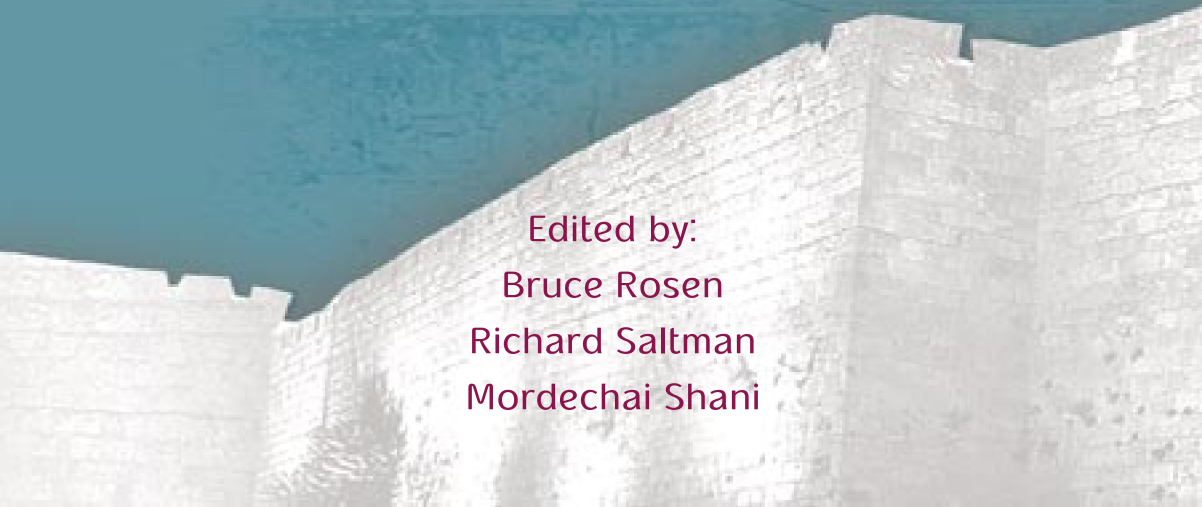
The Israel National Institute for Health Policy and Health Services Research

Jerusalem Conference on Health Policy

Health Systems: Are We in a Post Reform Era?

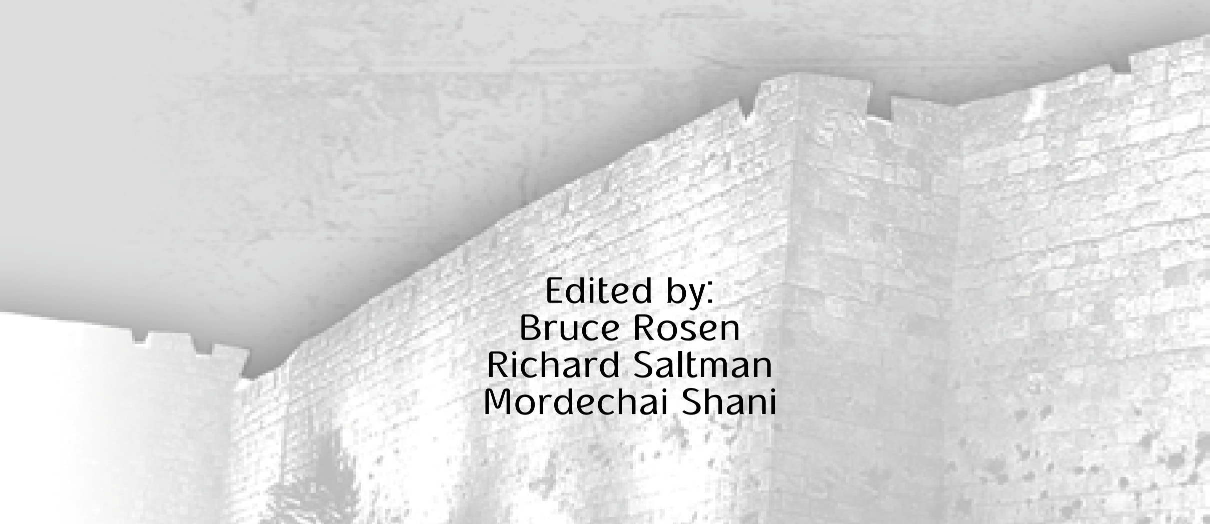
Edited by:
Bruce Rosen
Richard Saltman
Mordechai Shani



The Israel National Institute for Health Policy and Health Services Research

Proceedings of The Third International
Jerusalem Conference on Health Policy, 2006

Health Systems:
Are We in a Post Reform Era?



Edited by:
Bruce Rosen
Richard Saltman
Mordechai Shani

Graphic design: Nava Moscko

Contents

Part I:
The Control of Chronic Disease in the 21st Century The Integration of Primary, Secondary and Tertiary Prevention 15

Preface

Every year, around the world, there are dozens of international health policy conferences. Many Israeli professionals — along with professionals from numerous other countries - take advantage of those important learning opportunities.

Likewise, here in Israel, the National Institute hosts a Hebrew-language, national health policy conference each year. These are always well attended and are very successful forums for exchanges of ideas.

What, then, is the unique contribution of an international conference held in Jerusalem? In particular, what was the unique contribution of The Third International Jerusalem Conference on Health Policy and Health Systems, which was held in 2006, and whose proceedings appear in this volume?

We believe that the conference provided two types of unique learning opportunities - one geared to Israeli participants and the other geared to participants from outside of Israel.

The conference gave a large number of Israelis an opportunity to be exposed together to new information, ideas and insights from beyond Israel, on a wide range of issues, including many of real importance to Israel. Indeed, the conference themes and the invited speakers from abroad were chosen in part for their potential to bring something new to Israel.

In parallel, the conference gave over 50 leading health professionals from around the world a chance to learn about issues and innovations that are emerging from the Israeli experience, and which may be relevant in the coming years to their own countries as well. In choosing the conference themes and the Israeli invited speakers, the conference organizers had this objective in mind as well.

We believe that both these objectives were met at the conference, and that these proceedings reflect that success. We will illustrate with a few examples from each of the four conference tracks, but we encourage the reader to delve into the volume, as there are many other equally important examples to be found there as well.

In the track on **chronic diseases**, the organizers of the track and several of the international speakers emphasized the need for integrated strategies for addressing chronic diseases, spanning prevention, treatment, and rehabilitation. In addition, several of the international speakers brought to the conference the experiences of countries such as Japan and the Netherlands, where the elderly constitute relatively high percentages of the population. Clearly, this is useful information for Israel, where the elderly currently constitute only 10% of the population, but where the share of the elderly is expected to grow, and the share of the population over age 75 is expected to grow rapidly.

On the other hand, several of the Israeli speakers were able to share with the international guests how Israeli health plans – with their organized systems of care – could monitor trends in morbidity and treatment, and mobilize to meet the needs of the chronically ill in creative ways. These Israeli-grown systematic responses to chronic care needs hold important lessons for participants and readers from other countries – those with health plans and those without them.

In the track on **health care reforms**, a fair number of papers from both Israel and abroad focused on the barriers to major reforms in health care systems, including insufficient preparation of the reforms, institutional barriers, interest groups, and transplanting reform ideas from other countries without adequate adaptation. Similarly, many of the papers in this track dealt with reforms that affect the mix of government regulation and market forces. However, along with the commonalities, there were also some interesting differences in emphases between the local and international papers. For many Israeli participants, it was eye-opening to hear about how health systems abroad are beginning to respond to a relatively new challenge – the globalization of health care. For Israeli participants it was also intriguing to hear that several European countries are moving in the direction of recentralization.

Conversely, the papers on consumer involvement in health care reform came predominantly from Israeli participants, suggesting that Israel may have some innovative approaches on this issue to share with the world. Similarly, there were several Israeli papers emphasizing the role of non-government agencies in leading health system change, an issue that may not have been given sufficient attention to date in several other countries. The Israeli papers also emphasized the unique potential for well-designed non-profits to bring together the best in public and private care provision.

In the track on **competition and contracts** in health care, informally referred to as "the economics track", most of the papers from abroad dealt with issues of quality – an important reminder to Israelis that economists can teach us useful things not only about cost, but about quality as well. Specifically, one of the international speakers summarized the empirical literature on how competition affects quality, and posed questions, techniques and insights which have not played a major role in the Israeli health policy discourse to date. The track also featured two papers from abroad on "pay for performance". This was very timely, as Israel is just beginning to explore its attitude toward this emerging tool for encouraging investment in quality of care.

At the same time, several of the Israeli papers highlighted important economic issues and mechanisms for dealing with them that have not received significant attention abroad. For example, one of the Israeli papers presented a refinement of one of the key traditional measures of competition that takes into account the regional nature of health care markets – certainly a crucial issue for Israel and probably an important one for other countries as well.

Interestingly, of all the four tracks, the one on doctoring in the 21st century featured the greatest amount of commonality between the Israeli and international papers. Common themes included how doctoring is being influenced by technological developments, economic constraints, population aging, and the growing emphasis on health promotion and well-being. But in this track, too, there were some interesting differences in emphasis. The international papers were apt to give more emphasis to how doctoring is being affected by wider societal changes in the political economy, thereby alerting those of us in Israel to pay more attention to changes that transcend the health care system.

The Israeli papers tended to give more attention to the untapped potential for cooperation between doctors and nurses – though it is not clear if this emphasis has emerged more from past successes with teamwork or from deficiencies in the current arrangements. Finally, while several of the international papers touched upon the role of medical associations in shaping the medical profession and health care, it was only among the Israeli contributions to the conference that this theme became a major focus of one of the papers. It may well be that Israel has unique experience and insights on this issue which could be useful to other countries.

We look forward to continuing this exchange of ideas and experience at the next International Jerusalem Conference on Health Policy and Health Systems, tentatively scheduled for December 2009. Clearly, conference proceedings, journal articles and the internet can contribute greatly to the exchange of information across countries and health care systems. However, there really is no substitute for the formal and informal interactions that take place in person at international meetings. We hope that these proceedings will encourage you to participate in our next conference, and look forward to seeing you there.

Bruce Rosen, Richard Saltman, and Mordechai Shani
(Editors of the proceedings)

Acknowledgements

The Israel National Institute for Health Policy and Health Services Research is grateful to all those involved in organizing and participating in the Third Jerusalem International Conference on Health Policy. First and foremost, we wish to think the co-chairs of the four conference tracks:

- Leon Epstein and Martin McKee (Chronic diseases)
- Gur Ofer and Josep Figueras (Innovative ideas for reforms)
- Jacob Glazer and Tom McGuire (Competition and contracts)
- Joshua Shemer and (Doctoring in the 21st century)

Please note that the papers from each track have been grouped together into a single section in this volume, with a section introduction by the co-chairs of the track.

Many thanks go as well to the National Institute staff who organized the conference: Ziva Litvak, Alik Aviram, Amy Lipman, Sigal Sheffer-Benton, and Bianca Dekel.

We also wish to thank the conference sponsors: Clalit Health Services, Maccabi Health Services, The Gertner Institute, The Myers-JDC-Brookdale Institute, Reshet Refua, Rosh Tov, The Israel Cancer Association, Medex Screen Ltd., and Doctor.

A very special thank you goes to Amy Lipman, who coordinated the preparation of the conference proceedings, and to Adele Perlov, the language editor. Their professionalism, hard work and dedication contributed greatly to the quality and timeliness of these proceedings.

PART 1

The Control of Chronic Disease in the 21st Century: The Integration of Primary, Secondary and Tertiary Prevention

Introduction

Perhaps the greatest challenge to the effective and efficient delivery of health care in the industrialized world, and increasingly in the developing countries, is to find appropriate ways to respond to the growing burden of chronic disease.

Paradoxically, the challenge we now face is one of the fruits of our success; a combination of advances in public health and health care mean that many more people are surviving into old age. Even better, many older people are now leading lives that are more active and fulfilling than their parents and grandparents could ever have dreamed of. The benefits are obvious; we can all think of people in their eighties who continue to participate fully in life, contributing to the community they live in and even taking regular vacations. Yet they are doing this despite having perhaps half a dozen different conditions, such as arthritis, diabetes, hypertension, and chronic airways disease, which they control with the help of a complex mix of daily medications.

The successes that have given rise to this situation lie in several areas. Landmark epidemiological studies, such as the Seven Countries study and research on discrete populations in places such as Framingham, Whitehall, Alameda County, and Jerusalem have provided a wealth of evidence on the determinants of chronic diseases. Armed with this knowledge, people in industrialized countries have been changing their lifestyles, quitting smoking, eating more fruit and vegetables and less saturated fat, and taking more exercise. As a consequence, death rates from ischaemic heart disease have fallen by up to 50% over the past three decades. At the same time, advances in health care have made an enormous difference to disorders that were once rapidly fatal but which are now easily controlled, illustrated by the dramatic falls in deaths from cerebrovascular disease as a consequence of improved management of hypertension.

Yet there is much more to do. Many people are still dying prematurely from treatable diseases or are surviving with severe disability. More importantly, the life chances of people with chronic diseases depend on where they live, with rates of premature death and disability varying extensively among superficially similar countries. However, this success has left societies with the reality of providing for growing numbers of people left with differing degrees of physical, mental and social disability.

This diversity in outcomes provides a valuable opportunity for learning lessons. Perhaps the most important lesson is that it is possible to achieve a win-win solution, in which outcomes are optimal and costs are minimized, by getting the response right. This entails the creation of integrated programs of care, spanning prevention, treatment, and rehabilitation, that focus on the patient as an individual and not as a package of discrete, unrelated diseases. This requires effective planning; unfortunately, the reality is often very different, with fragmented services driven by the interests of the care provider rather than the needs of the patient, with little contact between them, causing patients to "fall between the cracks". The outcomes for the patient are worse and the costs are higher as the system must pick up the pieces.

For these reasons, this conference stream was planned to cover the totality of the chronic disease spectrum. We began with a "Diagnosis". Martin McKee set out the reasons why the burden of chronic disease is rising internationally and examined the challenges we face in developing effective responses. Manfred Green reviewed the methods that can be used to assess the burden of chronic disease in a population, while focusing on the situation in Israel. Then came an exploration of the challenges facing a country with one of the highest life expectancies anywhere: Naoki Ikegami described an innovative approach to funding long-term care for the aging Japanese population, offering lessons, both positive and negative, for other countries.

Following the definition of the problem the program included a review of developments at all three levels of prevention:

I: Primary Prevention relates to those actions that are undertaken before the pathological process begins. The most significant change over recent decades has been the much greater appreciation of the role that lifestyle plays in the etiology of the major chronic diseases (including cardiovascular disease, cancer and diabetes). In particular, there is now a much better understanding of the roles of nutrition, physical activity, smoking and alcohol. Margaret Thorogood took up the challenges facing those engaged in health promotion. She emphasized the need to intervene in ways that change the spectrum of risky behavior, highlighting the critical importance of not waiting until disease becomes manifest at advanced age. Another aspect of primary prevention relates to actions aimed at specific conditions. Drawing on the analogy of immunization, Gad Rennert looked ahead to consider the opportunities offered by chemoprevention of malignancy and the increasing understanding of the genetic basis of malignancy and the burgeoning information on genetic profiling and its relevance both for primary prevention and treatment.

II: Secondary Prevention: This session concentrated on the delivery of care to those with chronic disease. Cor Spreeuwenberg analyzed the barriers faced by many present frameworks of care. In outlining the Maastricht model he stressed the importance of a shift from medical care alone to the full engagement of the patient and the provision of support systems; a shift from hospital to community and from physicians to nurses and other health professionals; and especially, the role of integrating planning, delivery, funding and evaluation of care. Barbara Starfield stressed the central role of Primary Health Care in helping the patient to navigate through the health system, obtaining specialist care when needed but at all times ensuring that the patient's holistic needs were kept in view. The need to plan adequately for the needs of different population groups and the emphasis on equity are all part of successful integrated planning for the management of established chronic disease.

III: Tertiary Prevention: With the increasing numbers of people surviving with major chronic diseases there is a growing need world-wide to provide adequate services for maintenance and improvement of functioning. Peter Disler described the problems facing different populations, including indigenous peoples and different socio-economic and cultural groups in industrialized countries. He stressed the need for development of interdisciplinary teams of highly qualified professionals. Shai Brill continued by exploring the potential for preventing or reversing functional decline in old age, a major objective of integrated care for aged people. Rachelle Kaye raised the important issue of the impact that the increase in chronic disease prevalence will have on the need for long-term care and the policy changes and budgetary implications that will result.

The sessions concluded with the description by Michael Sherf of the integration of all aspects of chronic disease management in an HMO in Israel.

In a plenary session, Steven Schroeder reviewed the state of health of the American people by asking how it could be improved. Accent was placed both on the behavioral factors, e.g., tobacco and obesity, and especially on the need to concentrate on the less-fortunate in society, whose state of health is worse.

The messages from this stream of the conference can be summarized as:

a. The need for inclusion of all levels of prevention in the planning and delivery of care for chronic disease
b. The need to ensure equity in planning and delivery of care as well as the need for planned evaluation of models of care
c. The need to plan for future technological advances, especially in the field of genetics, in order to integrate them into the overall health care framework, while recognizing the cost implications for countries worldwide.

Leon Epstein and Martin McKee

The Control of Chronic Non-Communicable Disease in the 21st Century: An Integrated Approach

> Martin McKee
Health Services Research Unit, London School of Hygiene & Tropical Medicine

INTRODUCTION

The world is becoming more complicated. One example is in the field of education. A teacher wanting to open a school in the 1900s needed only a room with some desks, a few books, a blackboard, and perhaps a map on the wall. Today's school is equipped with laboratories, computers and digital projectors, while schoolchildren can access an almost unlimited array of knowledge brought to their screens by search engines such as Google. This can also be seen in the sphere of warfare. A general in the First World War required only that his soldiers had boots, a rifle and a bayonet before they were sent to fight. Today's general demands attack helicopters, armoured fighting vehicles and computerised fire support systems. In both cases, the situation is now much more complex.

Inevitably, health care has not escaped this phenomenon. In 1900 a physician could offer his patients little more than watchful waiting and, perhaps, a few herbal remedies. In some cases, such as digitalis, the herbs were effective. In others they were not. In surgery, the recent introduction of asepsis and anaesthesia meant that surgeons were no longer judged on the speed with which they could amputate limbs, but they were still very restricted in what they could do (Porter, 1997).

DIABETES: AN EXEMPLAR

In the same way that the first use of the tank at the battle of Cambrai in 1917changed the nature of warfare, the discovery of insulin in 1921 by Banting and Best changed the nature of medicine. What is now known as type 1 diabetes went from a rapidly fatal disease of childhood, with those afflicted having only 18 months to live, to a life-long condition that people died with rather than from (Bliss, 1982). Yet this change exacted a price: over the course of his or her life, that child would have to navigate through a complex maze of health care providers. The lucky ones would lead almost normal lives, maintaining normal levels of blood sugar and being spared complications. The unlucky ones would have to contend with the failure of one body system after another, from retinopathy to neuropathy, from blindness to ischemic heart disease and amputation. Successful management of the disease would depend a great deal upon the patients' expertise, but also that of a diverse range of specialists. Crucially, they also needed someone to help them navigate the system, typically their family physician.

Yet the fate of these people with diabetes is not simply a matter of luck. A key factor determining their probability of surviving is the health system that helps to care for them. Research following cohorts of young people with diabetes demonstrates marked differences in the chances of surviving in different countries. Countries such as Israel (DERI Study Group, 1995) and the United Kingdom (Laing, Swerdlow, et al. 1999) do relatively well, in marked contrast to the much worse outcomes in the USA. However, such cohorts have been established in only a few countries so an alternative is needed. One recent study compared existing data on mortality among diabetics under 40 (as this will minimise the number of deaths from type II diabetes) and incidence of death in childhood (taken from the DiaMond and EURODIAB studies). This maps well onto the cohort data where both are available but greatly extends the numbers of countries that can be compared (McKee, Nolte, et al. 2006). It reveals ten-fold variation in this outcome measure among industrialised countries.

The focus on diabetes is justified by its status as the easiest of the common chronic diseases to study, as those afflicted by it are easily identified, unlike, for example, epilepsy, heart failure, or chronic airways disease. While there are obviously differences of detail, such as which drugs to use or which specialists to involve, the principles underlying the optimal management of all of these conditions are the same. However, it is important to note that chronic diseases cannot be seen in isolation. As populations age, the typical patient will be one with some combination of diabetes, heart failure, osteoarthritis, Parkinson's disease and depression.

Furthermore, although this paper concentrates upon chronic non-communicable diseases, those same principles apply equally to chronic communicable ones, exemplified by AIDS. In the same way that insulin can keep someone with diabetes alive, but other things are needed to treat their complications, so anti-retrovirals can enable those living with AIDS to live a relatively normal life, but additional measures are needed when they acquire opportunistic infections or, increasingly, suffer from the atherogenic effects of anti-retrovirals.(Sudano, Spieker, et al. 2006)

THE IMPLICATIONS FOR HEALTH CARE

What are the implications for health care? It is possible to identify changes that are taking place in at least seven areas that will influence how we respond to chronic diseases in the future (McKee and Nolte, 2004).

First, the growing opportunities for early intervention, coupled with a greater recognition in some countries of the benefits of reducing the burden of disease as a means of relieving pressure on health systems, are shifting the balance between treatment and prevention. In the United Kingdom, for example, a Treasury study on future needs for healthcare constructed a variety of scenarios differing largely in the extent to which the health of the population improves. The difference in costs in 2022 between the most optimistic and pessimistic scenarios was approximately €44 billion, about half of the current National Health Service expenditure (Wanless, 2004). Yet the issue is not one of shifting resources from treatment to prevention; rather it is finding ways to integrate the two, utilizing prevention strategies that take full advantage of developments in healthcare, while reorienting healthcare to embed prevention at all stages.

Second, there is a changing balance between hospitals and alternative settings for care (McKee and Healy, 2002). Hospitals have the advantage of confining the patient to one place, awaiting a series of investigations or a sequence of treatments to be undertaken. The patient is seen when it is convenient for the healthcare providers. Organisationally, this makes it easy to deliver complex packages of care but it creates major disadvantages for the patient, whose liberty is restricted. Even for those people requiring continuing care, hospitals may not be the most appropriate setting in which to receive it. Patients with advanced cancer may be better placed in a hospice; those with moderate disabilities may be able to manage in their own homes but with enhanced nursing or other support. Again, this introduces a degree of complexity, as the needs of the patient are assessed and alternative modes of care provided.

Third, the balance between professional and patient involvement in care is changing. In a less deferential society, patients are less willing to accept instructions without explanations. In addition, the internet enables patients to become experts in their own diseases, in some cases making them more familiar with new developments than their physicians, who must struggle to keep up to date with a wide range of diseases (Lowrey and Anderson, 2006). At the same time health professionals are realising that, for many chronic conditions where the course of the disease may be labile, such as asthma or diabetes, patients who are adequately informed and supported can improve control of their disease process (Stam and Graham, 1997; Wiecha and Adams, 2006).

Fourth, there is a changing balance between evidence and intuition in the clinical encounter, with a growing quest for evidence to underpin clinical practice, and for mechanisms to ensure that the evidence is acted upon, that performance is assessed and action taken to improve it. This balance is, however, dynamic, as initial enthusiasms for protocol-driven care confront the reality of individual patient characteristics, thus exposing the limits of determinism (McKee and Clarke, 1995).

Fifth, recognising the existence of societal inequities (Marmot, 2004), some health services simply respond to demand whereas others proactively look for need, even when it is not voiced as demand, in the knowledge that those whose needs are greatest may be least able to access the care that they need.

Sixth, technology is constantly evolving. Patients accustomed to booking holidays or shopping on the Internet are puzzled increasingly by the continuing reliance of health services on postal communication. In theory, booking an appointment should be easy. Yet there is a crucial difference. The Internet model of holiday booking is analogous to a single episode of care, for example a routine medical examination. However, the traveller in search of a tailor-made holiday in which he or she visits a sequence of destinations suited to his or her individual needs, and uses a variety of travel modes, a model more analogous to a patient with a multiple chronic diseases, will require the services of a travel agent. Given that most patient journeys more closely resemble the bespoke holiday market, it is not surprising that healthcare information systems, so far, often struggle to deliver what they promise.

Seventh, there is a continuing challenge to develop a workforce that can respond to the changing healthcare environment. This is a vast issue, drawing together many of the previous six issues, with the added problem of how to provide training in the increasingly diverse settings in which healthcare is delivered (McKee, Nolte, et al. 2006).

Taken together, these factors emphasize that effective delivery of care for chronic diseases demands integrated health and social policy responses, including effective prevention, coordinated involvement with a range of appropriately trained health professionals, a reliable supply of pharmaceuticals and technology, use of evidence-based interventions, a system that empowers patients and, crucially, a seamless transition between primary, secondary, and where necessary, tertiary care. The emphasis is on integration; the failure of any of these components may seriously disrupt the effective management of the patient's disease processes, leading to disability and premature death.

PREVENTION IS BETTER THAN CURE

Unfortunately, prevention is too often the stepchild and rarely even begins to reach the agenda. There are a few exceptions, such as the Healthy Israel 2020 programme. Yet it can be incredibly difficult to bring about change. It was a tremendous struggle to get a ban on smoking in public places in England, in the face of what can best be described as perversity by ministers (McKee, Hogan, et al., 2004). Fortunately, at least in this area, change is proving increasingly easy as smoking in public places is more and more seen as simply unacceptable and it must be only a matter of time before other countries, such as Israel, adopt effective smoke-free policies (McKee, 2006).

There are, however, attempts to acknowledge the importance of prevention, and to act accordingly. An example of concerted action is the Oxford Health Alliance, a partnership of academics, companies, governments, and NGOs. Its simple message is 3, 4, 50 – three risk factors, four major diseases, and 50% of the disease burden accounted for by non-communicable diseases. Its emphasis has been on engagement of the widest possible range of stakeholders, in particular young people. Its website (www.3four50.com) provides a new and imaginative way of looking at this issue.

AN INTEGRATED RESPONSE

Returning to the management of chronic non-communicable diseases, it is clear that piecemeal solutions will not be sufficient. This has led to the development of a variety of comprehensive models that recognise the complexity of the strategies required to manage chronic disease. This approach is illustrated by the Chronic Care Model (Bodenheimer, Wagner, et al. 2002), one of a number of models of care developed in the USA, all with broadly similar features. It comprises four interacting system components that are seen as critical for providing good care for chronic disease: self-management support, delivery system design, decision support and clinical information systems. These are set in a health system context that links an appropriately organised delivery system with complementary community resources and policies.

While the Chronic Care Model illustrates the key elements involved in the management of chronic disease, it is important not to become too focused on any particular product. Some elements within the model can be linked to improvements in some process or outcome measures, such as perceived quality of care, patient outcomes, pathways to care, and reduced cost, but it has been less clear whether this is a consequence of applying the model as a whole, or whether the same improvements can be achieved with only some of its elements. A survey of chronic disease management programmes in the USA that had been identified as innovative found considerable diversity in their content, with many limited to traditional patient education approaches (Wagner, Davis, et al. 1999), but a meta-analysis found a beneficial effect of care models that incorporated at least one element of the Chronic Care Model (Tsai, Morton, et al. 2005). This diversity is in part due to differences in context. However, comprehensive evaluations of the Chronic Care Model in practice have been less encouraging and it has been difficult to establish a correlation between particular elements of the Chronic Care Model and improvements in quality of care (Solberg, Crain, et al. 2006).

It is also important, when implementing this type of approach, to take into account the environment in which it is to be implemented, and in particular how easy it is to establish the strong linkages between the community and the health system that are required to implement multi-sectoral interventions. Experience with the Chronic Care Model in the USA has shown that implementation faces many serious organizational obstacles, not least because of the complexity of bringing about change (Hroscikoski, Solberg, et al. 2006).

At this stage it might reasonably be assumed that this paper would discuss what works and what does not. Unfortunately, this is not easy, as there have been far too few evaluations of innovative approaches to chronic disease management. In particular, very few look at patients with multiple chronic diseases – it is obviously much easier to concentrate on people with only one, typically diabetes. Moreover, many of the evaluations that have been undertaken are from the USA where death rates from common non-communicable diseases are very high. It is clearly much easier to demonstrate marked improvements in outcomes there than in countries, such as those in Western Europe, where outcomes are already relatively good. Indeed, a cynic might argue that to improve chronic disease outcomes, the USA should simply adopt any European health system, as they would all produce a reduction in mortality of about two-thirds (McKee and Nolte, 2004). Here, it is impossible to ignore the irony of English ministers continuing to look for answers to American commercial providers, ignoring the evidence that is already emerging that they are no better than the system already in place (Gravelle, Dusheiko, et al. 2007).

COMMON THEMES

However, it is, possible to identify a series of common themes that, on balance, seem to be important.

The first is effectiveness: Care for chronic diseases should be based on well-accepted evidence, in the form of guidelines or standards, but with sufficient flexibility to accommodate new technologies.

The second is responsiveness. Delivery models should respond to the patient's clinical and social needs and the requirements of providers, rather than trying to fit within rigid structures and models.

The third is the centrality of patient self-management, often described as the 'cornerstone of treatment'. Effective self-management by patients often emerges as the single most important factor when measuring impact on outcomes (Stam and Graham, 1997). The mechanisms for supporting self-management are complex and resource-intensive, requiring regular access to appropriate levels of care, trained multi-disciplinary provider teams, and follow-up. They must include consultation and negotiation with the patient, rather than acceptance of the provider's view of what is best, recognising the patient's right to participate in his or her own treatment. Patient empowerment is much more than simply patient education. It also is not a process of transferring all responsibility to the patient, effectively abandoning them to their own devices, always an attraction in a cash-strapped system. It is therefore essential that patient empowerment be linked to strong systems of health system governance so that the rights of vulnerable individuals are protected.

However the key issue is integration (Ouwens, Wollersheim, et al. 2005) across all levels of care, the theme chosen for this conference stream. It is also the greatest challenge, not least because so many of the health care reforms being dreamt up by "blue sky" thinkers who have the ear of politicians are moving in precisely the opposite direction. Their unshakeable belief in the benefits of the market, in the face of overwhelming evidence to the contrary, could be seen as meeting the diagnostic criteria for a delusion. The United Kingdom currently exemplifies this, with some of the most bizarre ideological leaps of faith, in areas as diverse as railway systems and telephone directory inquiries, leading to organizational and financial disasters (Monbiot, 2000). The fragmentation that is a pre-requisite for competition is being applied to the English NHS (Pollock and Leys, 2004) as part of a scheme for what has been described as "creative destruction" (Ham, 2006). This will make the development of seamless integrated care for patients with multiple chronic diseases much more difficult. It also creates disincentives for providers to engage in health promotion, as any payback on the investment may come to another provider long in the future.

CONCLUSION

Chronic diseases pose one of the greatest challenges to health systems in the 21st century. It provides a fitting topic for this conference, which will facilitate the exchange of ideas that will take us a step closer to being able to respond to this challenge.

REFERENCES

Bliss, M. (1982). *The discovery of insulin*. Chicago, IL: University of Chicago Press.

Bodenheimer, T., E. H. Wagner, et al. (2002). Improving primary care for patients with chronic illness: the chronic care model, Part 2. J*ournal of the American Medical Association* 288(15), 1909-1914.

DERI Study Group (1995). International analysis of insulin-dependent diabetes mellitus mortality: a preventable mortality perspective. The Diabetes Epidemiology Research International (DERI) Study. *American Journal of Epidemiology*, 142(6), 612-618.

Gravelle, H., M. Dusheiko, et al. (2007). Impact of case management (Evercare) on frail elderly patients: controlled before and after analysis of quantitative outcome data. *British Medical Journal*, 334(7583), 31.

Ham, C. (2006). Creative destruction in the NHS. *British Medical Journal*, 332(7548), 984-985.

Hroscikoski, M. C., L. I. Solberg, et al. (2006). Challenges of change: a qualitative study of chronic care model implementation. *Annals of Family Medicine*, 4(4), 317-326.

Laing, S. P., A. J. Swerdlow, et al. (1999). The British Diabetic Association Cohort Study, I: all-cause mortality in patients with insulin-treated diabetes mellitus. *Diabetes Medicine*, 16(6), 459-465.

Lowrey, W. and W. B. Anderson (2006). The impact of internet use on the public perception of physicians: a perspective from the sociology of professions literature. *Health communication*, 19(2), 125-131.

Marmot, M. G. (2004). *Status syndrome : how your social standing directly affects your health and life expectancy*. London: Bloomsbury.

McKee, M. (2006). Towards a smoke-free Israel. *Haaretz*. Jerusalem.McKee, M. and A. Clarke (1995). Guidelines, enthusiasms, uncertainty, and the limits to purchasing. *British Medical Journal*, 310(6972), 101-104.

McKee, M. and J. Healy (2002). *Hospitals in a changing Europe*. Buckingham: Open University Press.

McKee, M., H. Hogan, et al. (2004). Why we need to ban smoking in public places now. *Journal of Public Health* (Oxf), 26(4), 325-326.

McKee, M. and E. Nolte (2004). Responding to the challenge of chronic diseases: ideas from Europe. *Clinical Medicine*,4(4), 336-342.

McKee, M., E. Nolte, et al. (2006). *Human resources for health in Europe*. Maidenhead: Open University Press.

Monbiot, G. (2000). *Captive state : the corporate takeover of Britain*. Basingstoke: Macmillan.

Ouwens, M., H. Wollersheim, et al. (2005). Integrated care programmes for chronically ill patients: a review of systematic reviews. *Internationa Journal of Quality in Health Care*, 17(2): 141-6.

Pollock, A. and C. Leys (2004). NHS plc : *the privatisation of our health care*. London, New York: Verso.

Porter, R. (1997). *The greatest benefit to mankind : a medical history of humanity from antiquity to the present*. London: HarperCollins.

Solberg, L. I., A. L. Crain, et al. (2006). Care quality and implementation of the chronic care model: a quantitative study. *Annals of Family Medicine*, 4(4), 310-316.

Stam, D. M. and J. P. Graham (1997). Important aspects of self-management education in patients with diabetes. *Pharmacy Practice Management Quarterly*, 17(2), 12-25.

Sudano, I., L. E. Spieker, et al. (2006). Cardiovascular disease in HIV infection. *American Heart Journal*, 151(6), 1147-1155.

Tsai, A. C., S. C. Morton, et al. (2005). A meta-analysis of interventions to improve care for chronic illnesses. *American Journal of Managed Care*, 11(8), 478-488.

Wagner, E. H., C. Davis, et al. (1999). A survey of leading chronic disease management programs: are they consistent with the literature? *Managed Care Quarterly*, 7(3), 56-66.

Wanless, D. (2004). *Securing good health for the whole population: Final report*. Norwich: HMSO.

Wiecha, J. M. and W. G. Adams (2006). Boston Breathes: Improving pediatric asthma care with a home-based interactive website for patient education, monitoring, and clinical teamwork. AMIA Annual Symposium Proceedings, 1144.

Merging of Primary and Tertiary Prevention in the Aging Society - The Case of Japan

> Naoki Ikegami
School of Medicine, Keio University

INTRODUCTION

This paper has three objectives. The first is to briefly examine the rationale for providing preventive services in health insurance and long-term care insurance (LTCI). The second is to describe why and how the public LTCI came to be implemented in Japan in the year 2000. The third is to describe why and how the government decided to refocus on prevention in the LTCI when it was revised in 2005. Through this process, the role of prevention in designing and revising the LTCI will be examined.

RATIONALE FOR PREVENTION IN HEALTH INSURANCE

The fact that prevention is better than treatment appears to be self-evident, not only from the individual's perspective, but also from that of society, as it should lead to a more efficient use of resources. Certainly, the prevention of infectious diseases which claims the lives of children and workers is cost-effective. However, is this also true for metabolic syndrome - diabetes, hypertension and hyperlipidemia? Their onset is asymptomatic and usually in the mid-years of life. The goal of prevention lies in lowering the relative risk of heart diseases, strokes and renal failure that may arise years later, so that the benefits are less tangible. For these conditions, the intervention should be primarily focused on improving lifestyles, and not on prescribing medication. However, lifestyles are difficult to change, whereas prescribing and taking drugs is easier. This could defeat the fiscal purpose of the prevention program, as aggressive treatment of asymptomatic patients has been shown to increase costs (Thorpe & Howard, 2006). There is also a moral issue of how coercive society should be in its efforts to improve the individual's lifestyle, and in the allocation of resources. Should the best and most expensive drugs with the least side effects be prescribed to all who have these conditions? In addition, the prevention of one disease may merely result in death from other causes (Mangin, Sweeney, & Heath, 2007) or have only a lead-time effect without impacting on longevity; even if it does, since the prevalence of Alzheimer's disease increases with age (Brayne, Gao, Dewey, & Matthews, 2007), the years extended might not lead to any gains in quality-adjusted life years, while aggregate costs will definitely increase.

For these reasons, the value of prevention should lie in the compression of morbidity, and the extension of healthy life years. However, it would take years to evaluate the effectiveness of prevention programs if these criteria were to be used as outcome measures, by which time the science that had been the basis for the screening and intervention may well have become obsolete. Why then is there an increased emphasis in prevention? It's possible that treating end-stage metabolic syndrome is not only expensive, but futile, so that even if the early intervention were not cost-effective, it could be the only means available. It's also possible that focusing on lifestyles puts the onus of improvement on the individual: those who do NOT make the effort could and should be penalized by more out-of-pocket payment for treatment, or by higher premiums, while those who do make the effort would not only be financially rewarded, but could also feel virtuous.

In the case of Japan, mass screening has long been the distinctive feature of its prevention program (Ikegami, 1988). The prevalence of tuberculosis decreased dramatically in the 1950s when per capita income increased, antibiotics were introduced and mass-screening became highly organized. Because these events occurred at the same time, it inflated expectations of the effectiveness of screening; also, the organizational infrastructure for screening remained as a legacy. Screening programs subsequently expanded because social health insurance plans were allowed discretion in their scope, in contrast to medical service benefits which are statutory and thus the same for all plans. Given this tradition, it was not surprising that the Ministry of Health, Labor and Welfare (MHLW) focused on preventive programs as a relatively painless and uncontroversial way to contain medical expenditures when pressured to do so by the Ministry of

Finance. Legislation was passed in 2006 which increased the responsibility of the health plans and the local government to provide screening and follow-up consultations for the prevention of the metabolic syndrome to all those between the ages of 40 and 74[1].

The above reform has not yet been implemented at the time of this writing in April, 2007, so evaluation is not possible. However, I do have grave doubts whether this initiative will succeed, at least as far as achieving cost containment is concerned. For these reasons, this paper will focus on the parallel new initiative on prevention in the public long-term care insurance (LTCI), which has been in effect since April, 2006.

RATIONALE FOR PREVENTION IN LTCI

Although it may appear illogical to include prevention in a benefit package of the LTCI, there are several valid reasons for doing so. First, tertiary prevention (rehabilitation) tends to merge with primary prevention (improving health) for the frail elderly. Second, for improving lifestyle, LTCI is more likely to be successful than health insurance because, while the latter is focused on medical interventions provided externally to the patient, the former is focused on the client's daily care and the social aspects of his or her life. It is true that elderly people may be more set in their own ways and less willing to change, but they may also be more responsive to advice on improving lifestyles as they are more likely to have symptoms (such as persistent cough from smoking) which could be alleviated by changes in behavior. Pensioners may also have greater freedom to change their lifestyles because they are no longer constrained by their work. Third, there is a fiscal advantage in transferring benefits from health insurance to the LTCI, once the policy decision has been made that providing LTC should be an entitlement for the reasons listed in Table 1. Whereas in health insurance egalitarian standards are the norm, in LTCI, the goal is to provide a decent level of care and allow individuals to top-up and purchase additional services. Thus, expenditures should be easier to control in LTCI than in health insurance.

---

[1] Those 75 and over are covered by another screening program which is discretionally provided by the municipalities.

Table 1: Advantages of public LTC insurance

Health insurance	LTC insurance
• Benefits become medicalized • Egalitarian standards: Topping-up not allowed • Expensive professional staff has dominant role • Patients find it difficult to exercise choice	• Benefits are a combination of health and social care • Decent level of care: Topping-up allowed • Low-wage staff has dominant role • Clients find it easier to exercise choice

In theory, the following conditions for defining benefits could be set from the revenue side through a purely rational process based on the extent to which the younger generation is willing to pay for the care of elderly people now, and in the future from projections made from demographic trends.

1. The criteria that groups applicants into eligibility levels, including the level ineligible: If strict, eligibility will be restricted to those with heavy care needs; if generous, it will be expanded to those with light care needs.
2. The extent to which the benefits would meet needs in each eligibility level: If limited, most would have to pay an additional amount out-of-pocket.
3. The extent to which the entitled amount would actually be used: Expenditures could be contained on the demand side by restricting the conditions under which benefits are obtained and by increasing the level of co-payment levied; on the supply side, by regulating the number of providers and by decreasing reimbursement.

However, in practice, it would be difficult to design a new program based on a careful evaluation of these options for the following reasons. First, the rights of those who had been receiving benefits prior to the implementation have to be honored and negotiations must be made with the various interest groups. Second, it is very difficult to accurately estimate future expenditures as much depends on how the public responds to a new program (Wittenberg, Pickard, Comas-Herrera, Davies, & Darton, 1998). Thus, an unexpected rise in demand could occur. Third, it is also difficult to evaluate the future relative burden on the younger generation as this will depend on the performance of the macro-economy and the fertility rate.

The above could be regarded as valid reasons for NOT introducing public LTCI because the government may be faced with a fiscal nightmare. The objective of this paper is to explain how LTCI expenditures in Japan initially increased more than projected due to the first two reasons cited, but came to be subsequently contained by changing the conditions listed in 3) above. Benefits for those in the light care levels were made more restrictive and reimbursement to providers was decreased. Both revisions were made under the banner of preventing a decline similar to that which had resulted previously from the provision of excessive and inappropriate services.

LONG TERM CARE BEFORE THE ADVENT OF PUBLIC LTC INSURANCE IN JAPAN

To understand why LTCI was implemented in Japan, and, more specifically, why preventive services became an integral part of it, an explanation of the social and policy issues that played a key role in its design is needed. The number one problem on the social policy agenda in Japan has long been the aging of society (Campbell, 1992). The percentage of people aged 65 and over trebled from 7 percent of the population in 1970 to 20 percent in 2005 and is expected to be 31 percent in 2025 (MHLW, 2006). The percentage of those 65 and over living with a child has declined from 69 percent in 1980 to 50 percent in 1998, while those living with only their spouse or alone has increased from 28 percent to 46 percent (MHW, 2000). At the same time, the hardship faced by families caring for elderly people attracted more and more media attention. In particular, the plight of daughters-in-law, who are still bound by social norms to provide care to their in-laws, became the focus of the women's rights movement (Campbell and Ikegami, 2003).

This perception of crisis had been heightened by the structural problems in the health and social service sectors (Ikegami, 1997). In the health sector, there was a heavy reliance on hospitals, due to an unintended effect of making healthcare free for people 70 and over in 1973 (up till then, the co-payment rate was 50 percent). Hospitals were able to quickly fill their beds as the care was both free and socially acceptable for families of the elderly. Since the establishment of a new type of intermediate care facility, the HFE (Health Facilities for Elders) in 1986, and the increase in nursing home beds, the ratio in hospitals has subsequently declined from two-thirds of the institutionalized in 1990 (MHW, 1992) to just over half in 2005, but the absolute number of elder inpatients has continued to increase (MHLW, 2007a).

Developments in social services generally lagged behind health care because they had been financed entirely by taxes and constrained by the budget, unlike the open-ended social insurance in health care. However, services began to improve after the government embarked on a ten year plan to increase grants to local governments for developing LTC services in 1989 (referred to as the "Gold Plan"). The reason for doing so was that the ruling party wanted to win back votes after nearly losing the election that followed the introduction of the consumption tax (Campbell, 1992). The Gold Plan proved to be popular; it was therefore subsequently revised with higher targets in the five-year "New Gold Plan" in 1994. By the end of the five year period, in 1999, the plan was that the number of full-time equivalent home-helpers would have increased from the 1990 level of 38,945 to 170,000; the number of adult day care centers from 1,615 to 17,000, and so forth (Kousei Toukei Kyokai, 1996, 2001)[2]. These goals were generally successfully met (MHLW, 2001). However, access to services continued to be controlled by the local government welfare departments, and were means-tested and with no choice of providers by the individual. Although restrictions based on income and availability of family support had officially been removed, the institutional culture of the social welfare agencies and budget limitations led to priority being given to indigent elderly people living alone or with their spouse.

The situation prior to the LTCI was as follows: For institutional care, which was mostly provided by the health sector, accommodation costs (charges for room, meals and utilities) were fully covered by health insurance, while for community care, which was mostly provided by the

---

[2] 2. Some health care services were also included in the Gold Plan such as HFE and visiting nurse services but, unlike social services, they were funded only for their capital costs, and their operating costs were reimbursed by health insurance.

social service sector, socially disadvantaged elderly persons who required only light care were being provided with IADL support services. The system was perceived as unfair because of the major differences among individuals and among localities in the provision of services. In addition, both sectors had their intrinsic problems. In the health sector, even though some hospitals had become de facto nursing homes, being hospitals, they were staffed by full-time physicians and nurses, their wards had been designed for acute care, and there was no triage. In the social sector, response to demand was slow, bureaucratic and stigmatizing. Local social-welfare offices were usually staffed not by trained social workers, but by bureaucrats whose former positions were usually in areas unrelated to LTC, such as the public works department. The process tended to adhere rigidly to government regulations on the one hand, and to yield to pressures from local politicians to provide services to their favored constituents on the other.

OUTLINE OF THE LTCI

The problems inherent in the system led to a proposal by a government sponsored committee in 1994 to establish a separate LTC insurance program that would be social-insurance based, and would combine the health and social LTC services, with the goal of supporting the independence of the older population. LTCI was legislated in 1997 and implemented in 2000 (Campbell & Ikegami, 2006).

The LTCI program provides for universal entitlement for all people aged 65 and over who meet the eligibility criteria and grants them access to the providers of their choice. For those 40 to 64, benefits are limited to those having disabilities as the result of specified age-related diseases, such as stroke or Alzheimer's. The following services were transferred to the LTCI: from social services, home-helpers for personal care (ADL support) and domestic tasks such as cleaning and meal preparation (IADL support), bathing service, loan of devices such as wheelchairs, home reconstruction (putting in slopes and hand-bars, etc.) and nursing homes; from health insurance, some hospital LTC beds, all HFE beds, most visiting nurse and visiting rehabilitation services, and "medical management" (supervision of care by physicians). Adult day care and temporary "respite" stays in institutional settings, which had been available from both sectors, were transferred but not unified and continued to maintain different staffing requirements. Physicians' services continued to be paid in the same way as prior to the implementation of LTCI[3]. There are no cash benefits for family carers, partly because of the opposition of feminist groups who claimed that granting such benefits would further increase the social pressure to provide care for their in-laws.

Eligibility is determined by the process shown in Figure 1: 1) assessing a 79 item form on physical and mental status by a local government employee (usually a public health nurse) or individuals under contract, 2) entering the results into a computer which groups the individual into the seven levels of eligibility or ineligibility according to the algorithm, and 3) review by a local expert committee. This committee alters the level calculated by the computer, usually to a severer level, in about a fifth of the cases on average, based on the information in the forms written by the assessor and the attending physician. Income levels and the amount of informal care available are not taken into consideration. The algorithm for grouping applicants into the eligibility levels was designed by a statistical analysis of data from residents in nursing homes concerning the amount of care each had received and their physical and mental status.

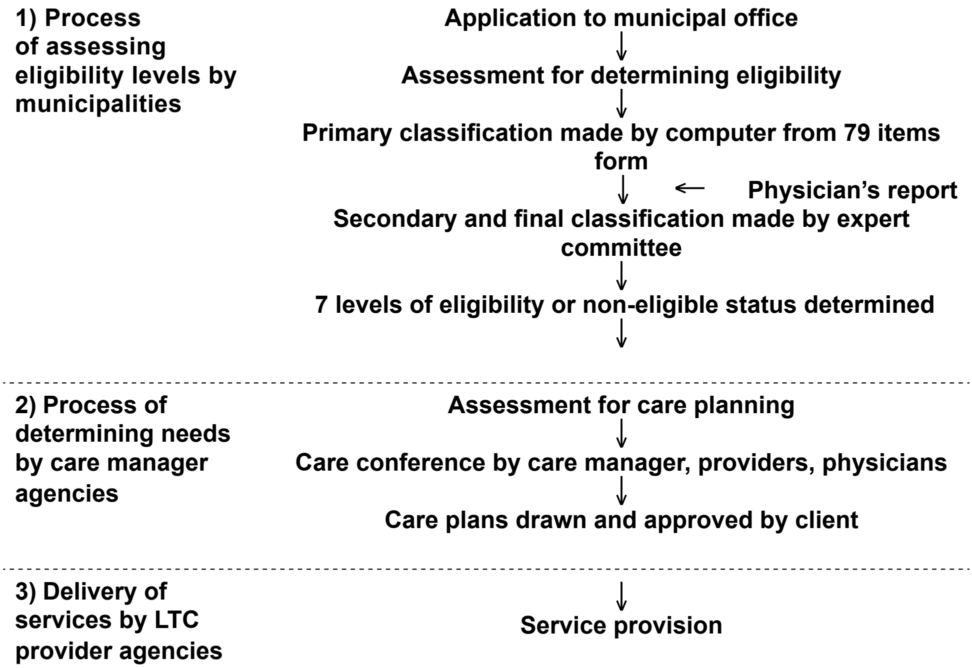
After eligibility has been determined, the individual can go to any certified care management agency for community care and be covered for LTCI services up to the amount set for each level, which varies from 49,700 Yen (US $ 400) to 358,300 Yen (US $ 3,000) per month[4].

---

3. On a fee-for-service basis by health insurance for community care and nursing homes, and included in the per-diem inclusive payment by the LTCI for hospital LTC beds and HFE.

4. The amount in dollars has been rounded off to make the figure easier to comprehend. At the time of submission in April, 2007, the exchange rate was 118 Yen to US $ 1.

Figure 1: Flow chart for receiving LTCI services



These amounts were derived from model care plans designed for each level by an expert government committee, and then multiplying the unit price of each service by the number of times it would be provided monthly. The care manager agencies were newly created for the LTCI and virtually all were established by service providers. Licensing procedures for care managers were also newly created so that nurses and others working in the LTC field could easily become qualified[5]. The fact that provider agencies are also registered as care planning agencies could lead to a conflict of interest, as they are

---

[5] Those who have had five or more years of experience are allowed to sit for the examination. If they pass, they must attend a 32 hours training course. As of February, 2007, 400,900 have passed (MHLW, 2006a).

able to draw up plans that consist only of, or primarily of, the services they could deliver themselves[6]. However, people who primarily want visiting nurse service would tend to select a care manager agency that is dually certified as a visiting nurse station, while others who primarily want IADL support service would tend to select one certified as well as a home-helper agency. Moreover, if dissatisfied, the client may ask the care plan to be changed and go to another agency. While this does not fully protect the vulnerable from exploitation, the 10 percent co-payment has made elderly clients aware of the costs involved for any additional services[7].

After the care plan is drawn up, based on the assessment of need and client preference, provider agencies are contracted and services delivered. In principle, anyone who prefers institutional care may go to any facility and will be admitted if a bed is available, with the exception of those in the two lightest levels who are only eligible for community services. In place of means-testing for social services and, at the time of LTCI implementation, a small flat payment for health care, a 10 percent co-payment was introduced, which must be paid for all services except for care management[8]. After services are provided, the insurer and the client are billed on a monthly basis, in accordance with the prices and rules set by the government.

The LTCI is managed by the municipalities, with one-sixth of their budget funded by premiums levied on the elderly living in the community; one third by premiums levied on those aged 40 to 64, which are pooled at the national level and redistributed to municipalities after adjusting for income level and age distribution of their elderly population; and the remaining one half from central and local government taxes.

---

[6] Eligibility assessments were also initially delegated to some of the providers. However, from 2006, they are no longer allowed to do so, in addition to which, the fees for care planning agencies that contract most of the services to one provider agency have been reduced.

[7] Visiting nurse services have not increased compared with home-helper services mainly due to the fact the fee for the former is three times that of the latter.

[8] In health insurance, a 10 percent co-payment was introduced in October, 2002, and from April, 2003, elderly persons with incomes higher than the average of employees have a 30 percent co-payment (with catastrophic ceilings).

ESTIMATING DEMAND AND THE ACTUAL FIGURES

Estimating demand for institutional care was a relatively easy task because all the beds in nursing homes and HFE were to be transferred to the LTCI. For designated LTC hospital beds, despite some uncertainty as to how many would be transferred, for budgeting purposes it was assumed all would be. This meant that there would be a total of 0.7 million who would be eligible for institutional care, and their expenditures would be about the same as before the transfer.

However, the task was far more difficult for community care, because expenditures would depend much more on the design of the eligibility criteria and the amount of benefits that would be set for each level. Moreover, the extent to which the elderly population would actually use this entitlement was difficult to predict because the introduction of a 10 percent co-payment would act as a deterrent, and because of possible delays in developing the services. The MHW estimated that there would be 2 million eligible for community care. This was based on surveys conducted by the local governments on the elderly population concerning their physical and cognitive status (the algorithm for determining the eligibility levels was not used because it was set just before the implementation). Next, the extent to which those eligible would use their entitled benefits was estimated from another survey which asked about the use of specific types of services (such as day care), should they be made available. Based on this, the MHW calculated that those eligible would use 32.73 percent of their entitled benefits (MHW, 1999).

These estimates are compared with the actual figures in Table 2, together with the most recent available. For community care, the estimate was initially surprisingly on target. Although the number certified as eligible turned out to be less than estimated, because they used 45 percent - and not 32.73 percent - of their entitled benefits, the differences cancelled themselves out. However, in institutional care, the estimates were incorrect as only half, and not all, of the hospital LTC beds were transferred to LTCI because of the opposition of the municipal authorities who wished to keep the premium level low for their elderly population, and also because some hospital owners had second thoughts about transferring to LTCI[9]. As a result of the incomplete transfer of hospital LTC beds, LTCI had a net surplus for the first year of implementation: of the 4.3 trillion Yen that had been budgeted, only 3.6 trillion Yen (0.7 percent of the GDP) was actually spent (which also led to a less-than-expected reduction in health care expenditures).

Table 2: Estimated and actual number certified and receiving LTCI benefits (in thousands)

	Estimated	Actual		
	August, 1999	June, 2000	June, 2001	June, 2006
Certified to be eligible	2,689	2,325	2,701	4,574
Receiving LTCI benefits	2,689	1,769	2,116	3,502
Community care	1,984	1,178	1,467	2,685
Institutional care (total) *	705	605	661	817
Nursing homes	304	279	309	398
Health Facilities for Elderly	205	213	241	301
Hospital LTC beds	197	100	109	123

*Includes those who could not be categorized into facility type
Source: http://www1.mhlw.go.jp/topics/kaigo99_4/kaigo43.html;
http://www.mhlw.go.jp/topics/0103/tp0329-1-6.html;
http://www.mhlw.go.jp/topics/0103/tp0329-1-8.html;
http://www.mhlw.go.jp/toukei/saikin/hw/kaigo/kyufu/2006/06hyo2.html

---

[9] Under LTCI, physicians could not admit patients unless they met the eligibility criteria and the cost of diapers etc. (that could be extra-billed in health insurance) would be included in the inclusive payment. Also, as the hospital owners were physicians, some were reluctant to take the step of transferring from health insurance to LTCI.

LTCI expenditures were expected to increase to 5.5 trillion Yen in 2005, due not only to the aging of society, but also to increasing demand as people became more aware of their entitlement, and as the supply expanded[10]. The actual increase turned out to be much more: 6.8 trillion Yen for 2005 (1.4 percent of GDP). The increase in the percentage of the population certified to be eligible also turned out to be greater than predicted. Originally, it was planned that 12 percent of the population 65 and over would eventually be eligible. However, the percentage increased from 10 percent in 2000 to 16 percent in 2005. In absolute terms, the number certified nearly doubled to 4.3 million in 2005, with the increase greater for the lighter eligibility levels and those who chose community care.

GOVERNMENT RESPONSE TO CRITICISM

Somewhat surprisingly, the cost of the new LTCI was not a major issue when the country was debating its introduction and throughout its initial years. This could be ascribed to the fact that, firstly, there would be little, if any, increase in the growth rate of expenditures in its initial year of implementation; accounting was merely transferred from the health and social services sectors, both of which had been increasing LTC expenditures. Secondly, from the Ministry of Finance's point of view, the levying of premiums meant that appropriations from the general expenditure budget would actually decrease, so it supported LTCI. Thirdly, as noted, upon implementation, expenditures for the first year were less than projected because only half of the hospital LTC beds had been transferred to the LTCI.

The main opposition to the LTCI came from the social welfare establishment for the following reasons. First, as the LTCI was originally drafted, services were limited to those requiring heavy care, which would have led to a socially disadvantaged light care elderly population becoming ineligible for IADL support services. To win their support, the LTCI legislation

---

[10] This is the best number available as the government's estimate of future costs, but it is not clear how seriously it should be regarded. The MHW mentioned this amount when the LTCI legislation was introduced to the Diet in 1995 (Ikeda, 1997). However, since then, the figure has not been mentioned – one might infer a deliberate strategy to remain uncommitted.

was rewritten to emphasize the prevention of decline, which would justify the provision of services to those who required only light care[11]. The level of *youshien* "needs support" was introduced with the ostensive purpose of preventing decline to the five levels of *youkaigo* "needs care". Moreover, the municipalities were encouraged to develop preventive programs (*yobou jigyo*), such as seminars on how to prevent falls, for those certified as "ineligible". Thus, "prevention" was used as a banner to justify and continue the services for those requiring only light care. Second, they criticized the introduction of a 10 percent co-payment because it would impose barriers to access for the current users. Prior to LTCI, only 30 percent of the recipients had been paying under the sliding scale rules because social services had targeted those with low income and the municipalities were not strict in levying charges. In response, the government lowered the co-payment rate for the first three years after implementation, and also lowered the ceiling on the amount of co-payment levied per calendar month for those with low income levels. Third, they objected to the fact that social service providers would lose their virtual monopoly on the provision of LTC services because for-profit and new non-profit organizations would gain entry[12]. The government stood firm on this issue because the public was demanding more consumer choice, but, as a compromise, their entry into institutional care continued to be prohibited.

After the LTCI had passed the Diet, criticism next arose concerning the method of determining eligibility levels. The computer algorithm had been developed from nursing home data so that, when tested in community settings, the results did not match the perceived severity, especially for those with cognitive problems[13]. In response, the government made two revisions prior to the implementation based on the results of pilot

---

[11] The details of how this shift occurred are not clear: the 1994 Committee Report focused only on those requiring heavy care in order to decrease the care burden of the family.

[12] Except for visiting nurse services, which were covered by health insurance and delivered by medical organizations, the provision of community LTC services and nursing homes had been limited to the government and social welfare foundations which were closely controlled by the local authorities.

[13] It is a mystery how the MHW was able to design an algorithm for separating those in the lightest level from the ineligible since they should have been very few, if any, who would meet the criteria for being ineligible in the nursing homes surveyed.

tests conducted in the community. Additional revisions were made three years after implementation in April, 2003, by making slight changes in the algorithm and in the assessment form, which led to a reduction in the number of items from 84 to 79.

However, after the third year, this criticism became muted while serious concerns came to be expressed about costs. Whereas the average monthly premium levied on those aged 65 and over increased from 2,900 Yen in the first three years (2000-2002) to only 3,300 Yen for the next three years (2003-2005) (MHLW, 2005a)[14], it was projected to increase to 4,300 Yen in 2006-2008, and eventually to 6,000 Yen in 2012-2014. Decreases in the price schedule of 2.3 percent in 2003, and 2.4 percent in 2006, were insufficient to stem this rapid increase. Thus, cost containment was the overriding concern when the LTCI came up for its scheduled revision in 2005. For institutional care, the partial levying of accommodation costs was introduced[15], and for community care, this led to the introduction of the preventive program which will be discussed in the next section. By making these revisions, the government announced that premium increases will be confined to 3,900 Yen in 2006-2008, and 5,200 Yen in 2009-2012 (MHLW, 2005a). In actuality, average premiums increased to 4,090 Yen in the 2006-2008 period but were still less than originally projected (MHLW, 2006b).

PREVENTIVE SERVICES IN THE LTCI

As has been noted, "prevention" had been an integral part of LTCI from the time of its implementation. However, in reality, as its inclusion was a result of a political compromise to protect the entitlement of low

---

[14] The premium increase made in 2003 was small because the municipalities had over-estimated demand (being fearful of running a deficit) and because there was a surplus as only half of the hospital LTC beds were transferred to the LTCI.

[15] From October, 2005, about half of the accommodation costs (room and board charges, utilities) had to be paid, which would increase out-of-pocket expenses for nursing home residents from about 56,000 yen (US $ 500) per month to about 81,000 yen (US $ 700) in a regular room with four beds. Charges are decreased or waived entirely according to income, and the balance is paid by LTCI. The lower charges are one reason why nursing homes are so popular in Japan, with waiting lists of several years.

care clients, the care plans in the "need support" level were not focused on reducing the rate of decline to the "need care" level and the services actually provided consisted overwhelmingly of IADL support (Tsuji, 2006). The 2005 revision made the ostensive purpose a real one, by explicitly limiting benefits to "preventive services" for those grouped in the "need support" level. Moreover, the number of those in the "need support" level was doubled by recategorizing most of those who had been placed in the lightest "need care" level (level one) to the newly created "need support level two"[16]. The two groups constitute 20 percent of the 4.4 million who have been certified as being eligible (MHLW, 2007). The preventive services are focused on strengthening muscles, oral function improvement and dietary consultation which are primarily provided in adult day centers.

This revision has already led to a 5 percent decline in the numbers of those in the "need support levels one and two" and in the lightest level of "need care (level one)" from April, 2006, to December, 2006, for the first time since the implementation of the LTCI (MHLW, 2007b). The decrease could be ascribed to the following:

For beneficiaries, the new services are much less attractive than the IADL support services provided by home-helpers, so fewer people have applied to be assessed for their eligibility status. Although IADL support services have not been completely excluded from the benefits for the "need support" levels in order to protect the rights of those who had been receiving these services, they have become available only on condition that the home-helper does not perform all the tasks, and involves the client in the activity, such as asking him or her to cut vegetables in preparing the meal (preventive home-help service, *yobou houmon kaigo*). While it is true that monitoring compliance would be difficult, it was assumed that most of those who would insist on these services are likely to be the pre-existing users. However, since they are likely to have declined to the "need care" levels by the time they come up for their next assessment, few in the "need

---

[16] Those placed in the lightest "need care" are now divided into two groups by a secondary algorithm and also subject to approval by a physician to rule out health conditions which would preclude their participation in preventive programs. About two thirds are placed in "need support level two" and the rest, one third, continue to receive the same benefits as before the revision.

support" levels are likely to be receiving these services in the future.

For the providers, there has been a de facto decrease in the amount reimbursed for services delivered to those in the "need support" levels. Instead of being paid for each day care session or visit, fees are now bundled for each calendar month and based on a standard number of sessions or visits, with time limits placed for each visit (on the grounds that excessive provision has led to increased dependence). This has made providing services to this group less profitable and has led providers to shift to heavy care clients. Moreover, the care plans of those in the "need support" are now subject to monitoring by the "Local Comprehensive Care Centers (LCCC)," which were newly created and operated, either directly by the municipalities, or contracted out to selected organizations. Although there are some doubts as to whether the LCCC are able to effectively monitor compliance, providers will likely feel increasingly under pressure as the LCCC starts to play a proactive role.

Whether the preventive services will be successful in slowing down or reversing decline to the "need care" level will not be easy to evaluate[17]. Although the program is designed so that services will be terminated as soon as the individual is certified to have improved to the ineligible state[18], very few are likely to do so. However, the revision appears to have been effective in dealing with the pressing need to contain the increase in those in the "need support" levels. The government was able to do so by restricting their benefits and making service provision less profitable to providers. Moreover, they were able to justify this revision by claiming that it was for the good of the individual and in line with the original intent of the LTCI to support the independence of the older population.

In future, the benefits for those in the "need support" levels may be further curtailed by merging them with a new preventive program targeted at the frail elderly, who are not so dependent as to be eligible for the LTCI (*tokutei koureisha jigyo*) (that would include those who have

---

17. According to a literature review performed by the MHLW committee, there was evidence to show the effectiveness of preventive measures. However, when examined by Niki (2005), whose work included more recent evidence, it was not conclusive.

18. The reassessment of the eligibility level must be made every six months for those in "need support" levels, in comparison to every two years (or when there has been a decline) for those in "need care" levels.

improved to this level from the "need support"), which will be provided at the discretion of the municipalities, and not as an entitlement (MHLW, 2005b)[19]. Thus, the original intent of targeting LTCI benefits to heavy care clients would eventually be realized. The group that loses out would be those in the light care levels who do not have informal support and are not able to pay out-of-pocket for IADL support services. However, these people should be the responsibility of the social welfare department, and not the LTCI. As has been explained, providing benefits to them by the LTCI had made the standards too lax when applied universally, and not just for the socially disadvantaged.

The implementation and revision of the LTCI in Japan demonstrate that policy-makers must respect the rights of the pre-existing beneficiaries when making their decisions. However, despite this caveat, preventive services are more likely to contain costs in LTCI than in health insurance because there is more flexibility in designing the benefit package and more responsibility could be placed on the individual.

---

[19] New criteria, composed of 20 self-checked items, were developed for screening the tokutei koureisha (designated elders), that are completely unrelated to the 79 item form used in the LTCI. There is considerable overlap between the eldely eligible for the "needs support levels" and for the tokutei koureisha (Ishibashi & Ikegami, 2007).

REFERENCES

Brayne, C., Gao, L., Dewey, M., Matthews, F. E. (2007). Dementia before death in ageing societies - The Promise of prevention and the reality. www.medscape.com/viewarticle/550283

Campbell, J. C. (1992). *How Policies Change: The Japanese Government and the Aging Society*. Princeton, NJ: Princeton University Press.

Campbell, J. C. & Ikegami, N. (2003), Japan's radical reform of long-term care. *Social Policy and Administration*, 36, 719-34.

Campbell, J. C. & Ikegami, N. (2006). Comprehensive long-term care in Japan and Germany: Policy learning and cross-national comparisons. In T. R. Marmor, K. G. H. Okma, & R. Freeman (Eds.), *Comparative Policy Learning in the World of Modern Medical Care*. New Haven, CN: Yale University Press (in press).

Ikeda. S. (1997). Kaigo Hoken no Nokosareta Mondai (Remaining problems in LTCI). In S. Sato & M. Kouno (Eds), *Kaigo Hokenhou* (LTCI) (pp.225-250). Tokyo: Houritsu Bunkasha.

Ikegami, N. (1988). Health technology assessment in Japan. *International Journal of Technology Assessment in Health Care*, 4, 239-254.

Ikegami, N. (1997). Public long-term care insurance in Japan. *Journal of the American Medical Association*, 278 (16), 1310-1314.

Ikegami, N. & Campbell, J. C. (2002)., Rationale and issues in designing an independent long-term care. *Social Policy and Administration*, 37, 21-34.

Ishibashi, T., & Ikegami, N. (2007). Kaigo Yobou Sesaku niokeru Taishosha Chushitsu no Kadai (Issues in screening subjects for the preventive care policy). *Kousei no Shihyo (Journal of Health & Welfare Statistics)* 54(5) (in press).

Kousei Tokei Kyokai (1996, 2001). *Kousei no Shihyo (Journal of Health & Welfare Statistics)*, 43(12), 199, 48(12), 194.

Mangin, D., Sweeney, K., & Heath, I. (2007). Preventive health care in elderly people needs rethinking. *British Medical Journal*, 335, 285-287.

MHW (Ministry of Health & Welfare) (1992). 1990. *Kanja Chousa (Patient Survey)*. Tokyo: Kousei Toukei Kyoukai.

MHW (Ministry of Health & Welfare) (1999). *Heisei 12 Nendo Roujin Hoken Fukushi Kankei Yosan Gaisanyoukyu no Gaiyou (Outline of the FY 2000 Health and Welfare Related Budget)*. http://www1.mhlw.go.jp/topics/kaigo99_4/kaigo43.html

MHW (Ministry of Health & Welfare) (2000). *2000 Kousei Hakusho (White Paper on Health & Welfare)*, 20. Tokyo: Gyosei.

MHLW (Ministry of Health, Labor & Welfare) (2001). *1999 Shakaifukushi Shisetsuto Chousa (Survey of Social Welfare Facilities)*. Tokyo: Kousei Toukei Kyoukai.

MHLW (Ministry of Health, Labor & Welfare) (2002). *Nippon no Shourai Suikei Jinkou (Future projections of the Japanese population)*. Tokyo: National Institute of Population and Social Security Research.

MHLW (Ministry of Health, Labor & Welfare) (2005a). *Kaigo Hoken Seido Kaikaku no Saishin Doukou (Most Recent Trends in the LTCI)*. Tokyo: MHLW.

MHLW (Ministry of Health, Labor & Welfare) (2005b). *Kaigo Yobou Management Gyomu Manual (Preventive Care Management Manual)*. www.nenrin.or.jp/center/event/kenshu01.html

MHLW (Ministry of Health, Labor & Welfare) (2006a). *Dai9kai Kaigoshien Senmonin Jitsumu Kenshu Jyukou Shiken no Jisshi Jyokyo nitsuite (Results of the 9th examination for the care managers' practical seminar*. www.mhlw.go.jp/houdou/2006/h1227-2.html2007/02/03

MHLW (Ministry of Health, Labor & Welfare) (2006b). *Daisankikan niokeru Daiichigou Hokenryo (Kakuteigaku) nitsuite (Insurance premium rates for the third period for elders (final figures)*. Document distributed at the 12th Meeting of the Kaigo Hoken Seido no Hihokensha, Hijyukusha no Hani Kakudai ni Kansuru Yushikisha Kaigi. Tokyo: MHLW, May 31.

MHLW (Ministry of Health, Labor & Welfare) (2007a). 2005 *Kanja Chousa (Patient Survey)*. Tokyo: Kousei Toukei Kyoukai.

MHLW (Ministry of Health, Labor & Welfare) (2007b). *Kaigohoushu Kaiteigo no Doukou (Trends after the revision of the LTCI fee schedule)*. Document distributed at the 2nd Meeting of the Kaigo Hoken Seido no Hihokensha, Hijyukusha no Hani Kakudai ni Kansuru Yushikisha Kaigi. Tokyo: MHLW, May 31. http://www.mhlw.go.jp/shingi/2007/03/dl/s0326-7e.pdf

Niki, R. (2005). *Niki Ryu's Iryokeizai-Seisakugaku Kanren Newsletter (Niki Ryu's Health Economics & Health Policy Related Newsletter)*, No. 12.

Thorpe, K. E., Howard, D. H. (2006). The rise in spending among Medicare beneficiaries: The role of chronic disease prevalence and changes in treatment intensity. *Health Affairs Web Exclusive*, 178-188.

Tsuji, I. (2006): *Sougouteki Kaigo Yobou System nitsuiteno Manual (Comprehensive Care Prevention System Manual)*. Research Report to the MHLW. http://www.mhlw.go.jp/topics/kaigo/topics/051221/index.html

Wittenberg, R., Pickard, L., Comas-Herrera, A., Davies, B., & Darton, R. (1998). *Demand for long-term care finance for elderly people'*. PSSRU., www.ukc.ac.uk/PSSRU

Is There a Role for Health Promotion in the Control of Chronic Disease in the 21st Century?

> Margaret Thorogood
Department of Epidemiology, Warwick Medical School; Health Sciences Research Institute, University of Warwick

"You know," he said, "sometimes it feels like this. There I am standing by the shores of a swiftly flowing river and I hear the cry of a drowning man. So I jump into the river, put my arms around him, pull him to shore and apply artificial respiration.

"Just when he begins to breathe, there is another cry for help. So back in the river again, reaching, pulling, applying, breathing and then another yell. Again and again, goes the sequence.

"You know I am so busy jumping in, pulling them to shore, applying artificial respiration, that I have no time to see who the hell is upstream pushing them all in."

(Tones & Tilford, 2001, p.27).

Chronic disease, particularly cardiovascular disease and cancer, already causes a heavy health burden throughout the world. It is predicted that the prevalence of such diseases will increase, particularly in low income countries. Deaths from cardiovascular disease will have serious economic consequences in emerging economies due to the loss of productive working life. The causes of chronic disease range from proximal causes, such as the lifestyle of the individual, to more distal causes such as the socioeconomic environment. These have been described as downstream and upstream causes. Health promotion is based on the belief that larger health gains can be achieved by interventions that address the upstream causes.

Recent computer modelling has shown how such interventions can be both effective and affordable, even in low income countries. What is needed now is the political will to implement effective upstream interventions.

INTRODUCTION

As the globalization of economic activity increases, and as new forms of media carry news and other information to even the most remote parts of the world, it is increasingly obvious that the economies of the world are interdependent and that peace and security of us all depend on the stability (and hence the economy and hence the health) of every country. It is impossible to predict all the challenges to the health of populations that will occur in the 21st century but we can be virtually certain that in the first half of the 21st century chronic diseases will dominate the list of causes of death and disability worldwide. The future therefore depends to a significant degree on how successfully the chronic disease challenge is addressed.

GLOBAL BURDEN OF CHRONIC DISEASE

In its 2005 report, the World Health Organization (WHO) predicted that in 2005 there would be, worldwide, 2,830,000 deaths from HIV/ AIDS and 883,000 deaths from malaria, but there would be a massive 17,528,000 deaths from cardiovascular disease and 7,586,000 deaths from cancer (World Health Organization, 2005). The challenge of reducing this already existing and growing burden of chronic disease is of global importance. Although the principal burden will fall on lower income countries it is not a problem that high-income countries can afford to ignore.

The World Health Organization (WHO) defines chronic disease as heart disease, stroke, cancer, chronic respiratory diseases and diabetes, but also neuropsychiatric and sense organ disorders, musculoskeletal and oral disorders, digestive diseases, genito-urinary diseases, congenital abnormalities and skin diseases (World Health Organization, 2005). Cardiovascular diseases accounted for 30% of all deaths at all ages worldwide (World Health Organization, 2005). The pattern is different when considering the disability-adjusted life years (DALYs) lost; cardiovascular disease now has just a 10% share but other chronic diseases account for a further 38% of the loss of DALYs (World Health Organization, 2005).

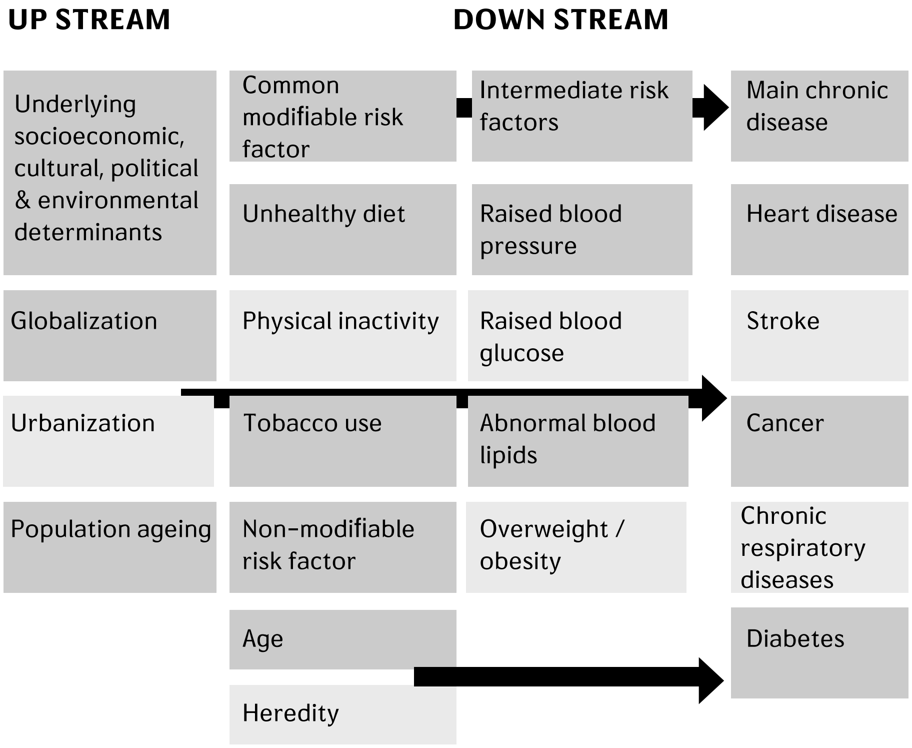
This is a problem for **all** parts of the world; including those countries that are still struggling with a heavy burden of malnutrition and infectious disease. When total deaths by cause are broken down by World Bank income group it emerges that "low income" countries carry the heaviest mortality burden of communicable disease, and maternal and perinatal causes (in terms of number of deaths); they also have the highest number of deaths from injury and the second highest number of deaths from chronic disease. The highest number of deaths from chronic disease are in "low middle income" countries (World Health Organization, 2005).

With the increasing urbanization of emerging economies it is likely that the prevalence of causal risk factors for chronic disease in such economies will increase, and hence the incidence of chronic disease will increase. However, even if the age-specific incidence of cardiovascular disease does **not** increase in low and middle income countries, their share of the burden of disease is set to rise simply because their population is ageing. It has been estimated, for example, that the total number of CVD deaths in Brazil will increase by 250% by 2040, in comparison to an increase of around 60% in the USA (Leeder, Raymond, Greenberg, Liu, & Esson, 2004).

ECONOMIC IMPLICATIONS

Chronic diseases represent an important health burden, but, in addition, the increasing prevalence of chronic diseases poses a very serious threat to the economies of some of the poorest countries. It might be supposed that such diseases affect mainly older people who are no longer part of the workforce, but almost half of the deaths due to chronic disease occur in people under the age of 70, and a quarter in people under 60 (World Health Organization, 2005). The problem is certain to get more serious as low income countries move further along the epidemiological transition and the prevalence of risk factors for cardiovascular disease increases. An international team of health policy makers has estimated the proportion of years of productive life in three working age groups that will be lost due to cardiovascular disease in 2030 in countries at different stages of transition. They predict that, for example, South Africa will lose 32% of the workforce aged 35-44 years, 40% of the workforce aged 45-54 years and 28% of the workforce aged 55-64 years. Equivalent figures for Russia were 22%, 44% and 33%. (Leeder et al. 2004). This shows what a huge inroad just one chronic disease will make at a time when these countries should be seeing the benefits of a rapid economic transition. Small wonder that President Obasaiyo of Nigeria, writing in the WHO report of 2005, said, "We cannot afford to say, 'We must tackle other diseases first… then we will deal with chronic disease.' If we wait even 10 years, we will find that the problem is even larger and more expensive to address" (World Health Organization, 2005, p.ix).

Figure 1: Upstream and downstream causes of chronic disease



Reproduced from WHO (World Health Organization, 2005)

UPSTREAM AND DOWNSTREAM CAUSES

Figure 1 is taken from the WHO 2005 report, but many similar models of the causes of chronic diseases can be found (World Health Organization, 2005). The most immediate and important causes of chronic disease are clinical conditions: raised blood pressure, raised blood glucose, abnormal blood lipids and overweight, and for these, clinical interventions may be effective and cost effective, even in a low-income country. However, lying behind those causes are **modifiable** lifestyle behaviors: diet, activity and tobacco use, where clinical interventions are of little value, and lying behind the lifestyle behaviors are the underlying socioeconomic, cultural, political and environmental determinants. These are not only the most powerful determinants of chronic disease; they are also the hardest to define and to address. Sometimes these determinants are referred to as "upstream" while determinants such as raised blood pressure are referred to as "downstream."

HEALTH PROMOTION

Health promotion is not synonymous with Health Education, although health education (posters, leaflets, mass media messages) may form an important part of a health promotion campaign. Some people regard health promotion as the province of well-meaning but ineffectual people who are merely ancillary to medicine. Others regard it as the whole purpose and point of public health. There is no single agreed definition, nor is there any agreement on whether health promotion is a discipline in its own right, or just a conglomeration of many disciplines, pulled together as and when needed. I prefer to think of health promotion as an organic entity growing from a base of several disciplines, such as psychology, sociology, anthropology and epidemiology, brought together pragmatically because the aims of health promotion are essentially pragmatic. Health promotion does not lack theory, but rather draws on the theoretical base of many disciplines, taking from them what is needed and what is relevant to a particular problem. One of the central ideas that drive health promotion is that the health of any individual is affected, not just by individual lifestyle factors but also by the wider social and environmental context in which they live. This has been encapsulated in the model proposed by Dahlgren and Whitehead (Acheson, 1998) which shows individuals and families positioned at the centre of several different arches of influences on their health, from the proximal (downstream) causes of individual lifestyle, through social and community influences, and living and working conditions to the most distal (upstream) influences of general socioeconomic and environmental conditions.

Health promotion began to develop its own identity after the First International Conference on Health Promotion held in Ottawa in 1986, which resulted in the Ottawa Charter (World Health Organization, 1986). Although health promotion has developed and matured a lot in the intervening 20 years, the Ottawa Charter is still widely quoted and the basic tenets of health promotion are unchanged. As the Ottawa Charter declared:

> Health Promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living (World Health Organization, 1986).

The Charter provided a broad agenda for health promotion, laying out five areas of action for health promotion:

1. To build a healthy public policy,
2. To create supportive environments,
3. To strengthen community actions,
4. To develop personal skills, and
5. To reorient health services.

The more upstream areas require action at a local community or even national level, including legislation, fiscal policy, planning decisions, housing policy and so on. Actions such as those called for in the Ottawa Charter take a long time and a great deal of persistence to implement. Developing personal skills and reorienting health services are somewhat easier (although not that easy) targets for action. In terms of chronic disease, there has been a great deal more activity related to these areas than there has been related to the first three, but there are also some successes in the more upstream spheres.

RESOURCES FOR HEALTH PROMOTION

In the struggle to get access to the resources that are necessary for developing and evaluating new initiatives, health promotion often misses out. There are many reasons for this but four important reasons are that health promotion does not attract the same public (and therefore political) support that providing a new treatment for the acutely ill does; that health promotion offers long term gains rather than short term fixes; that health promotion often provides small health gains for many people rather than large health gains for a few (and is therefore less visible); and that it is very difficult to demonstrate the effectiveness of health promotion initiatives within the constraints of a randomised controlled trial paradigm.

Less public support than care for the acutely ill

Partly because the gains are long term and the individual's gains are small, health promotion is never going to attract the public imagination in the same way as a public appeal for funding for an MRI body scanner, for example. In fact, when governments do support health promotion initiatives (such as banning smoking in public places, or providing parenting support services), they often face criticism from the media and from politicians for behaving as a "nanny state" or interfering with personal freedom. Moreover, while policy makers have increasingly come to understand the key message that any real impact on chronic diseases of lifestyle will only come about by achieving population-level change, there is a tendency to address this by exhorting individuals to change their behavior, ignoring the context in which people live and the many wider determinants of their behavior. This tendency has been described as "victim blaming," where the victims of an unhealthy environment are blamed for leading unhealthy lives. The lack of public engagement is a problem in all aspects of health promotion, but is a particular problem when dealing with the potentially more powerful upstream initiatives.

Long term gain, not short term fix

Politicians and public servants are inevitably driven by the need to fix today's problems today and rarely lift their eyes to view tomorrow. It is difficult, but not impossible, to get their attention focused on, for example, the gain in fifty years time from reducing the amount of salt in the diet of schoolchildren today. Many public health professionals, including those working in health promotion, have worked hard to achieve this shift in focus, and there are some signs of success, but there is still a long way to go.

Small gains for many

Long before the Ottawa Charter, Geoffrey Rose foresaw the problem, particularly of the long time scale and the small gains for many. In his seminal book, *The Strategy of Preventive Medicine*, he describes data from the 1980s on the distribution of cholesterol levels in middle aged American men, and their subsequent experience of death from coronary heart disease (Rose, 1993). A small proportion of men had very high cholesterol levels and as a result had a very much increased risk of death from coronary heart disease. However, a large proportion of the men had modestly raised cholesterol levels and experienced a modest increase in the risk of coronary heart disease. Geoffrey Rose demonstrated that many more deaths could be avoided by a small population-wide change in cholesterol levels than by a larger change in the cholesterol levels of only those with the highest measures. This also demonstrates what is known as the "prevention paradox." Many adverse events can be prevented if there is a population-wide change in a risk factor such a cholesterol levels, blood pressure or smoking. However, there is no way of determining either before or after the event which people will benefit or which events have been prevented. This means that many individuals need to make changes in their behavior, but only a small proportion of them will benefit, and there is no way to determine which people will benefit. This is a problem that Geoffrey Rose described as the "health lottery" but is commonly known as the Prevention Paradox.

Not amenable to evaluation by randomised controlled trial

There is now an emphasis on ensuring that health policy is "evidence based." This is entirely appropriate and a great advance on a policy which is based on prejudice and unsubstantiated opinion. However, demand for an evidence base tends to focus quite narrowly on evidence from randomised controlled trials and meta-analyses, and this poses a major problem for health promotion. Interventions which solely involve contact and dialogue with individuals or small groups are amenable to these methods of evaluation, but potentially far more powerful interventions, which rely on community involvement, policy change and political will, do not easily adapt to being evaluated by any form of controlled trial. Developing appropriate but robust methods for evaluating such health promotion activities is an ongoing and extremely difficult process.

EFFECTIVENESS OF UPSTREAM INTERVENTIONS

One evaluation method for upstream health promotion initiatives is computer modelling of likely impacts. Murray and colleagues from WHO (Murray et al. 2003) carried out a worldwide based modelling exercise to estimate the cost effectiveness of interventions to lower systolic blood pressure and cholesterol using both non-personal (health promotion, upstream) and personal (clinical, downstream) interventions. For example, among the 13 interventions they modelled were legislation to decrease the salt content of processed food (a non-personal and upstream intervention) and treatment of systolic blood pressure above 140 mm Hg with - blockers and diuretics (a personal and downstream intervention). These computer models were applied to the populations of 14 sub-regions of the world, categorised by continent and by levels of child and adult mortality. The table (Figure 2) shows a small selection of the results, with surprising levels of cost effectiveness particularly for the more upstream interventions, even in countries in sub-Saharan Africa. The authors concluded that their findings were "at odds with the perception that strategies to prevent cardiovascular disease should strictly be the concern of the very wealthy" and called for a "frame shift in thinking about priorities and public health strategies for less developed regions" (Murray et al. 2003, p.722).

Figure 2: Estimated cost effectiveness of legislation to reduce salt intake and of providing treatment for elevated blood pressure

Overall Mortality Pattern	Salt Legislation ($s per DALY)	Treating SPB >140mmHg ($s per DALY)
Countries with high adult and child mortality in Africa	47	101
Countries with low adult and child mortality in the Americas	13	186
Countries with high adult and low child mortality in Europe	28	149

Adapted from Murray et al. (Murray et al. 2003)

This same call for a change in how we think about chronic disease was echoed in the 2005 WHO Report (World Health Organization, 2005). There is still a long way to go, but there are a few signs that attitudes to chronic disease are shifting and policy makers and researchers are becoming more aware of the looming worldwide disaster posed by chronic disease. Some encouraging upstream initiatives are in place. Many governments have taken on the tobacco companies, and are introducing tough new laws on advertising and on smoking in public. In England we will be benefiting from such a law next July. The newly emerging Republic of South Africa led the way for developing countries with its tough tobacco control legislation passed very soon after Nelson Mandela took office, and since tightened up (National Department of Health South Africa, 2006).

CONCLUSIONS

Despite these minor successes there is still an enormous amount to be done and many of the changes that are needed will be even more difficult to achieve than the control of tobacco use. Diet and physical activity must be key components of any strategy to promote healthy life and avoid the chronic diseases of lifestyle, but these lifestyles are very difficult to address. Difficult though it is, the control of tobacco is easy compared with changes in what people eat and whether, when and how they are active. Both what we eat and whether we are active are woven into the whole complexity of our lives, and are not easily amenable to legislative control. Moreover, it is very difficult for individuals to change their habits in isolation. There have been many randomised controlled trials that have evaluated downstream individual health promotion interventions to improve a person's diet or to increase physical activity, and these have been summarised in a number of systematic reviews. In summary, such interventions are effective on average, but the effect size is small and the resource implications of delivering such interventions at a population level in a low or middle income country are prohibitive.

Yet the impending chronic disease disaster will not be contained unless the environmental factors that nurture these diseases are addressed. To return to the Ottawa Charter: we need a process to enable people to increase control over, and to improve, their health. This demands upstream interventions. I have recently been working with South African colleagues; together with women who cook for their families, we are exploring the factors that affect their choice of food. This research is in its early stages, but it is already apparent that the concept of food choice, let alone healthy food choice, is meaningless in a situation of constant food insecurity. Unless and until the issues of production and supply of food are tackled, there is little opportunity for any move towards a more healthy diet. This then calls for health promotion at its most difficult and most powerful; acting to "build healthy public policy." However, we have also noted a great need for some more downstream action to "develop healthier lives." The women we interviewed wanted to give their families food that was best for their health but they knew little about food and health and expressed the need to know more.

Does health promotion have a role in the control of chronic disease? Most certainly, at all levels. Will it be easy to implement? No.

REFERENCES

Acheson, D. (1998). *Independent inquiry into inequalities in health*..London: TheStationary Office.

Leeder, S., Raymond, S., Greenberg, H., Liu, H., & Esson, K. (2004). *A race against time. The challenge of cardiovascular disease in developing countries*. New York: Columbia University.

Murray, C. J., Lauer, J. A., Hutubessy, R. C., Niessen, l., Tomijina, N., Rodgers, A., et al. (2003). Effectiveness and costs of interventions to lower systolic blood pressure and cholesterol in a global and regional analysis on reduction of cardiovascular-disease risk. *Lancet*, 361, 717 - 725.

National Department of Health South Africa. (2006). Tobacco products control amendment bill. Retrieved November 11, 2007 from Government of RSA website: http://www.info.gov.za/gazette/bills/2003/25601.pdf

Rose, G. (1993). *The strategy of preventive medicine*. Oxford: Oxford University Press.

Tones, K., & Tilford, S. (2001). *Health promotion effectiveness, efficiency and equity* (3rd ed.). Cheltenham: Nelson Thornes Ltd.

World Health Organization. (1986). Ottawa charter for health promotion.

World Health Organization. (2005). *Preventing chronic diseases: A vital investment*. Geneva: WHO.

Future Management for Chronically Ill in Europe

> Cor Spreeuwenberg, Bert Vrijhoef,
Lotte Steuten
Faculty of Health, Medicine and Life Sciences,
Maastricht University

INTRODUCTION

Till the early 1920s health care institutions were owned by charities and care was mainly delivered by female non-physicians: sisters and nuns. The rise of modern medicine has changed this totally. Since the 1920s the main stream of health care facilities have been modeled to conform to a medical paradigm that focuses on acute care given in hospitals by often specialized physicians. Nurses are supposed to assist these physicians and to restrict their work to caring activities. However, in the 21st century most patients do not suffer from acute problems but from chronic conditions, defined by WHO as conditions requiring management over a period of years or decades (World Health Organization, 2003). Some even speak about an epidemic of chronic diseases. Although all health care systems will be confronted with this phenomenon, those in the Western industrialized countries are already being challenged to adapt their systems to the new needs. These needs can be considered from different perspectives such as the nature of chronic conditions, the health care system and society.

The aim of this article is to look for ideas to implement changes in care delivery adapted to the needs of chronically ill patients.

CHRONIC CARE IN TEMPORARY HEALTH CARE SYSTEMS

The rise in the number of chronic conditions derives from the fact that modern medicine has managed to postpone death, but is often not able to cure many diseases completely. Physicians are better at early diagnoses than at timely cures. Life expectancy has been prolonged dramatically, but a large percentage of the elderly must face suffering from chronic conditions during the last decade of their lives. The gain in quantity of life has not been followed by a parallel gain in quality of life.

The needs of acute patients with the same diseases do not differ a lot: their needs are disease-related and their main interest is to be cured. Chronic conditions do not only affect physical functioning but all aspects of life, including social and psychological functioning, family life and work. Therefore the needs of chronically ill patients differ substantially from one another.

By the nature of chronic illness, patients have a lifelong dependency on medicaments and health care services, and must adapt their behavior to their illness.

Suffering from chronic conditions does not affect only work, but also social relations and income, resulting in lower socio-economic status.

Not all chronic conditions have the same impact. The majority of people with well treated asthma and diabetes can function normally while others, like some people with chronic neurological diseases, face severely limited functional capabilities.

The health care system is dominated by hospitals and their orientation towards physicians. The care is fragmented within and between health care sectors and lacks continuity and understanding of the various needs of different chronic patients. Health care professionals are familiar with traditional medical treatments but have no knowledge of approaches and interventions to inform patients and to change their behavior.

Apparently the health care system has problems in adapting their way of delivery of care to the needs of chronic patients. Notwithstanding its rich history of medical progress, the health care system is failing amazingly in its power to change its own delivery system. Physicians protect their position and status and question the need for a comprehensive change. The value of management tools and information technology is underestimated, resulting in a lack of effectiveness and efficiency. Many bureaucratic mechanisms have been introduced to control personnel resulting in monkeys on the backs of the professionals and thus in cynicism and lack of motivation. Governments, insurers, purchasers, employers, third parties and interest groups want to be kept informed about evidence, best practices, etc., but it is unclear if they actually use this information in their plans.

The health care system is part of society and our societies are changing rapidly. Because of the importance of health care for their citizens and the public implications of health care expenditures, governments are very interested in the health care system. All European countries have public arrangements to assure that people have access to health care. In most countries the health care systems are nationalized; in others they are privatized, but the conditions under which they operate are tightly controlled.

People are better educated and have easy access to information. Instead of the traditional uniform relations they look for networks and structures which meet their specific needs. They ask for highly individualized services instead of collective ones. Citizens want to be autonomous, and refuse being dependant on others. In Europe, there is also a shift from collective responsibility towards taking responsibility for oneself. Public institutions are challenged to compete rather than to cooperate. Privatizations and public-private cooperation are stimulated. Industries have an interest in buying and governing health care institutions. They want to impose industrial and market principles on the health care system.

PHILOSOPHY OF CHRONIC CARE

The aims of chronic care are derived from the specific needs of chronic patients and society. Instead of being only disease oriented, chronic care will focus on supporting or restoring functions in order to promote participation in society.

1. Justifiable quality:
   Good chronic care will fit the specific needs of the patients and will therefore be personalized. The guidelines and standards of good clinical care will be followed and the care will have an integrated orientation.
2. Organizational and logistical effectiveness:
   To promote good care and to avoid errors, unwanted waiting times,

and duplication of services, the care will be given in an organizationally and logistically effective way.

3. According to societal needs:
   The interests of the society in aspects such as cost containment and increasing work force capacity must be recognized and respected. Therefore, a balance is required between input of resources and results.

To reach these aims several approaches have been proposed. Three of these will be explored further: Integrated Care, the Chronic Care Model and Disease Management.

Integrated Care

In order to improve chronic care, WHO has developed the concept of Integrated Care (World Health Organization, 2002). WHO has described it as "the bringing together of inputs, delivery, management and organization related to diagnosis, treatment, care, rehabilitation and health promotion." Integrated care is seen as a method "to improve services in relation to access, user satisfaction and efficiency."

Integrated care links the content of care with the process and structure of care delivery. Integrated care can only flourish if it exists in conjunction with development of expertise, infrastructure, quality assurance and research and development. (See figure 1.)*

The Chronic Care Model

Wagner and colleagues have developed a structural framework for organizing health care to improve outcomes among patients with chronic illness (Wagner, Austin, Korff, et al., 2001).

The Chronic Care Model (CCM) describes the conditions for good clinical care. The model can be summarized by six elements deemed to be essential for providing high-quality care to patients with chronic illnesses: delivery system design, self management support, decision support, clinical

---

* All the figures are at the end of the article.

information systems, community resources and health care organization (Bodenheimer, Wagner, & Grumbach, 2002). A meta-analysis has demonstrated that interventions containing one or more elements of the CCM can improve outcomes and processes for several chronic illnesses of interest to managed care organizations (Tsai, Morton, Mangione, & Keeler, 2005). By means of these interactions, patients become informed and activated in such a way that the functional and clinical outcomes of care will improve. (See figure 2).

The primary process in which a prepared, proactive practice team makes an effort to get productive interaction with patients is influenced by various factors: health care structure, financing of care, legal aspects, education of health care workers, availability of workforce, ICT and other technical equipment.

An exciting element of CCM is the emphasis on self-management and the establishment of the conditions to enable patients to self-manage their illness by using information, education, training and support. Self-management recognizes the reality that professional care is available only in a very limited way for patients with chronic conditions. The fact is often ignored that the average patient with diabetes mellitus who visits his physician four times a year must care for himself, without support, for 8,764 hours a year. It is therefore likely that investments in understanding of the disease and the principles of treatment are more effective than routine consultations alone.

A prepared and proactive practice team is competent in clinical care, has the attitude to see the patients as persons who are primarily responsible for their condition, is able to communicate with all types of patients and their families and organize the care delivery efficiently. Such a team is multi-disciplinary; keeps it competences up-to-date; delegates tasks to the professionals, often nurses, who are supposed to have the best skills by training and education; streams their patients in groups by complexity and characteristics; applies modern technology; is ready to support and inform; and is accessible and transparent.

Disease Management

A number of definitions are currently in circulation for disease management. The DMAA defines it as "a system of coordinated health care interventions and communications for populations in which self-care efforts are significant" (Disease Management Association of America, 2004). Personally I prefer the following description: "the programmatic and systematic approach to specific diseases and health problems by using management instruments that aim at the advancement of quality, efficacy and efficiency" (Spreeuwenberg, 2005). The steering information contains measurable outcome parameters which represent the aims of care. Benchmarking, feedback on different levels and steering are used to improve the results constantly. The feedback that is given is concrete, clear and personal. One uses "carrot and stick" mechanisms. Apart from the focus on improvement of care, disease management also has a strong client orientation.

Disease Management is a concept that was developed originally in the United States, often by parties outside the health care system itself who expect a return on investment (ROI). It focuses on populations instead of individuals and on the application of management instruments to improve care and reduce costs. The main public health care programs in the US, Medicaid and Medicare, have involved health plans working with disease management programs.

In Europe the concept of disease management is not widely accepted. In countries that have a national plan, such as England and Spain, the governments contract out parts of the health care services to third parties. In England responsibilities are decentralized. Some primary health care trusts cooperate with American organizations like Kaiser Permanente. In Spain the regional government of Catalonia has contracted out disease management programs for diabetes and heart failure. The countries with private systems under public law are introducing disease management programs. In Germany the government plays an active role; the authorities stimulated the foundation of large disease management programs focused on transferring care from hospital to community and sharing of services.

In the Netherlands health care providers such as big hospitals and organizations supporting family physicians started disease management programs. At the moment the government has taken the initiative to facilitate the foundation of groups, preferably groups of family physicians, which organize disease management programs starting with diabetes.

Differences between the three models

Integrated Care is a broad concept applicable for all chronic conditions. It aims to combine content with structure and process. The model focuses on the care provider and not on the care recipient. The Chronic Care Model is applicable for those chronic conditions in which self management is important. The model pays much attention to the activating role of the practice team which challenges and stimulates the patients to become involved in the control of their disease. The model also includes the preconditions for optimizing care, such as legislation, financing system, health care organization, etc. The model is more focused on quality of care and less on control mechanisms to reduce the costs of care, e.g., benchmarking and "carrot and stick" mechanisms. Disease Management, in any case the American version, focuses strongly on efficiency and quality gain. Its emphasis is on the use of market and business mechanisms in health care. The ultimate goal for the shareholder is the return on investment (ROI).

Common elements in chronic care approaches

A number of lessons can be learned from Integrated Care, the Chronic Care Model and the Disease Management approach:

- extend the clinical care with prevention and social and psychological support;
- focus on support of self-management by using instruments like information, education and change of lifestyle, coping and behavior;
- substitute if justifiable: often the care can be offered by well trained nurses; physicians perform better in the role of consultant;
- support the use of evidence based protocols: 80% of care can be protocolized;
- look for alternatives for the usual encounters - telephone calls or SMS messages;
- keep in mind that family and other informal caregivers see the patient more often than the formal caregivers;
- pay attention to the process of care;
- use feedback-mechanisms based on relevant data derived from clinical records, financial information systems and patient information;

- combine attention to clinical care with that on organization, financing, education, evaluation and research;
- make use of exchangeable technology for information and communication (e.g., HL-7 technology);
- be a learning organization, constantly willing and working to improve the delivery of care.

MODELING CHRONIC CARE IN MAASTRICHT

Till now this article has been rather descriptive. Attention was paid to the differences and similarities between the different models and to the opportunities for using these models in Europe. However our group has more than ten years experience in the implementation and evaluation of the common elements of the models in The Netherlands, which is part of Europe.

We are working in the Academic Hospital of Maastricht. Maastricht is the capital of the province of Limburg (one of the 12 provinces of The Netherlands). Maastricht has one hospital which has had academic status for the past 30 years and has a catchment population of 150,000 people. A feature of the medical faculty and the hospital is that it explicitly intends to bridge the gap between the hospital environment and the community.

In the Netherlands primary and secondary care are separated completely; primary care physicians called general practitioners (GPs) work alone or in small groups in the community and medical specialists work exclusively in hospitals. All citizens are supposed to have a particular GP. GPs have lists of their patients.

Since the 1980s the local medical specialists and GPs have worked together intensively in a facility at the hospital that supports GPs in diagnosis and treatment.

In 1996 the hospital wanted to reduce the number of chronic patient for budgetary reasons. At that time the hospital received a lump sum for all care delivered to all patients. It wanted to extend the number of complex patients and was no longer interested in caring for patients with common chronic problems. On the other hand, the GPs were paid on a capitation basis for their care of the socially insured ("sick fund") patients, who comprised more than 60% of their practice population. GPs had no financial interest in becoming primarily responsible again for the chronic patients, in those days treated by the medical specialists.

However, there was general agreement that too many patients were treated in the hospital without any medical need.

At that time a very small group of dedicated and innovative GPs and internal medicine specialists formulated plans to change the method of chronic care delivery. For strategic reasons they wanted to start with substitution of care: horizontally from hospital to community or primary care (practices of the GP) and vertically from physician to (specialized) nurse. By means of this change they wanted to promote "shared care."

In this situation the hospital's desire to reduce the number of chronic patients could be used as a window of opportunity. The group tempted some GPs to participate in an "experiment" to determine if combined horizontal and vertical substitution was justifiable. They chose to start with diabetes, asthma/COPD. They were able to offer them a specialized nurse employed by the hospital and working in the practice offices of the GPs for patients who were transferred from hospital to the care of the GPs. The medical specialists, GPs and specialized nurses formed a nuclear team that assigned patients to the nurse based on criteria related to the complexity of the health problem. A protocol was developed for examinations, laboratory tests, treatment and support. The Inspectorate of Health gave a special permit to allow the nurses to perform independent medical tasks beyond those that were legally permitted. A coordinator, located in a special "shared care" department of the hospital, could be appointed and each disease-specific program was chaired by a joint team of GP and medical specialist. The group was able to acquire funds for the development and scientific evaluation of the project. To discriminate between horizontal and vertical substitution, the research team also included other projects or programs in its evaluations. The results have been described in articles in international journals (Vrijhoef, Diederiks, Spreeuwenberg, Wolffenbuttel, & Wilderen, 2002; Vrijhoef, Diederiks, Spreeuwenberg, & Wolffenbuttel, 2001).

After having concluded that the substitution, giving a central role to specialized nurses in primary care, was justifiable, the initiators started to develop disease management programs for highly prevalent chronic diseases. All GPs in the region who met certain criteria were invited to participate in these programs. About 60 (out of 90) regional GPs agreed to participate.

All GPs have an electronic patient record by which all patients, classified as having specific conditions, can be detected. Patients with diabetes, asthma or chronic obstructive pulmonary diseases were invited for an assessment, often performed by medical students. Criteria for stratification of these patients in three groups were defined. The most complex group was treated by a medical specialist, the middle group by a specialized nurse and the uncomplicated cases by a GP and/or his practice-nurse. All patients with diabetes, asthma or chronic obstructive pulmonary disease were assigned to the medical specialist, the specialized nurse or the GP. (See figure 3.) These specialized nurses were supervised by the medical specialists and the GPs could ask the specialized nurses for advice. All clinical data were collected. A medical specialist discussed annually the clinical results with the specialized nurses and the GPs.

Clinical trials comparing the effects of the program were performed with the usual care to collect data on costs and outcomes. These data were used as an input for a probalistic decision-analytic model (Markov Model) designed to estimate the 5-year impact of the program beyond follow-up. Outcomes were assessed in terms of health-related quality of life (HRQL) and costs per quality-adjusted life-year (QALY). HRQL is the result of measurements of changes that patients with certain medical conditions experience that can be attributed to that chronic condition. A QALY is the sum of the mean change in quality of life by that condition and the number of years that these changes have lasted. All kinds of health care interventions aim to influence (improve) QALYs, either by improving quality and/or by prolonging life.

The results depend on the diagnosis-related program. In the diabetes program, the clinical effectiveness, as expressed by glycaemic control, improved significantly after two years of follow-up, except for patients assigned to the GP. Patients who were assigned to the specialized nurse benefited most from the introduction of the program. (See figures 4-6.) There is a probability of 74% that the program strategy will be superior to the usual care strategy. In the program strategy € 118 per patient per year is saved and HRQL increases by 5%. When policy makers are willing to pay € 3,000 for an additional QALY, the probability that the program will deliver value for money rises from 74% to 90%. This is a presentation of results that differs from traditional science in health care in which we are accustomed to presenting data as statistically significant and as odds-ratios. The percentage reflects the chance that a decision-maker makes the right decision if he introduces the intervention; in other words, the probability that the intervention will lead to a significant improvement. In this case: without financial input the probability that the quality will improve significantly is 74%; if an insurer is willing to pay € 3,000 extra, the probability will rise to 90%. Our estimations aim to encourage decision-makers to make the right decision.

In the asthma-program patients were better controlled. This result can be completely attributed to the patients assigned to the nurse specialist. The expected outcomes for patients assigned either the GP (+0.1 ± 0.2 QALY; € 23 ± 1,020) or the pulmonologist (+0.2 ± 0.38 QALY; -€3,687 ± 6,378) seem to remain largely the same as before implementation of the program. For patients assigned to the specialized nurse, the program strategy was associated with a gain in QALY (+1.2 ± 0.05) at higher costs (+ € 757 ± 612). However, as a whole, the program is associated with a gain compared to usual care of 0.7 QALYs within five years (3.4. ± .2 versus 2.7 ± .8) showing an increase of HRQL. Here the probability that the program was superior to the usual strategy was 76%.The annual cost reduction per patient was € 329 (€ 3,302 ± 314 versus € 2,973 ± 304). When the willingness to pay is € 1,000 per QALY the probability that the program delivers value for money rises to 95% (Steuten, 2006; Steuten, Vrijhoef, Merode, Wesseling, Spreeuwenberg, 2006).

Apart from measuring HRQL and cost-reductions, patients were asked to relate their satisfaction and their opinion of the program. Patients included in the program were more satisfied than patients treated as usual. Patients treated by specialized nurses were much more satisfied than patients treated by GPs. This finding has been confirmed by the results of a focus group of patients with diabetes or COPD (Koppers, 2000; Vrijhoef, 2002; Eijkelberg, Mur-Veeman, Spreeuwenberg, Koppers, 2002).

The following keys for success could be identified:

- longstanding relationship between academic hospital and GPs
- medical specialists in the hospital who are salaried employees
- common interests of participating providers (see "window of opportunity")
- creation of a sense of urgency
- enthusiastic and competent management, nurses and researchers

- goal-oriented, systematic and programmatic approach
- creation of national interest and funding
- temporary external funding for program development
- scientific evaluation resulting in international publications
- positive clinical results
- satisfied patients and participants

The next step in the development of a disease management program based on the principles of CCM is the focus on self management support. In cooperation with the Department of Health Promotion of Maastricht University, the initiators have developed a tool for informing and educating patients with diabetes that gives much room for the patient's situation, needs and wants and helps the patient play an active role in the consultation (www.diep.info). This program is adapted by national organizations dealing with the improvement of diabetes care.

CONCLUSIONS

Several countries in Europe are looking for innovative chronic care approaches combining Integrated Care, Disease Management and the Chronic Care Model. They are adapting models to European values for health care such as access for all and equity. At a European level decentralization of responsibilities seems to be more important than the way the health care system is paid, publicly or privately.

In chronic care it is more important to focus on support-systems for self management and behavioral changes than on taking over responsibilities as usually happens in the classic medical approach. Changes are needed on all levels of management. The caring organization must function as a learning organization, constantly improving its quality.

For implementation of these models it is important to follow a step-by-step approach and to look intelligently for windows of opportunity. Evaluation by critical research may function as an instrument to convince criticasters and to induce change.

As stated, this approach has been followed in Maastricht (The Netherlands) since the mid 1990s and was an initiative taken by some medical specialists and general practitioners. Assignment to medical specialist, specialized nurse or GP was based on stratification. The assignment to nurses and the use of protocols and feedback tools especially improved clinical outcomes, patient satisfaction, health-related quality-of-life and overall-costs. Research convincingly showed that nurses function better than physicians as the central caregiver for patients. A strong argument for this conclusion is that the nurses treated a group less complicated than the medical specialists but more complicated than the GPs. So there is no reason to assume that the effect depends on the complexity of the cases. Explanations for these results are the better developed communication skills of the nurses and the fact that they adhere more strictly than physicians to protocols and guidelines. It is interesting that they adhere better not only to the medical guidelines, but also to the research protocol. In the group of nurses the number of missing data was less than that in the group of GPs. These results must have further implications. One suggestion is to give nurses the responsibilities of care delivery – including medical care - to non-complex and moderately complex chronic conditions, and to restrict the tasks of physicians to consultants for supervision and for complications and serious multiple conditions. Such a change requires a new curriculum for specialized nurses.

The realization and implementation of innovative ideas require leadership and involvement of all organizations, including insurers and patient representatives. Attention must be given to circumstantial conditions like financing, education of professionals and administrators, ICT, publicity and continuation of care after the experimental period.

However there are also potential pitfalls and threats:

- programs which are not adapted to regional health needs;
- key persons who change their positions during the introduction and early implementation;
- insufficient resources and incentives for the nurses (payment, legal position);
- imbalanced power between medical specialists and GPs;
- hospital management that does not support community care;
- professional organizations protecting failing and poorly functioning professionals;
- financial drives as key-motive for participation;
- too much "democracy" and room for negotiations;
- lack of regular funding of evaluation and research.

Introduction of innovative care will not be easy. However, our experiences in Maastricht demonstrate that there is no need for pessimism. Despite the fact that more scientific evidence is needed, there are sufficient indications that innovation in chronic care is feasible, and all efforts are worthwhile.

Figure 1: Model of elements related to Integrated Care

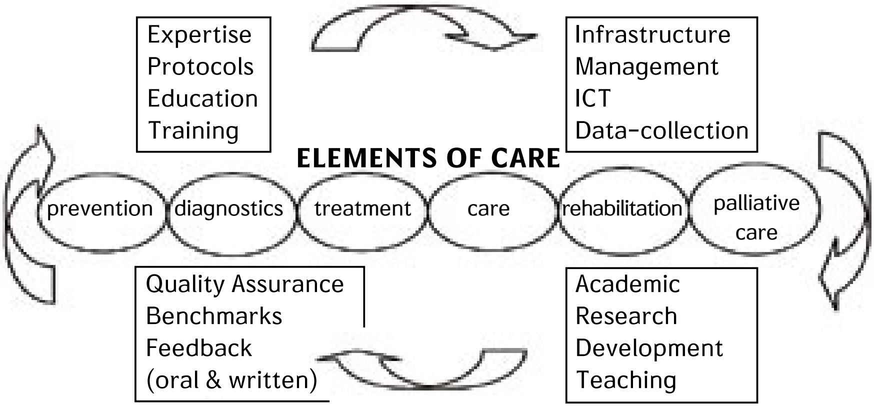


Figure 2: "Chronic care model" as developed by E.H. Wagner et al.

Figure 3: Maastricht model of stratification:

Categories of chronically ill patients assigned to medical specialists, specialized nurses and general practitioners

1: Patients with very complicated chronic diseases:
- assigned to medical specialists
- treated in a hospital

2: Patients with (moderately) complicated chronic diseases:
- assigned to specialized nurses
- treated in the community
- specialized nurse can consult medical specialist

3: Patients with chronic diseases without complications
- assigned to general practitioners or practice nurses (under responsibility of the general practitioner)
- treated in the community
- general practitioner can consult a specialized nurse

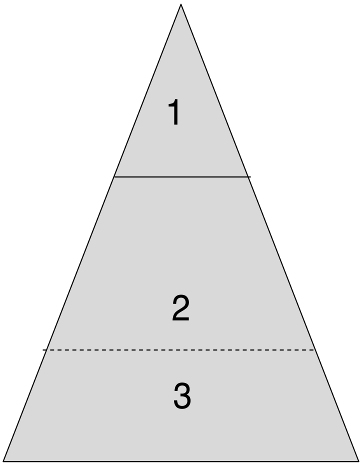


Figure 4: Cost effectiveness plane for patients with non complicated diabetes treated by the general practitioner

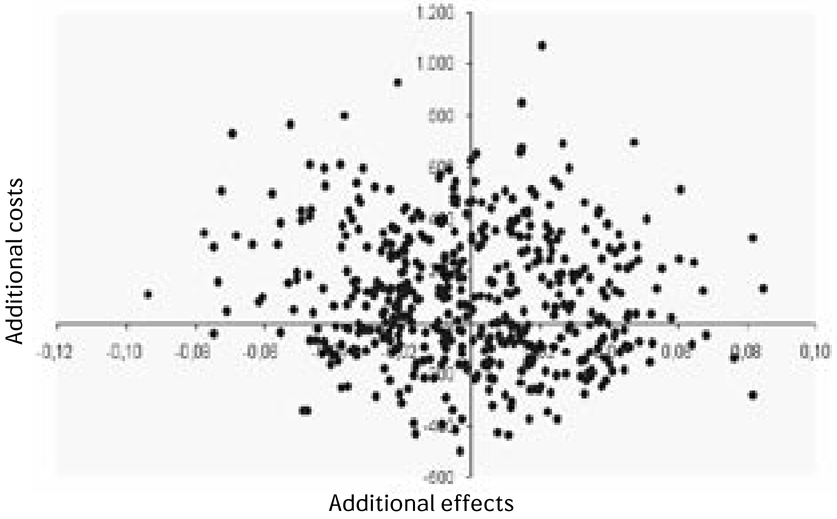


Figure 5: Costs effectiveness plane for patients with (moderately) complicated diabetes treated by the specialized nurses

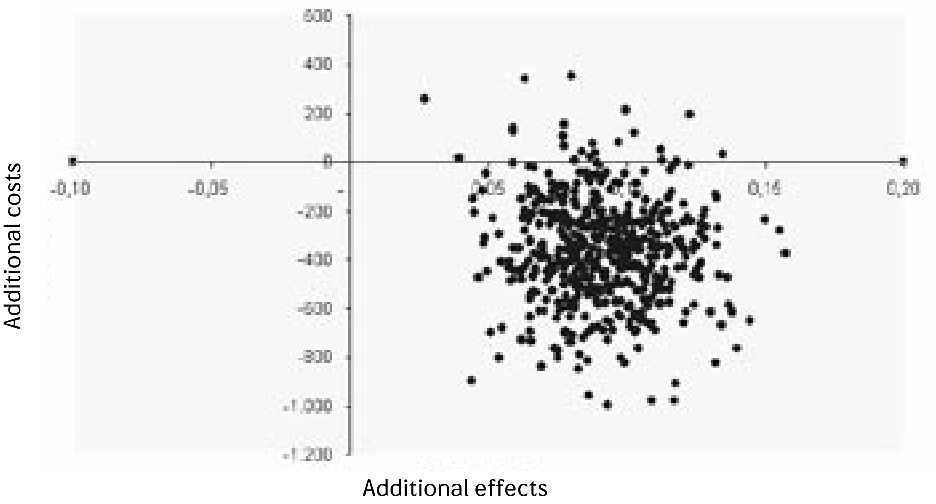
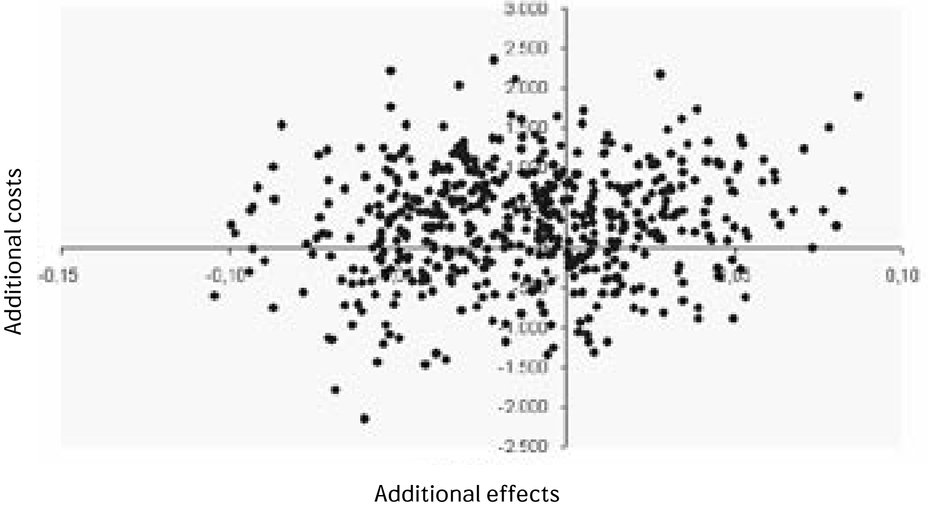


Figure 6: Cost effectiveness plane for patients with very complicated diabetes treated by the medical specialist



REFERENCES

Bodenheimer, T, Wagner, E. H., Grumbach, K.(2002). Improving primary care for patients with chronic illness. *Journal of the American Medical Association*, 288, 1775-1779.

Disease Management Association of America (2004). *Dictionary of disease management terminology*. Washington: DMAA Publications.

Eijkelberg, I. M. J.G., Mur-Veeman, I. M., Spreeuwenberg, C., & Koppers, R. L. W. (2002). Patient focus groups about nurse-led shared care for chronically ill. *Patient Education and Counselling*, 47, 236-239.

Koppers, R. L. W. (2000). *Patiënten stemmen…..kwaliteitsindicatoren vanuit het patientenperspectief voor shared care zorgmodellen* [Patients' voices….. indicators of quality for shared care models from patients' perspective]. Master thesis. Maastricht: Maastricht University.

Spreeuwenberg, C. (2005).The characteristics for an ideal disease management programme. In G. Schrijvers, C. Spreeuwenberg, Laag, H. van der et al. (Eds.), *Disease Management in the Dutch Context* (pp. 9-25). Utrecht, The Netherlands: Igitur.

Steuten, L., Vrijhoef, B., Merode, F. van, Wesseling, G. J., & Spreeuwenberg, C. (2006). Evaluation of a regional disease management programme for patients with asthma or chronic obstructive pulmonary disease. *International Journal for Quality in Health Care,* 2006, 1-8.

Steuten, L. M. G., Vrijhoef, H. J. M., Landewé-Cleuren, S., Schaper, N., Merode, G. G. van, & Spreeuwenberg, C. (2006). A disease management programme for patients with diabetes mellitus is associated with improved quality of care within existing budgets. In L. Steuten (Ed.), *Evaluation of disease management programmes for chronically ill* (pp. 116-131). Maastricht: Thesis, Maaastricht University.

Tsai, A. C., Morton, S. C., Mangione, C. M., & Keeler, E. B. (2005). A meta-analysis of interventions to improve care for chronic illnesses. *American Journal of Managed Care*, 11, 478-488.

Vrijhoef, H. J. M., Diederiks, J. P. M., Spreeuwenberg, C., Wolffenbuttel, B. H. R., & Wilderen, L. K. G. P. van (2002).The nurse specialist as a main care-provider for patients with type 2 diabetes in a primary care setting: effects on patient outcomes. *International Journal of Nursing Studies*, 39, 441-451.

Vrijhoef, H. J. M., Diederiks, J. P. M., Spreeuwenberg, C., & Wolffenbuttel, B. H. R. (2001). Substitution model with central role for nurse specialist is justifiable in the care for stable type 2 diabetic outpatients. *Journal of Advanced Nursing*, 36, 1-10.

Vrijhoef HJM. Is it justifiable to treat chronic patients by nurse specialists? Evaluation of effects on quality of care. Maastricht: Thesis, Maastricht University, 2002.

Wagner EH, Austin BT, Korff M von et al. Improving chronic illness care: translating evidence into action. Health All (Millwood) 2001: 20: 64-78.

World Health Organization. Innovative care for chronic conditions: building blocks for action. Genevea, WHO, 2003.

World Health Organization. Innovative care for chronic conditions. Geneva: WHO, 2002.

Chronic Illness, Comorbidity, and Primary Care Quality

> Barbara Starfield
Health Policy and Pediatrics,
Johns Hopkins University

"Chronic disease" is the widely accepted major epidemic of the 21st century. Generally focused on biomedical entities such as coronary artery disease, diabetes, asthma, obesity, and hypertension, the concept of the "chronic disease" is turning health services away from a focus on meeting people's needs for care of acute health problems (which still constitutes the major reason for visits to physicians everywhere) and towards a disease-by-disease focus in patient care.

Evidence for the validity and utility of this new paradigm comes largely from mortality data that demonstrate increasing rates of death assigned to the presumably underlying causes – "presumably" because it is health professionals who decide what constitutes an "underlying" cause. Is the cause of death appropriately attributed to a chronic heart failure (as is usually the case) when a woman with an osteoporotic hip fracture goes into heart failure – a common occurrence in the elderly? Accumulating evidence of life course influences on vulnerability to illness is not reflected in outmoded conceptualizations of "cause."

This paper provides the basis for rethinking the concept of "chronicity" as represented by conventional, biomedically oriented "chronic diseases" by showing how a wide range of semi-acute and acute conditions often act as if they were chronic, recurring or reappearing with periodicity in many people. Moreover, people with any given illness are more likely than people without the illness to have other unrelated illnesses, i.e., multimorbidity (more commonly referred to as "comorbidity"). Vulnerability to illness is often a generalized vulnerability – a fact that calls into question a health system focus on individual diseases rather than on people's health needs in general. The originally genetic concepts of penetrance, pleiotropism, and etiologic heterogeneity define the challenge to identifying people with high burdens of morbidity, NOT whether or not they have a medically-defined chronic illness (Starfield, 1998; Broemeling, Watson, & Black, 2005).

Comorbidity is very common in the population – even more common in the elderly because of the overall high frequency of illness in the elderly. However, the occurrence of comorbidity (greater than statistically expected co-occurrence of diseases) is actually greater in the young (van den Akker, Buntinx, Metsemakers, Roos, & Knottnerus, 1998). That is, the concentration of vulnerability to illness in various segments of the population decreases with increasing age. It does not make sense to focus on the presence of defined illnesses – chronic or not – to define populations at risk of poor outcomes.

Comorbidity is very expensive, in terms of impact on overall health, on costs of care, on hospitalization rates, and on rates of adverse events (Wolff, Starfield, & Anderson, 2002). Because of the high frequency of comorbidity and its attendant demand on health resources, it is not a "chronic disease" model that is required but, rather, a model that is focused on the care of people over time, i.e., a primary care model.

A decade of research has provided a strong basis for primary care as the infrastructure of health systems and has elucidated the characteristics of primary care as well as its characteristics and cardinal functions and the strategies for its assessment and monitoring. Strong primary care has been consistently and robustly demonstrated to provide better outcomes, more equitable care, and lower costs than specialty care, whether primary care is measured as the orientation of health systems, as the ratio of primary care physicians to population, as the benefit of having a primary care practitioner as the regular course of care, or as the primary care experiences of people and their health outcomes (Starfield, Shi, & Macinko, 2005).

In contrast, little is known about the characteristics and functions of specialist care. Apart from the fact that it is more disease-oriented (in contrast to primary care's patient-orientation), there has been no attention to describing or measuring the quality of the functions of specialty care. Evidence from empirical studies in the US indicates that high ratios of specialists to population are not associated with better health of those populations, but rather with increased costs and often worse health outcomes (Starfield, Shi, Grover, & Macinko, 2005). Areas with higher consultation rates with multiple physicians have worse outcomes (Schoen et al., 2005; Skinner, Staiger, & Fisher, 2006) even when the severity of patients' conditions is taken into account. Moreover, international comparisons show much higher adverse events rates when patients see larger numbers of physicians. The roles of specialty care need defining, describing, and assessing. Specialty care is best thought of as a resource to enable primary care physicians to manage those needs that are too uncommon for primary care practitioners to maintain competence in dealing with them, or to provide assistance in dealing with uncommon manifestations of common illnesses. It makes much better sense, both from the viewpoint of costs and outcomes, for specialty services to function as a backup to primary care physicians rather than as a resource for patients, except in situations where specialist care is appropriate, according to evidence-based criteria.

Primary care, buttressed by appropriate specialty care, unifies a health system and focuses it on people's problems, not on specific diseases, whether they fit the current conceptualization of "chronic illness" or not.

The current fad for disease-oriented approaches to quality of care assessments, with the attendant enchantment with payment for performance, based largely (at least in the US) on routine care of narrowly defined chronic illnesses, is inimical to high quality patient-oriented care (Boyd et al., 2005; Garber, 2005; Kravitz, Duan, & Braslow, 2004). The current agenda that suits vested interests such as pharmaceutical companies, medical academia (with its specialty focus), and the market-oriented creation of disease (Thorpe, Florence, Howard, & Joski, 2005) and patient demand (rather than patient needs) works against improvement in the health of patients and populations, and will lead to the bankrupting of health systems. A more justifiable approach to quality and payment would focus on equity as the basis for choosing priorities in health systems; alternatives to cost-effectiveness as a basis for choice or priorities (Oliver, 2006); primum non nocerum as a major issue; and the extent to which people's health needs have been adequately recognized and dealt with, and have responded to interventions.

REFERENCES

Boyd, C. M., Darer, J., Boult, C., Fried, L. P., Boult, L., & Wu, A. W. (2005). Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: Implications for pay for performance. *Journal of the American Medical Association*, 294(6), 716-724.

Broemeling, A.-M., Watson, D., & Black, C. (2005). *Chronic conditions and co-morbidity among residents of British Columbia*. Vancouver, BC: University of British Columbia.

Garber, A. M. (2005). Evidence-based guidelines as a foundation for performance incentives. *Health Affairs,* 24(1), 174-179.

Kravitz, R. L., Duan, N., & Braslow, J. (2004). Evidence-based medicine, heterogeneity of treatment effects, and the trouble with averages. *Milbank Quarterly*, 82(4), 661-687.

Oliver, A. (2006). Inconsistent objectives - Reflections on some selective health care policy developments in Europe. *Health Economics, Policy and Law*, 2(1), 93-106.

Schoen, C., Osborn, R., Huynh, P. T., Doty, M., Zapert, K., Peugh, J., & Davis, K. (2005). Taking the pulse of health care systems: Experiences of patients with health problems in six countries. *Health Affairs*, W5:509-525 (also available at http://content.healthaffairs.org/cgi/reprint/hlthaff.w5.509v3).

Skinner, J. S., Staiger, D. O., & Fisher, E. S. (2006). Is technological change in medicine always worth it? The case of acute myocardial infarction. *Health Affairs*, W6:W34-W47 (also available at http://content.healthaffairs.org/cgi/reprint/hlthaff.25.w34v1).

Starfield, B. (1998). *Primary care: Balancing health needs, services, and technology* (pp. 35-52). New York: Oxford University Press.

Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. *Milbank Quarterly*, 83(3), 457-502.

Starfield, B., Shi, L., Grover, A., & Macinko, J. (2005).The effects of specialist supply on populations' health: Assessing the evidence. *Health Affairs*, W5:97-107 (also available at http://content.healthaffairs.org/cgi/reprint/hlthaff.w5.97v1).

Thorpe, K. E., Florence, C. S., Howard, D. H., & Joski, P. (2005). The rising prevalence of treated disease: Effects on private health insurance spending. *Health Affairs*, W5:317-325 (also available at http://content.healthaffairs.org/cgi/reprint/hlthaff.w5.317v1).

van den Akker, M., Buntinx, F., Metsemakers, J. F., Roos, S., & Knottnerus, J. A. (1998). Multimorbidity in general practice: Prevalence, incidence, and determinants of co-occurring chronic and recurrent diseases. *Journal of Clinical Epidemiology*, 51(5), 367-375.

Wolff, J. L., Starfield, B., & Anderson, G. (2002). Prevalence, expenditures, and complications of multiple chronic conditions in the elderly. *Archives of Internal Medicine*, 162(20), 2269-2276.

Tertiary Prevention: The Role of Rehabilitation in the Management of Chronic Disease

> Peter Disler
Medicine and Clinical Dean, Monash University and Bendigo Hospital

People who live with chronic disease face many challenges, including unpleasant symptoms and complex treatment regimens; for many, however, it is the disability which is so commonly associated with chronic disease that has the major impact on their lives. This paper will explore whether rehabilitation is a necessary and valuable component of chronic disease management, and will also raise questions as to whether, and how, the current rehabilitation paradigm needs to change, if it is to make a global impact.

HOW COMMON IS DISABILITY IN CHRONIC DISEASE?

In 2005, the World Health Organization (WHO) Secretariat on Disability & Rehabilitation reported to the 58th World Health Assembly that 600 million people in the world live with disabilities, 80% of whom reside in low-income countries, most of whom are poor, and few of whom have access to rehabilitation (World Health Organization, 2005). Moreover, the global incidence and prevalence is increasing, a function of many factors including ongoing wars, malnutrition, substance abuse and accidents and the epidemic of HIV/AIDS, all against a background of a rapidly ageing population.

Disability caused by chronic disease has many facets, and I will use road traffic accidents and diabetes to illustrate the association *(this should not be taken to imply that these exceed other conditions in relevance or prevalence, but they are important causes of disability internationally, are known to be increasing, and have attracted recent attention in the literature)*.

Road Traffic Accidents as a cause of disability

In 2003 the WHO estimate of mortality as a result of **road accidents** was 1.2 million people annually (Ameratunga, Hijar, & Norton, 2006). Even allowing for inadequate data, low income countries appear by far to be the worst affected, e.g., the overall mortality rate (per 10,000 population) in all of Europe is 11, while in Latvia it is 22.7. The comparable figure in Latin America is 41.7; in East Mediterranean countries it is 26 and in Africa, 28.

Even more striking is the increase that has been seen in recent years: between 1975 and1998 the mortality in India increased by 79%, in Malaysia 44% and in Botswana 200%. Many factors have been cited to explain these appalling statistics, including a massive rise in motorized vehicle use in the face of limited driver training, substantial traffic congestion and inadequate road design and surfaces (Kopits & Cropper, 2003). Pedestrians and cyclists, both particularly susceptible to accidents and injury, fill the roads in less developed countries, and share them with highly powered cars (Nantulya, 2003). Furthermore, great use is made of less formal public transport such as minibuses and taxis, often overcrowded and poorly maintained and known to have high accident rates (Afukaar, Antwi, & Ofosu-Amah, 2003). In this context, unless radical changes occur, the traffic accident related mortality in China is expected to increase by 92% in the next 20 years, and in India, by a frightening 147%.

However, mortality data may only partly reflect the topic at hand, and does not consider the disabling effects of non-fatal injury. As Ameratunga et al. (2006) state: "Reliable data for longer term health consequences of injury particularly remain sparse," and even in New Zealand, where data collection is highly developed, more than one third of road traffic accidents that lead to hospitalization are neither reported to the police nor recorded in the national statistics. In 2002 the WHO estimated that 50 million people had been disabled by accidents, at a global cost of US $ 518 million, with the 2% of people with the most severe disabilities accounting for 44% of the total costs. However even this understates the secondary societal and economic effects, as more than half of those affected are males aged 15-44, who are usually the primary breadwinners, and loss of their income may precipitate whole families into poverty.

It is important to note that while improved retrieval and acute services have had a significant positive effect on mortality, those who survive are often severely disabled; this was shown in Sweden where between 1992 and 1997 decreased mortality was paralleled by increases in disability and pensions (Lund & Bjerkedal, 2001). As road traffic accidents are predicted to move from their current rating as ninth highest contributor to the global burden of disease, to third by 2020, this issue will have a major impact on the demand for rehabilitation internationally.

Diabetes as a cause of disability

The global **prevalence** of diabetes in adults is predicted to increase to 370 million by 2030; in Australia, a generally first world society of approximately 20 million people, recent work has shown that 7.5% of people over the age of 25 are diabetics (23.6 % of whom are over 75), and 275 new cases of diabetes are diagnosed daily. This frightening statistic is at least partly attributable to the national obesity epidemic (Ausdiab reports, 2001 and 2006) which has also been implicated in the increasing incidence of type 2 diabetes in children and adolescents (Fagot-Campagna & Narayan, 2001); more than 25% of Australian children are now found to be obese (Batch & Baur, 2005).

With these enormous numbers, the fact that 50% of **newly** diagnosed type 2 diabetics have disabling or potentially disabling conditions such as retinopathy, nephropathy, neuropathy or vascular disease becomes highly significant. Moreover the number and extent of disabilities increases with age and duration of diabetes, and includes limb amputations, blindness, and cerebrovascular, renal and cardiac disease (UK Prospective Diabetes Study, 1998). It is widely predicted that survival of diabetics into old age will have a major impact on the prevalence of disability in the medium term future.

WHAT IS THE ROLE OF REHABILITATION IN PEOPLE WITH DISABILITY ASSOCIATED WITH CHRONIC ILLNESS?

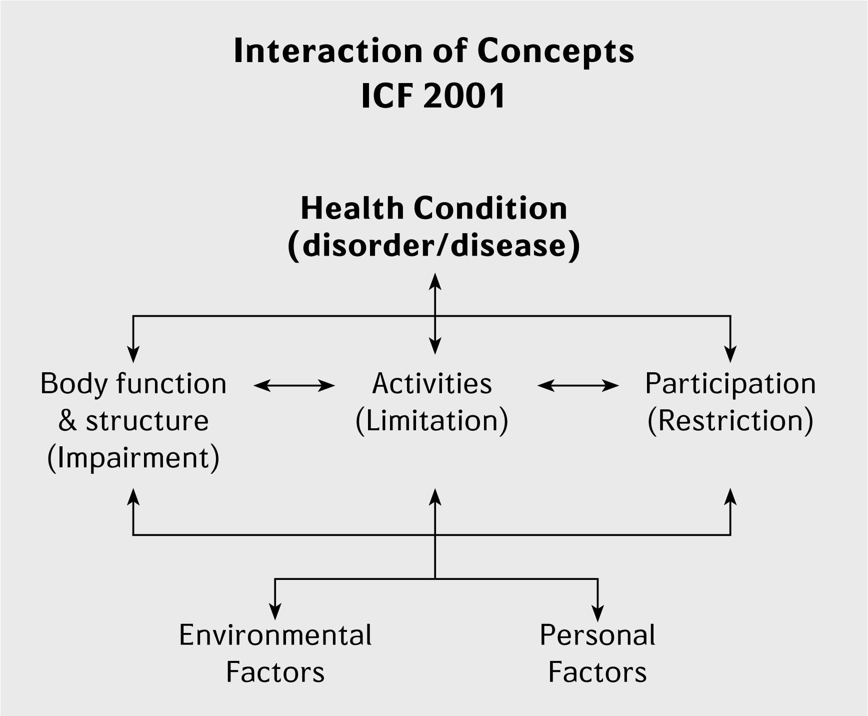
There is thus ample, indisputable evidence that many people with chronic illness are "disabled," and that this affects their quality of life and is a major challenge for the health care system. Can rehabilitation favourably affect this balance?

The WHO has long been a powerful advocate for the development of rehabilitation programs for people with chronic illness. Since 1993 WHO member countries have been committed to implementing the United Nations Standard Rules on *"Equalization of Opportunities for Persons with Disabilities,"* which mandate inter alia the provision of *"rehabilitation services"* and *"support services, including provision of assistive devices,"* to support people with disabilities to *"reach and sustain their optimum level of independence and functioning"*, and *"allow them to exercise their rights."* The WHO goes further and details the kind of strategies that should be implemented to make the above possible, including moving the focus from hospital to community-based rehabilitation, international workshops to foster national rehabilitation programs, early identification of impairment to reduce its impact, and integration of rehabilitation into all primary health care programs. Those programs for people with HIV/AIDS, leprosy and violent injuries may be particularly important.

How much progress has been made in this regard in the 15 years since the Standard Rules were promulgated? Although rehabilitation is widespread and highly developed in first world countries like the USA, Germany, the United Kingdom and Australia, it remains a sporadic feature of the health services of many countries in Africa and Asia (Disler, Khan, Omar, & Abbott, 2004). It is thus worth examining the model currently practised in the Western world, and exploring whether it can successfully address chronic disease globally in its current form, or whether it needs to be adapted materially in order to do so.

Historically, rehabilitation developed largely in response to war injuries, e.g., the provision of prostheses to amputees, and wheelchairs to those who were unable to walk. Such approaches may be so intuitive that rigorous research is not needed for their justification, and as brain tissue was understood not to regenerate (Silver, 2003), neurological rehabilitation focussed on teaching the patient to use unaffected areas of the body to compensate for those which were impaired. In the early 1950s, however, groundbreaking research such as Bobath's *Neurodevelopmental Approach* (Bobath, 1990) and Brunnstrom's *Movement Therapy Approach* (Brunnstrom, 1970) demonstrated that recovery of paralysed limbs can indeed be expedited by appropriate patterning of movement, posture, sensory stimulation or motor use, and concepts such as "neuroplasticity" emerged as major forces in modern neuro-rehabilitation. Over the intervening years, a large body of evidence has accumulated attesting to the positive effect that rehabilitation has across a wide range of disabling impairments, not only clinically, but in terms of cost related to length of hospital stay and long-term dependency (Turner-Stokes Disler, Nair, & Wade 2005).

The current paradigm of rehabilitation is informed by the International Classification of Function (ICF), developed under the auspices of the World Health Organization, sanctioned by the World Health Assembly and now available in six languages. The ICF paradigm was developed as a taxonomic model, and as such its language is relatively precise, i.e., ***impairment*** in body structure or function may affect ***activities and participation***, under the strong influence of both ***personal and environmental factors*** (see model below).



In this context, rehabilitation is seen to be an ordered process, whose aim is the minimization of *impairment*, and enhancement of *activities and participation*, thereby offsetting disability and improving quality of life. To this end, the current model demands definition and treatment of a clinical problem by a number of different health professionals, who bring their individual professional expertise into a multidisciplinary or (preferably) interdisciplinary team, and work together using physical, social and psychological approaches.

However, some have argued that this rehabilitation paradigm is too restrictive, is based more on the perspective of the rehabilitation professionals than the patient, and is too resource – intensive to address the needs of people with chronic disease and disability globally. In order to address these questions in the context of this brief review, I have chosen to base the discussion on the rehabilitation of a person after stroke. Although this decision is easily justified by the high incidence of stroke internationally, its distribution across both more and less developed countries, and the traditional inclusion of a broad spectrum of health professionals in its management, it is acknowledged that this will focus on adults, and the elderly in particular. I believe, however, that the principles illustrated should be broadly applicable to people of all ages, who have congenital or acquired chronic conditions that lead to disability.

In the developed worlds of the USA, Western Europe and Australia, rehabilitation of stroke victims accounts for more than 30% of rehabilitation hospital admissions, with a median duration of six weeks. The therapeutic team is large, and may include specialist and junior doctors and nurses, physiotherapists, dieticians, occupational and speech therapists, social workers, psychologists, orthotists and more. The prevailing dogma is: *the more intense the rehabilitation program, the better the outcome* (Kwakkel, Wagenaar, Twisk, Lankhorst, & Koetsier, 1999); at least three hours of therapy per day (over and above nursing and medical time) is the minimum gold standard in Australia; in the USA it may often be double that (Taub & Uswatte 2001). Although many patients will return home, a significant percentage of elderly patients will be discharged to residential care facilities. In less generously resourced health services, however, the process is usually far less formalized and incorporates a narrower spectrum of health professionals; less therapy is provided, and patients are usually discharged home to relatives, even with severe ongoing disabilities.

How is the success of rehabilitation measured? In both the above models, the practice is informed strongly by the longstanding dogma (Ford & Katz, 1966) that most functional gains occur in the first month, and few after three months. In these relatively early stages after a stroke, the preeminent challenge for both the patient and team is independence in self care (usually referred to as personal activities of daily living or PADL) and this naturally forms the focus of baseline function. PADL can be measured relatively easily using standardized indices, such as the Barthel Index or Functional Independence Measure (FIM) (Granger, Hamilton, Linacre, Heinemann, & Wright, 1993). Thus, it is also used to measure progress later during the course of treatment, and for final outcome measurement. As dependency in self care correlates with care needs and discharge destination, and has a major impact on cost, this parameter also makes sense to the funders and providers of rehabilitation, who aim to move people out of hospital with the minimum length of stay, and with least dependence on community services. They thus use the same measures of PADL to judge rehabilitation programs, putting even more pressure on rehabilitation professionals to focus primarily on these areas, even though this may mean that they lack time to address the many other challenges that people with stroke face, such as altered body image, self confidence and self esteem.

Several other important questions emerge from scrutiny of the above process. Firstly, professional rehabilitation often stops once the patient is discharged, so we need to ask if an intensive post-acute rehabilitation program is sufficient. Immediately after a stroke, people feel debilitated and in a state of emotional shock, and the high incidence of post-stroke depression has been recognized for many years (Robinson, Lipsey, & Price, 1985). They may therefore not be susceptible to the best of rehabilitation intentions and interventions at this early stage. In addition, it is only once they achieve independence in personal care and leave the institution that people start to comprehend the myriad of domestic and community-based challenges they will face in personal relationships, and with driving and returning to work. Support in these areas then falls on the family, who often struggle on without professional advice; the unfortunate effect is that people often do not reach their maximum potential.

Some would therefore argue that we need two rehabilitation phases: a justifiable early stage with a focus on PADL, and a "second go," once affected people have recovered some emotional and physical strength, and identified their goals. It is only in the last decade that research has emerged to support this approach, e.g., when Taub offered intensive rehabilitation programs (including restraint therapy) to people with hemiparesis of up to 17 years duration (mean 4.9 yrs); good progress was seen in arm strength and in 21 other tests of function, and these gains were maintained during a further 2-year period of follow-up[1].

Secondly we need to look at the geographical locus of rehabilitation. If, as the ICF argues, social and physical environments are major determinants of whether or not people reach their goals, it follows that rehabilitation **must** have an environmental focus. Rehabilitation needs to help people develop the skills to manage in their **own** homes, not a customised, highly accessible ward which seldom reflects the home environment. Hospitals also separate people from families, friends and their cultural and linguistic milieus, and visits to hospitals often cost relatives money that they can ill afford. Furthermore, in many instances, carers need to be trained to look after a disabled person who wishes to live at home. In the United Kingdom alone, 850,000 people care for people with dependency related to chronic neurological disease alone. Should all, or almost all, rehabilitation therefore be done in the home environment? The evidence suggests that home-based rehabilitation for people with stroke costs much the same as hospital based rehabilitation, and leads to similar functional outcomes, but seems to have a positive effect on "patient satisfaction" and their feeling of being "empowered" (Disler & Wade, 2003).

However, perhaps the most important issue to tackle is the dependency of the current rehabilitation paradigm on a large, multidisciplinary team and complex equipment, as neither may be available in developing countries. The world faces a great shortage of rehabilitation professionals of all streams, so which members of the traditional team are essential? Can similar outcomes be achieved by using a smaller team? Although there is ample evidence for the value of the rehabilitation process as a whole

---

[1] The importance of this was even recognized by the popular press. The New York Times reported: *"Doctors know that people can recover some lost function in the first months after stroke; but the conventional wisdom says there's little help for improvement after that. A new study offers hope for use of limbs disabled by stroke"*.

(Cochrane Review, Stroke Unit Trialists' Collaboration, 2001), it is a multilayered, multifaceted process, described by Wade (2001) as a *"black box"* and by Whyte & Hart (2003) as a "Russian Doll", and there is little high quality research available to tell us which of its components are most important. For example, an evidence-based review of speech therapy after stroke (Greener, Enderby, & Whurr, 2002) found little difference in the outcomes of dysphasic patients whether they were treated by trained speech therapists or partially trained volunteers. Similarly, a relatively small randomized study of occupational therapy (OT) (Unsworth & Cunningham, 2002), showed no difference in personal or community activities of daily living whether patients received therapy of this type or not. In this context, an extremely interesting study compared patients who had **either** physiotherapy (PT) or OT after stroke. Firstly, no difference was found in the Barthel PADL measure or in the SF-36 (a standard quality of life measure) after one, three or six months (Alexander, Bugge, & Hagen, 2001). Secondly (and somewhat counter-intuitively), those who had OT ended with less pain and better physical function, and those who received PT functioned better socially, thus begging the question of whether therapy makes a difference to the outcome on which it focuses. This was reinforced by a further study which compared, and found no difference, between therapeutic programs focussed either on PADL specific activities or "activities for pleasure" (Logan et al. 2004); e.g., those whose programs comprised gardening improved as much in PADL as did the PADL-specific group.

In the absence of good evidence-based research one may be justified in speculating on how rehabilitation might (and must) change if it is to offer positive outcomes to people with chronic disease throughout the world. I personally believe that we need a far less restricted rehabilitation paradigm, one which acknowledges rehabilitation as a complex, iterative process of *assessment, goal setting, intervention and evaluation*, in which the key aspect is setting goals which are achievable and shared both by the disabled person and the team (Wade & de Jong, 2000). Furthermore, if (as implied above) it is the innate strength of the team, and not specialized individual skills that promote positive outcomes, or even link up to specific outcomes, then we can (or must) also argue for a *multi-skilled* rehabilitation professional who works across all fields, who deals with the majority of patients, and who only needs to seek assistance in highly selected cases.

As Wittgenstein stated, however, *"The limits of my language mean the limits of my world" (Tractatus Logico-Philosophicus, 1922)* and critical to the above change may be a change in the vocabulary and semantics of rehabilitation: targeted outcomes and their measurement must be expanded to include **any** goal that is important to the person receiving rehabilitation, not only goals which subserve a system of rapid discharge from inpatient beds. Not all patients, for example, may see independence in personal care or even personal hygiene as paramount, even if this view is not always palatable to their therapists!

Can this be possible in the years ahead? Will progress be restrained by strong professional craft groups, whose status may be linked to their being perceived as having esoteric knowledge and skills? Certainly little will happen unless national governments make a commitment to applying the WHO principles and the United Nations standard rules. In this respect one is reassured by the recent British *National Service Framework for Long-term Conditions*. In militating for a structured, systematic approach to treatment and care for people with long-term neurological conditions, this report invests in many of the principles suggested above, e.g., moving the focus of measurement to the goals set by the person with disability, although still strongly informed and assisted by health care professionals. It also advocates for multi-skilled professionals, who will work closely with family members and the disabled person, in that person's own environment, where the disabled person will be empowered by familiarity, family support, language and culture. This British lead calls for measured optimism, and may open the door for similar changes being implemented in other less resourced parts of the world, where even more value may be found in such an enlightened approach.

REFERENCES

Afukaar, F., Antwi, P., & Ofosu-Amah, S. (2003) Pattern of road traffic injuries in Ghana: implications for control. *Injury Control and Safety Promotion*, 10, 69-76.

Alexander, H., Bugge, C., & Hagen, S. (2001). What is the association between the different components of stroke rehabilitation and health outcomes? *Clinical Rehabilitation*, 15, 207-215.

Ameratunga, S., Hijar, M., & Norton, R. (2006). Road Traffic Injuries : confronting disparities to address a global health problem. *Lancet*, 367, 1533-1540.

Ameratunga, S. (2005) Disability counts—or does it? *Injury Prevention* 11: 129-130.

Barr E. L. M., Magliano, D. J., Zimmet, P. Z., Polkinghorne, K. R., Atkins, R. C., Dunstan, D. W., et al. (2006) *The Australian Diabetes, Obesity and Lifestyle Study (Ausdiab 2005). Tracking the Accelerating Epidemic: Its Causes and Outcomes*. Melbourne, Australia: International Diabetes Institute.

Batch, J. A. & Baur, L. A. (2005). Management and prevention of obesity and its complications in children and adolescents. *Medical Journal of Australia*,182, 130-135.

Bobath, B. (1990). *Adult hemiplegia: Evaluation and treatment* (3rd ed.). Amsterdam: Elsevier.

Brunnström, S. (1970). *Movement therapy in hemiplegia: A neurophysiological approach*. New York: Harper and Row.

Disler, P., Khan, F., Omar, Z, & Abbott, G. (2004). International aspects of rehabilitation. In J. De Lisa, B. Gans, & N. Walsh (Eds.), *Physical medicine and rehabilitation: Principles and practice (4th ed.)*. Philadelphia: Lipponcott.

Disler, P. & Wade, D. (2003) Should all stroke rehabilitation be home based. *American Journal of Physical Medicine & Rehabilitation*: 82, 733-735.

Dunstan D, Zimmet P, Welborn T, Sicree R, Armstrong T, Atkins R, Cameron A, Shaw J, and Chadban S. (2001) *The Australian Diabetes, Obesity and Lifestyle Study (Ausdiab 2000). Diabetes and Associated Disorders in Australia: The Accelerating Epidemic*. Melbourne, Australia: International Diabetes Institute.

Fagot-Campagna A. & Narayan, K. M. V. (2001). Type 2 diabetes in children (editorial). British Medical Journal, 322, 377-378.

Ford AB, Katz S. (1966). Prognosis after stroke: a critical review. *Medicine* 45:223-35.

Granger CV, Hamilton BB, Linacre JM, Heinemann AW, Wright BD. (1993). Performance profiles of the Functional Independence Measure. *Archives of Physical Medicine and Rehabilitation*, 72, 84-89.

Greener J, Enderby P, Whurr R. Speech and Language Therapy for Aphasia following Stroke. *Cochrane Database of Systematic Reviews Cochrane Database of Systematic Reviews CD000425*. www.theCochraneLibrary.com

Kopits E and Cropper M. (2003) Traffic fatalities and economic growth (*Policy Research Working Paper No 3035*). Washington,: The World Bank.

Kwakkel G, Wagenaar R, Twisk J, Lankhorst G, Koetsier J (1999) Intensity of leg and arm training after primary middle-cerebral artery stroke: a randomised trial. *Lancet*, 354, 189-194.

Logan P., Gladman, J., Avery, A., Walker, M., Dyas, J., & Groom, L. (2004). Randomised controlled trial of an occupational therapy intervention to increase outdoor mobility after stroke. *British Medical Journal* 329:1372-4.

Lund, J., & Bjerkedal, T. (2001). Permanent impairments, disabilities and disability pensions related to accidents in Norway. *Accident Analysis and Prevention* 33:19-30.

National Service Framework for Long-term Conditions (2005). United Kingdom: Department of Health.

Nantulya, V. and M. Reich (2003). Equity dimensions of road traffic injuries in low and middle income countries. *International Journal of Injury Control and Safety Promotion* 10, 13-20.

Robinson, R., Lipsey, J. & Price, T. (1985). Diagnosis and clinical management of post-stroke depression. *Psychosomatics* 26, 769-778.

Silver, J. R. (2003) *History of the treatment of spinal injuries*. New York and Dordrecht: Kluwer Academic/Plenum Publishers

Stroke Unit Trialists' Collaboration (2001). Organised inpatient (stroke unit) care for stroke. *Cochrane Database of Systematic Reviews 2001, Issue 3*. Art. No.: CD000197. DOI 10. 1002/14651858.CD000197.

Taub, E., & Uswatte, G. (2001) Constraint-Induced Movement Therapy. *Stroke*. 31, 983 Turner-Stokes, L., Disler, P., Nair, A., & Wade, D. T. (2005) Multi-disciplinary rehabilitation for acquired brain injury in adults of working age. *Cochrane Database of Systematic Reviews* CD004170. www.theCochraneLibrary.com

UK Prospective Diabetes Study (UKPDS) Group (1998). Effect of intensive blood glucose control with metformin on complications in overweight patients with type 2 diabetes *Lancet*, 352,854–865.

United Nations (1993) *Standard Rules on the Equalization of Opportunities for Persons with Disabilities* , 85th plenary meeting of the United Nations General Assembly (Resolution 48/96).

Unsworth, C. A., & Cunningham, D. T. (2002). Examining the evidence base for occupational therapy with clients following stroke. *British Journal of Occupational Therapy*, 65, 21- 29.

Wade, D., de Jong, B., (2000). Recent advances in rehabilitation. *British Medical Journal*, 320, 1385-1388.

Wade, D. T. (2001) Research into the black box of rehabilitation (editorial). *Clinical Rehabilitation* 15, 1-4.

Whyte, J., & Hart, T. (2003) It's more than a black box; it's a Russian doll: Defining rehabilitation treatments. A*merican Journal of Physical Medicine and Rehabilitation*, 82, 639-652.

World Health Organization (2001). *International Classification of Functioning, Disability and Health* (ICF). Geneva : World Health Organization.

World Health Organization (2005). *Disability, including prevention, management & rehabilitation*. Report to the 58th World Health Assembly by the Secretariat on Disability and Rehabilitation (Report # A58/17).

Long Term Care – The Next Revolution?

> Rachelle Kaye
Maccabi Institute for Health Services Research;
Planning and Finance Division – Strategic
Planning, Maccabi Healthcare Services

The issue of long term care, particularly for the dependent elderly, has been of increasing concern in all of the countries of the Western world, and is even beginning to demand attention in developing countries. One of the obvious reasons for this growing concern is demography. Life expectancy is increasing and is expected to continue increasing, particularly in the elderly population. From 1960 to 2000, the life expectancy of males aged 65 in OECD countries increased by almost 3 years – an increase of 22%, while the life expectancy of women aged 65 increased by almost 5 years – an increase of more than 30% (Huber, Hennessy, Izumi, Kim, & Lundsgaard, 2005).

As a result of increasing life expectancy as well as the trend in decreasing birth rates, the share of older people in the population has increased dramatically and the prediction is that it will continue to increase. In 1960 the OECD average for the share of persons aged 65 and over was 8.7% of the population. In 2000 it had increased to 13.8% and the projection for 2040 is 25.6%. It should be noted that the average share of persons aged 65+ for Western Europe in 2000 was even higher than the OECD average – about 15%. The increase in the share of persons over 80 in the population is no less dramatic. In 1960 it was 1.3%, in 2000 it was 3.1% and the projection for 2040 is almost 8% - similar to the average for the over 65s in 1960 (Huber et al., 2005).

One of the major unknowns is what proportion of this population will be dependent and require some level of long-term care services. While there is considerable debate on this issue, the most recent evidence would appear to indicate that there is a trend toward reduction of disability rates in old age – predominantly among the age groups 65-80 (Huber et al., 2005). However, even the most optimistic projections of increasing disability-free life expectancy still leave us with a significant projected increase of the burden of disability, albeit deferred to older age groups. The current trends are far from homogenous across countries, and we are only just beginning to learn about what potential factors might influence disability rates among older people. The factors most frequently addressed in the literature include socio-economic factors, education, health-related behaviors, and treatment of chronic disease (Cutler, 2001).

Chronic disease is indeed a confounding factor in attempting to predict the disability burden of the future. If the current trends continue unchecked, there may well be significant increase in disability due to chronic disease. According to WHO figures, "noncommunicable conditions and mental disorders accounted for 59% of total mortality in the world and 46% of the global burden of disease in 2000. The disease burden will increase to 60% by the year 2020; heart disease, stroke, depression and cancer will be the largest contributors (WHO Observatory on Health Care for Chronic Conditions, retrieved 2006). In a study conducted by the Department of Veterans Affairs in the US to assess how age and chronic illness affect healthcare costs, it was determined that age was less important than chronic illness in explaining differences in healthcare costs. Compared with costs of the younger patients (65-79), the total mean costs of the oldest patients (80+) was 22% higher. The reasons for this difference were: a higher proportion of the oldest patients had expensive chronic conditions (cancer, congestive heart failure, renal failure); and the costs of long term care which accounted for most of the extra cost of the oldest patients (Yu, Ravelo, Wagner, & Barnett, 2004).

What is "long term care"?

The definition suggested by Johnson and Cori, which is similar to earlier definitions by the American Institute of Medicine, the OECD Long Term Care Project and others is:

Long-term care encompasses a wide range of services for people who need assistance on a regular basis because of chronic illness or physical or mental disabilities. ***Unlike most health service, long-term care is not generally designed to treat an illness or condition****. Although it can include skilled nursing care, it consists primarily of help with the activities* *of daily living (such as bathing, eating, dressing and using the toilet) and with tasks necessary for indepndent living (such as shopping, cooking and housework)*(Johnson & Cori, 2005).

In many ways, this attempt to distinguish long term care from health care is what has created the dilemma of "who is responsible for long term care?" that has made it an orphan that falls somewhere between the responsibility of the family, social services and health care services; has enabled governments, who embrace health care as a right of all citizens, to ignore it; and has contributed to the fragmentation in service provision which may, in and of itself, exacerbate the burden of dependency.

In 1994, Dr. Bernd Schulte of the Max-Planck Institute wrote:

> In most countries, there is a sharp institutional and legal division between sickness and dependence on care. The former is covered by "health insurance" *[be it private insurance such as in the US, public social insurance as in Germany, Belgium, and the Netherlands, or public tax-based health systems such as Great Britain, Spain, Italy, New Zealand, the Scandinavian countries]* while the latter continues to be largely a personal "private" risk for which there are mostly no adequate public provisions…..The build up of social services does not seem keep pace with the needs of an ageing society so that frail elderly persons and their families are often put under a very heavy strain…

Schulte continues with the assertion that there is a more or less general consensus that all [*European*] countries need social security reforms which provide for coverage of the risk of long term care and that there are five recurring topics of special concern to policymakers in all EU member states:

- The lack of integration between health and social services
- The lack of special geriatric hospitals or of special facilities for long-term care
- The inadequacy of coverage of long-term care under social security
- Deficits in coordination in community care services
- The need for decentralized services which would integrate public and other forms of help (Schulte, 1996).

All of the above was written on the eve of the implementation in 1995 of the German long-term care social insurance program which provided, for the first time in Germany, a system of social protection for dependency as a right of all citizens. Since then, in response to population aging and growing demand for services, more countries have begun to address the issue and to implement reforms in this area.

> ***Among OECD countries, there is a trend toward more universal public provision of long-term care services for those dependent on such care. Several countries have made decisive progress over the past decade in overcoming fragmentation of service delivery and financing across public programmes, regions or groups of the population*** (Huber et al., 2005).

PUBLICLY FUNDED SYSTEMS FOR LONG TERM CARE

In a survey by this author of the developments in the health care and long term care systems in 21 countries (Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, Greece, Ireland, Israel, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, United Kingdom, United States) we found that:

- Public funding is the predominant means of financing long term care. Private long term care insurance is negligible in most countries
- Private households in most countries share the burden of care, not only by providing informal, unpaid care, but also by making substantial co-payments and/or out-of-pocket spending for care provided under public programs, both at home or in institutions (Huber et al., 2005).
- In many countries, there is a correlation between the structure of the publicly financed health care system and the long term care system

While there are significant differences and unique features to the long term care system in each country, they all address the basic services: home health care, home personal care, residential care and long term institutional care. There is sufficient similarity among the various long term care systems in these countries that it is possible to group them into several broad categories:

- Countries with universal and comprehensive coverage and services for health care and long term care. In these countries, the same body is usually responsible for providing both types of care, allowing for considerable integration (Australia, Austria, Denmark, Finland, Norway, Sweden)

- Countries with clearly defined public social insurance programs for both health care and long term care (Germany, Japan, Luxembourg, Netherlands)
- Countries in which coverage and service provision for long term care are the responsibility of the health care system (Belgium, Canada, Ireland, New Zealand,)
- Countries with long term care benefits, sometimes well-defined, sometimes less well-defined, but characterized by a significant fragmentation of responsibility for the various long term care benefits and services among different agencies. (Greece, Israel, Italy, Portugal, Spain, United Kingdom, United States).

1. Universal and Comprehensive Coverage

In the Scandinavian countries, the health and social care systems are national, tax-based decentralized systems. The Central government sets policies and participates in the funding of services, but the responsibility for provision of these services is decentralized to the counties and/ or municipalities. While the system of each country has its own unique features, they are all characterized by provision of comprehensive health care and long term care services which are provided by and integrated at the local level. The emphasis is on maximizing the health and social support services in the community so as to enable the dependent elderly to remain in the community and to avoid or postpone institutional care.

Denmark, for example, was one of the first industrialized countries to adopt a community care policy with heavy emphasis on self-determination, deinstitutionalization and home care and is often cited as an example of the "almost ideal" system. The healthcare system in Denmark is a decentralized mandatory tax-financed national health service operated by 16 county (province) level regional authorities which provides full cover for primary, secondary and tertiary care to all residents. Services provided include help at home (both home help services paid for with social service funds and home nursing services paid for with health care funds), day homes and day care centers, nursing homes and various forms of housing for the elderly. In most municipalities there is a community center which is the base for home services and other activities geared to the community dwelling elderly such as health promotion, rehabilitation services, information, referral, day care, meals, transportation, and cultural and social activities. The municipalities (275) are responsible for providing all social services including long-term care and housing services for the elderly which are financed by local taxes and block grants from the state (Kodner, 2003).

All of the countries provide financial support for the informal primary caregiver and most provide relief and respite services as well as other support services (EC Documents on Health and Long Term Care, retrieved 2006). All of them are also showing some degree of strain in continuing financial sustainability of their systems. Australia has a federal system for both health care and long term care which is funded predominantly by the Commonwealth but is administered predominantly by the six states and two territories while the actual care (assessment, institutional, home and community care) is provided by a range of public and private (profit and non-profit) providers. There is significant support for the informal caregiver including income support, income supplement and respite and support services (Huber et al., 2005; Hillis & Healy, 2001).

Austria is different from the above countries in that it has a coherent long term care system, but it is totally separate from the health care system. The Austrian health care system is a social insurance system in which insurance coverage is the responsibility of social insurance funds. The long term care system, on the other hand, is a universal cash-payment program, funded from general tax revenues, which provides categorized needs-based long term care benefits, regardless of income, property ownership or reason for long term care. The benefits are provided by the landers (states) and the municipalities (Hofmacher & Rack, 2001; Huber et al., 2005).

2. Public Social Insurance

Schulte defines social insurance as a contributory system within which there is:

> a spreading of risks and a social equalization, independently of individual need, among the insured…..Contributions are not set according to the typified risk of the individual insured, but they are rather calculated according to social criteria by means of a redistribution mechanism, i.e., they are set according to the income

> of the insured….The task of social insurance is to protect the insured against situations of individual need, e.g., the consequences of illness, invalidity or old age…..[as well as] protecting the state against any liability to grant social benefits simply because the individual has failed to make any appropriate provision against the risk concerned…***The distinguishing features of social insurance are…that it is in most cases compulsory in order to keep the number of people who have to rely on social assistance financed from general taxation as small as possible…and, in order to take into consideration the ability-to-pay of the ensured person with the consequence that the better off pay higher contributions than those who earn less*** (Schulte, 1996).

Social insurance systems for long-term care, with the exception of the Netherlands, are relatively new. **Germany** has had a statutory social insurance system since the 1880s for old age (pensions), disability and health care, but only since 1995 for long term care. Long term care social insurance is financed and regulated independently of social health insurance but is managed by existing sickness funds (Karlsson, 2002). People above a certain income who have opted out of statutory health insurance and purchased health insurance from private insurers are obligated to purchase LTC insurance from the same private insurer that provides their health cover. The benefits must at least equal that provided by the health insurance funds. There is a small but growing market for supplemental health insurance (Homola, 2002). **Japan** has a social insurance system to cover the risks of old age disability and health care and since 2000 there is a new branch of social insurance to cover the risk of needing long term care. This is a mandatory social insurance operated by the municipalities under central government legislation (Karlsson, 2002). **Luxembourg** also has a social insurance system covering old age and acute health care and in 1998 introduced a new arm of social insurance to cover long-term care as part of its health care insurance (Schmitz, 2005). **The Netherlands**, too, has a social insurance system for health (enacted in 1966) and for long term care. Long term care is covered under the Exceptional Medical Expenses Act (AWBZ) which was enacted in 1967 as a compulsory national insurance scheme, mandatory for the entire population and intended to cover "catastrophic" and exceptional risks and expenditures regarded as "un-insurable". This insurance is administered by the regional social health insurance funds (Exter, Hermans, Dosljak, & Busse, 2005).

All of these systems, as social insurance systems, entitle the insured population to specified benefits. In all of them, the benefits are in-kind and/or cash benefits and eligibility is determined by some measure of "need". They all provide both institutional and home care benefits. In both Germany and the Netherlands, there is also a considerable infrastructure of community based services, such as neighborhood community centers, provided predominantly by non-profit organizations.

3. Long Term Care Coverage as an Integral Part of the Healthcare System

In Belgium, Canada, Ireland, and New Zealand those services defined as "long term care services" are provided by the health care system in the same manner as other health care services such as physician care, drugs, hospital care, etc. In **Belgium**, for example, both home nursing care and residential care for the elderly are listed among the other health care services covered by the Belgian health and disability insurance system which is a social insurance system implemented by mutual insurance organizations (Leonard & Lewalle, 2005). In **Canada**, healthcare, including long-term care, is assigned to the provinces and the territories. Although the federal government has established basic legislative requirements for the health system as a condition for its participation in financing, there are essentially 13 different single-payer universal systems of health care, each one with varying degrees of coverage for healthcare services. This is also true of long term care services which have evolved separately in each province. The following core services are offered in all of the provinces: long-term care institutions, palliative care, respite care, home care nursing, rehabilitation services, domestic help and personal care services (Marchildon, 2005). In **Ireland**, residential and community long term care services are provided by the public health system although there is discussion of the possibility of a new social insurance scheme for long term care, to be supplemented by voluntary insurance (Huber et al., 2005). In **New Zealand,** responsibility for acute and long-term health care rests with 21 elected district health boards which either deliver services themselves or fund other providers to do so.

4. Countries with Disparate Long Term Care Benefits

All of the countries that fall under this category are characterized by a division of the responsibility for long term care services between the health care system, the social services system and other public and/or private agencies, and varying levels of coherency of long term care benefits to the dependent population. In **Greece**, some long term care needs are covered by health insurance but in addition there are direct provisions through social services and indirect services through tax exemptions (EC Documents on Health and Long Term Care**,** retrieved 2006)**.** In **Israel,** long term care services are provided by at least five different agencies: health funds provide medically oriented LTC services such as skilled nursing home care and home health care services, the National Insurance Institute (Social Security) provides up to 15 hours a week of personal caregiver services in the home, the Ministry of Health provides means-tested social assistance for nursing home care, the department of social services provides support for some of the residential options for the frail elderly and the municipalities provide a variety of support services such as day care centers (Brodsky, Habib, & Mizrahi, 2000). Israel is the only country with public universal health care insurance that has a significant private long term care insurance market. Over 50% of the population is insured through collective policies via their health fund. This represents the bulk of non-governmental LTC coverage. About 10% are covered by group policies through their employer or professional associations and only about 3.5% of the population has individual private policies which tend to be very expensive. It is estimated that in 2003, about 4.5 million persons out of a total population of 6.7 million were covered by some form of private LTC insurance (Donsky, 2005). In **Italy** there is a clear division between health services, provided by the Italian National Health Service through the local health authorities, and social care, provided by the municipalities (Gori, Di Maio, & Pozzi, 2003). The **Portuguese** health care system is comprised of the National Health Service, special social insurance schemes for certain professions and voluntary private insurance. The Portuguese social security system does not include a specific branch for protection against the risk of dependency with the exception of cash allowances provided to persons who meet the criteria of dependency under the aegis of the Institute for Solidarity and Social Security and the National Center for the Protection against Occupational Risks (Bentes, 2004; Missoc, retrieved 2006). The healthcare system in **Spain** is a decentralized, tax-based national health service. Social and community care services are partly managed by the Ministry of Labor and Social Affairs and partly by the regions. Within the regions, social care is mainly the responsibility of municipalities (Rico, 2002). In the **United Kingdom** health services are provided by the National Health Service, which contributes to long term care by providing community nursing, therapy services and continuing care. Since 2002, the NHS covers the cost of *nursing care* in nursing homes. Social care services are the responsibility of local government and social services departments (both institutional and home care services) and are by and large means-tested (Robinson, 1999). Health care coverage in the **United States** is predominantly privately insured. Medical care for the economically disadvantaged is covered by Medicaid, a program jointly funded by federal and state governments. Acute health care for older people is provided through the Medicare program, funded by the Federal government through social security contributions. Medicare does not cover long term care in institutions (except post-acute care up to 100 days) and only covers home care services for people with acute conditions. For people who require long term care services in institutions or at home and cannot afford to pay, the costs of assessed need are met through the Medicaid means-tested social assistance program. The United States is one of the few countries with a "significant" private long term care insurance market and is, at this time, the only country that is seriously examining private long-term care insurance as a policy option for meeting the long term care needs of the elderly (Johnson & Cori, 2005).

All of the above systems are characterized by a lack of universality and comprehensiveness of long term care services for the elderly as well as fragmentation of the responsibility for the services that are provided among various agencies and programs.

Summary of trends and challenges

There are several very clear trends in the countries surveyed:

- In all of the counties studied, there has been a clear policy decision to enable the dependent elderly to remain in the community as long as possible. To this end, many countries have diverted resources to the development of community support services and alternative forms of residential and housing options instead of expanding institutional services.

◆ Despite the very significant increase in community based services, this infrastructure is still insufficient in many countries. In addition, these services are not always equally accessible and affordable to all sectors of the population.

◆ In all of the countries, there has been an increase in public spending on long term care services. In many countries, such as Austria, Germany, Luxembourg and Australia, this has been a deliberate policy direction, based upon the conviction that the government has an obligation to meet the long term care for dependency needs of its citizens just as it has an obligation to meet their health care needs. In others, such as the US, it has happened despite government efforts to limit public spending.

◆ In all countries, there is some level of co-payment for long term care services by the elderly or their families. The level of co-payment varies from country to country and is different for the various types of services. Almost uniformly, the family is required to cover the accommodation costs in the nursing home, with the exception of those who are eligible for full social assistance. In most countries, there are also co-payments for many community and home services.

◆ The informal caregiver, in all countries, continues to be the lynchpin of the long term care system. There is increasing recognition of the crucial importance of the primary caregiver and consequently, an increasing number of countries have developed mechanisms for financial support of the primary caregiver such as caregiver allowances, as well as other forms of practical support such as relief and respite services.

◆ The need for integration among the many services and service providers is an issue and concern in all countries. Some countries have done a better job of addressing these concerns than others. There has been some level of disappointment with mechanisms intended to provide integration that have not met expectations such as the care manager in the UK and devolving of the responsibility for administering the long term care insurance program on the same body responsible for health care insurance in Germany.

◆ There is growing concern with the long term financial sustainability of public funding for health and long term care services. Total expenditures for health have increased significantly over the past decade both in absolute terms and relative to the Gross Domestic Product (GDP). In 1992 the average national expenditure on health for OECD countries was 7.7% of GDP whereas in 2002 it was 8.5%. In 2003, the average had increased to about 9% (OECD Health Data, 2005). Expenditures in these countries on long term care (in countries where it is possible to reasonably isolate these costs from health care expenditures or general social services expenditures) ranges from about 0.2 to 3% of GDP, while even universal long-term care programs currently consume only around 8 to 20% of health and long-term care spending (taken together). These expenditures have increased significantly, particularly in countries with high population shares of very old persons (Huber et al., 2005). Consequently, in some countries, such as Sweden, there has been an increasing shift of the financial burden to the elderly and their families through increasing co-payments. More countries are exploring the possibility of encouraging private long term care insurance, at least as a supplement to public programs. Other countries are already being forced to make priority decisions and are concentrating efforts on the more severely disabled and/or the more socio-economically distressed.

Do we need a paradigmatic shift?

Life expectancy continues to increase and the projected share of older persons in the population on average in OECD countries is expected to exceed 25% within the next 30 years. The burden of dependency will increase, even if this increase is not in direct proportion to the increase in the elderly population. The cost of long term care, and particularly institutional long term care, can be classified as a catastrophic risk in that the costs are well beyond the financial means of the average family. Even the costs of residential alternatives and intensive home care over an extended period of time constitute a burden beyond the means of a significant proportion of families. It is to be anticipated that governments will respond to these needs by increasing or expanding existing public programs and/or developing new ones, in accordance with the trends that have been evolving over the last decade. Therefore, the growth in demand for long-term care services will greatly increase the burden on an already strained public sector that will be called upon to finance most of this care. For example, in a recent European study of long-term care expenditures by Comas-Herrara, Wittenberg and Pickard (2003), long term care expenditures are projected to increase between 112% in the UK and 168% in Germany between 2000 and 2050 (Comas Herrara, Wittenberg, & Pickard, 2003).

While the economic concerns are often the most compelling, the social as well as structural challenges to the system are no less important. From the survey of long term care systems in the 21 countries studied, it would appear that there are three major areas in which we must examine our assumptions and perhaps discard existing structures and mechanisms in favor of new ones – even if this means changing fundamental approaches that have become almost sacrosanct:

- The role of the community vs. the institution
- The role and support structure for the primary caregiver
- A redefinition of universality in public health care coverage

THE ROLE OF THE COMMUNITY VS. THE INSTITUTION

Despite the general consensus that modern medical technology enables us to provide the majority of care in the outpatient and community setting, and that care in this setting is preferable to hospital and other institutional types of care – both from a medical and quality of life perspective – expenditures on hospital and long term institutional care continue to consume the majority of health care resources. In 2001 the percentage of total health care expenditures spent on hospital care in OECD countries ranged from 28 to 48.5% of total health care expenditures with an average of 36%, as opposed to 26% on ambulatory care and 19% on pharmaceuticals and other medical non-durable goods (OECD Health Data, 2005). We extol primary care and we establish policies that give priority to care in the community, but we continue to spend the majority of our health care dollars in the hospital and the nursing home. One reason for this is that institutional care is simply more expensive. Another reason is political. In many countries, a substantial number of hospitals and institutions are owned and operated by the government – be it federal or local – and therefore they receive priority in the allocation of public funds. Another problem is that hospitals in many countries continue to compete with community providers in the provision of outpatient services. In addition, medical schools continue to be largely hospital oriented despite the fact that the majority of the care medical students will be required to give is no longer in the hospital.

If we truly believe that the community should be the dominant setting for the vast majority of health care services, then we need to take definitive action to make it so. This means redefining the role of the hospital and limiting hospital operations to those aspects of care that can only be provided in an acute care institutional setting. It means limiting the number of nursing home and chronic care beds and investing heavily in home health care programs, community support centers and integrated community care. It will also require significant changes in the structure and process of medical education and above all, a redistribution of public and private budgets.

Another aspect of this change is the redefinition of the role of the physician vis-à-vis the role of other health care professionals in the provision of community health care and the movement away from solo practices to group practices and multidisciplinary teams. This is essential for meeting two major challenges that are recurring themes in all countries: the need for greater integration of services and the importance of increased emphasis on health care promotion and prevention of illness. The community health care system needs to be strengthened and expanded and we need to build the necessary infrastructures in order to enable community health care to meet the challenges of the future.

THE ROLE AND SUPPORT STRUCTURE FOR THE PRIMARY CAREGIVER

One of the greatest dangers and greatest fears voiced in almost every study on long term care is the potential abdication of the informal, primary caregiver who continues to provide approximately 80% of the care for the dependent elderly in most countries. As the dependency ratio (the number of elderly relative to the working population) increases, these fears may indeed be realized, although there is as yet little evidence of significant reduction in care provided by the informal caregiver, despite increased publicly funded formal long term care services (Huber et al., 2005). There are three major issues which may contribute in the future to significant reduction of informal caregiver provided care:

- The economic issue – the informal caregiver may no longer be able to afford to give up the income from work required to provide the necessary amount of care required
- The demographic/social issue – the "declining" number of potential

caregivers in proportion to the population requiring care along with the continuing erosion of the traditional family unit

- The personal/social issue – the feeling of social isolation of the caregiver, the sense of sacrificing personal career goals, the conflict between the needs of the dependent person ands the needs of other family members, and the depletion of energy resulting from the constant demand for personal care-giving and the accompanying responsibilities for the dependent person.

Many countries have recognized this potentially catastrophic danger and implemented varying types of support for the informal caregiver. A number of OECD countries, such as Australia, Canada, Ireland, Japan, Sweden and the UK, offer payments to informal caregivers in order to partly compensate for the loss of income while providing care, thereby enabling the caregiver to reduce other work activities. However, in most countries this type of income support is limited or restricted. The *carer payment* in Australia, the *carer's allowance* in Ireland, the *allowance for families caring for elderly* in Japan and the *carer's allowance* in the UK are all means tested on the caregiver. In some countries the allowance is time limited or type of illness limited, e.g., the Swedish *Care Leave from Work* is limited to 60 days when caring for a terminally ill relative and the Canadian *compassionate care benefit* is a short term benefit for persons caring for somebody with a terminal condition (Lundsgaard, 2005). There are also other strategies that have been adopted that may indirectly contribute to income compensation for the caregiver through direct payments by the dependent person. A number of countries have established schemes that allow for long term care cash benefits instead of in-kind services such as the *Personal Budgets Scheme* in the Netherlands, *Cash Allowance for Care* in Germany, Austria and Luxembourg and the *Attendance Allowance* in the UK. These payments may be passed on to the informal caregiver (Lundsgaard, 2005).

A number of countries have adopted policies to build upon and support the efforts of family caregivers such as establishing policies addressing the needs of caregivers including assessment of their needs for services, in addition to services for the dependent person (Australia, US, UK). Periods of respite for the caregiver are essential for providing a break from caring responsibilities and there are differing arrangements in the various countries. There is short term institutional care of the dependent person, day care or day activity outside of the home or replacement of the informal caregiver at home. In some countries, respite care is a clearly defined benefit and in other countries it is a service that is provided without the status of a legal benefit.

There are also additional kinds of non-financial support in some countries such as individual counseling, support groups, training, appointment of a consultant for informal caregivers, contact points or call centers, recreation and holiday trips, health check-ups, provision of information about rights, eligibilities and services available for the dependent people and the procedures for accessing them. Sweden is notable for these types of activities (Lundsgaard, 2005).

The above activities are in the inception state in most countries, and are only partially developed. As yet, clear focus on the needs and rights of the informal caregiver does not exist in most countries and there are no comprehensive and/or universal systems of incentives for this population to continue to provide a service which is invaluable.

Perhaps a paradigmatic social policy shift is in order. Perhaps being a caregiver needs to be recognized as a high status profession. Once upon a time, the elderly were considered to be the wise and experienced leaders, they were honored, people stood up for them, children offered them their seats on the bus; they were respected and cherished by the social order. To be chosen among all family members to provide assistance to the respected elders was considered to be a great honor. This status may need to be restored. Instead of giving caregivers "welfare handouts", maybe we need to be giving them recognition and even paying them a salary for a professional job well done, with all of the benefits that a salaried employee enjoys.

Perhaps we need to see about creating a social milieu where caregivers meet together to share common problems and create new solutions. Perhaps we need caregiver societies that bring caregivers together in a systematic and preplanned way, with activities and programs that will help them to do a better job and at the same time, create a peer group for them. Certainly many of the activities that have been developed by the Swedish municipalities as described above: counseling, training, contact points, recreation and other forms of support need to become the norm in all countries rather than the exception.

Two things are for certain: we need to do a much better job of addressing the informal primary caregiver issue than we are doing today, and no country can afford to neglect this virtually priceless resource.

Universal public cover for health and long term care – Is it financially sustainable?

In the countries surveyed, the problems of financial sustainability of the health care and long term care system(s) are becoming increasingly evident. Almost every country providing universal health care and long term care coverage is contemplating some type of reform or change. Sweden has already implemented significant co-payments which shift the burden from the public sector to households. Germany's health and long term care sectors are in deficit and the German government is planning a dramatic reform. The Netherlands has already implemented a new reform in the health care sector and is planning a similar step in the long term care sector. Countries with public statutory health care systems but with only "partial" coverage for long term care find themselves under great pressure to increase long term care coverage and indeed, as we have seen, the public expenditures on long term care have increased in every country, and many of them have implemented or expanded public long term care benefits.

Policy makers are faced with the necessity of finding a way for providing a growing aged population with the care they require – health care and dependency care – within increasing economic constraints. What are some of the options?

1. **Increase public expenditures on health and long term care** in absolute terms and as a percent of GDP. There is no "magic" ideal number. The amount spent on health care and long term care relative to other competing sectors for the public dollar is a matter of social values, preferences and priorities. There is some indication that after a one-time significant increase in expenditures during the initial phase of setting up a new and expanded long term care benefit, the continuing expenditures remain relatively stable (Huber et al , 2005). However, the trend of aging and the increase in the dependency ratio point to a future decline in earned incomes (the source of tax revenues for public expenditures) just at the time that there will be a need for increased public expenditures. This will certainly create a political challenge for any move to increase the public expenditure on health and long term care.
2. **Implement a policy of private long term care insurance**. The only country that appears to be giving the option of private insurance as

the public solution to financing long term care services serious consideration is the US, although in Israel, this is occurring to some degree by default. In the decade of public debate in Germany prior to the implementation of statutory long term care social insurance, this option was considered. The proposal was to make all citizens beyond a certain age liable to insure themselves and their dependents privately against the risk of dependency, such as the model of private but compulsory insurance against car accidents. This solution was rejected for the following reasons:

- Private insurance premiums are actuarially based and, as a rule, too expensive. It is therefore unlikely that the entire population would be able to afford it.
- As the transition from acute illness to dependency is gradual, most of the dependent population requires medical services and supportive care simultaneously. It would seem illogical to create a system with a structural dichotomy between the two [remembering that in Germany medical care is covered by statutory social insurance]
- There would be no overall responsibility for the insured person who would be likely to "fall between the cracks" between the sick funds and the insurance companies (Schulte, 1996).

In the United States, there is considerable pressure to consider private long term care insurance as a viable long range solution and there have been and continue to be congressional proposals to encourage the purchase of private long term care insurance through expanded tax subsidies (Lewis, Wilkin, & Merlis, 2003). The advantages of private insurance in the American market, as outlined by Johnson and Cori (2005), are as follows:

- Raising private long term care coverage rates and reducing reliance on Medicaid could improve the efficiency of long term care financing. By requiring policyholders to set aside funds in the form of premium payments each year, private insurancecan increase national savings and thus promote economic growth. It also protects the assets of those receiving long term care services [unlike Medicaid which imposes a 100% tax on most assets].
- The current system imposes substantial burdens on state governments.
- Expanding private long term care insurance could help make

services more affordable.

However, the barriers to private insurance coverage are substantial and are somewhat reminiscent of the German debate:

- Many older people are simply unable to afford long term care insurance
- Some policyholders are unable to maintain their premium payments and let their policies lapse for a number of reasons, including unexpected premium rate increases
- People with health problems have special difficulty purchasing long term care insurance
- Adverse selection could lead to the breakdown of the private insurance market
- The presence of Medicaid as a safety net discourages those with limited financial resources from purchasing private insurance.

Some of these obstacles can be removed by policy changes such as deducting premium expenses from taxable income and/or offering tax incentives at both the federal and state level, linking long term care insurance and reverse mortgages, and allowing people who exhaust private insurance benefits to be eligible for Medicaid without depleting their savings (Johnson & Cori, 2005).

In Israel, private long term care insurance is widespread but only provides partial coverage for nursing home care and personal homemaker assistance up to a maximum of 5 years. Most policies require underwriting so that there are some segments of the population that are unable to obtain coverage. This market has evolved historically, predominantly as a result of health fund initiative rather than formal public policy.

In most OECD countries, private long term care insurance as primary cover has played a very limited role. It might play a stronger role in the future for voluntary complementary insurance to meet additional costs not covered by public programs, but is not being viewed as a substitute for public coverage, as in the US.

3. Shift the Balance of Public Coverage to Catastrophic Costs – the "new" Universality. The original intention of insurance, in all sectors, was to protect the insured party against the possibility of catastrophic economic loss. Even in health care, the early policies provided insurance primarily for hospitalization. Over the years, and as an incentive to reduce hospital costs and to change system incentives, medical insurance increasingly covered the "every day" costs of outpatient care including visits to physicians and other health care professionals. However, there have always been a number of countries where this was not totally the case. The Netherlands, until its most recent reform in 2006, had mandatory statutory health insurance for the entire population for long term care only (catastrophic coverage) and mandatory social insurance for regular health care for only about 64% of the population whose income fell below a defined threshold. The rest of the population had to take care of themselves by purchasing private insurance. In Germany to this day there is an income threshold for those required by law to purchase public social insurance. In Ireland, the National Health Service covers only 36% of the population, below a given income threshold, for all health care services whereas the remainder of the population is covered for hospital services only and is required to purchase community health care services out of pocket or by purchasing "private" insurance. In New Zealand, the entire population is covered by the public system for hospital care but most people are required to meet some or all of the costs of their own primary care. The government has chosen to target benefits to low income people (using concession cards) rather than offer universal free services paid for through taxation or through statutory insurance (French, Old, & Healy, 2001).

Faced with the potential lack of sustainability of the health care system in its current form together with the additional burden of long term care, perhaps the only viable alternative will be to target public spending on catastrophic costs for the entire population (including long term care) and the day to day costs for the low income population only, requiring the population that can afford to do so to pay for community health care services out of pocket or through voluntary insurance. This flies in the face of current practice and belief, particularly as regards preventive care where the belief is that public insurance for prevention creates a positive incentive and that ultimately, successful prevention will reduce the health care burden. Another option, much discussed, is to define a very minimal required basket of basic publicly financed services and to let those who can afford it purchase supplemental cover. The problems with this option in terms of both equity and solidarity are obvious.

The aging of the population and the increasing burden of age related health care and dependency costs is going to force a rethinking of health care system management and financing. The dilemma will become increasingly acute, forcing governments and consumers to make new choices, set new priorities and explore new options. We will be forced to reexamine existing assumptions and to search for new paradigms and we would do well to assess the evidence and keep an open mind rather than falling back on the familiar truisms which may no longer be as relevant in the new world we face as they were in the past.

REFERENCES

Annual report on health care and care for the elderly (2005). Ministry of Health and Social Solidarity of the Hellenic Republic, European commission and council documents on health and long term care. Retrieved August 20, 2006 from: http://ec.europa.eu/employment_social/social_protection/healthen.htm

Bentes, M. (2004). *Health care systems in transition: Portugal.* European Observatory on Health Systems and Policies.

Brodsky, J., Habib, J., & Mizrahi, I. (2000). *Long-term care laws in five developed countries: A review*. JDC-Brookdale Institute of Gerontology and Human Development, Jerusalem: World Health Organization.

Comas Herrera, A., Wittenberg, R., & Pickard, L. (2003). Long-term care for older people in the UK. In A. Comas-Herrera et al. (Eds.), European study of long-term care expenditure. Report to the European Commission, Employment and Social Affairs DG. Grant number VS/200/2001/0272. PSSRU Discussion Paper 1840.

Cutler, D.A. (2001). The reduction in disability among the elderly. Proceedings of the National Academy of Sciences of the United States of America (pp. 6546-6547). Vol. 98, No. 12, Washington, D.C.

Den Exter, A., Hermans, H., Dosljak, M., & Busse, R. (2005). Health care systems in transition: Netherlands. European Observatory on Health Systems and Policies.

Donsky, S. (2005). Private health insurance in Israel. Presented at winter 2005-2006 course on health and long term care insurance at the Academic College of

Kiryat Ono, Israel.

European Commission and Council documents on health and long term care 2005 for Belgium, Denmark, Finland, the Netherlands. New foundations for health care with a solid future; and Sweden. Retrieved August 20, 2006 from: http://ec.europa.eu/employment_social/social_protection/health_en.htm

French, S., Old, A., & Healy, J. (2001). Health care systems in transition: New Zealand (p. 56). European Observatory in Health Care Systems and Policies.

Gans, N. (2005). Netherlands. In J. Hermesse (Ed.), *Healthcare Protection Today: Structures and Trends in 12 Countries* (pp.171-187). Association Internationale de la Mutualite, Belgium.

Gori, C., Di Maio, A., & Pozzi, A. (2003). Long-term care for older people in Italy. In European study of long term care expenditure. Report to the European Commission, Employment and Social Affairs DG, Grant number VS/2001/0272, PSSRU Discussion Paper 1840.

Health care systems in transition reports: Australia (2002), Denmark (2002), Norway (2006), Sweden (2005). European Observatory on Health Care Systems and Policies.

Hofmacher, M. M., & Rack, H. (2001). Health care systems in transition: Austria. European Observatory on Health Systems and Policies.

Homola, V. (2002). "Long term care insurance in Germany", power point presentation (copies of slides). Healthcare Conference, 2002. [RKN: 33863] URL:http://www.actuaries.org.uk/Display_Page.cgi?url=/library/proceedings/health2002/index.xml

Huber, M., Hennessy, P., Izumi, J., Kim, W., & Lundsgaard, J., (2005). Long-term care for older people, The OECD Health Project.

Johnson, R.W., & Cori, E.U. (2005). Is private long term care insurance the answer? (pp. 1-6). Center for Retirement Research at Boston College, Issue in Brief. March, No. 29.

Karlsson, M. (2002). Comparative analysis of long term care systems in four countries (pp. 9-15). Interim Report of the International Institute for Applied Systems Analysis, Laxenburg, Austria.

Kaye, R. (2000). The future of long term care in Israel. Social Security. Special English Edition, Volume 6, National Insurance Institute, Jerusalem.

Kodner, D. L. (2003) Long term care integration in four European countries: A Review. In Brodsky, J., Habib, J., Hirschfeld, M. (Eds.), Key policy issues in long-term care (pp.102-104). World Health Organization, Geneva.

Leonard, C., & LeWalle, H. (2005). Belgium. In J. Hermesse (Ed.), Healthcare protection today: Structures and trends in 12 Countries (pp.13-36). Association Internationale de la Mutualite, Belgium.

Lewis, S., Wilkin, J., & Merlis, M. (2003). Regulation of private long term care insurance: Implementation experience and key issues (p. iii). Prepared for the Henry J. Kaiser Foundation by the Institute for Health Policy Solutions, Washington, D.C.

Lundsgaard, J. (2005). Consumer direction and choice in long term care for older persons, including payments for informal care: How can it help improve care outcomes, employment and fiscal sustainability? OECD Health Working Papers No. 20.

Marchildon, G. (2005). Health care systems in transition: Canada. European Observatory on Health Systems and Policies.

Missoc – Mutual information system on social protection in the EU member states and the EEA. Retrieved August 24, 2006 from: http://europa.eu.int/comm/employment_social/missoc2oo1/missoc_295_en.htm

Observatory on Health Care for Chronic Conditions, World Health Organization. Chronic conditions: The global burden. Retrieved August 20, 2006 from www.who.int/chronic_conditions/burden/en/index.html

OECD Health Data 2005.

Rico, A. (2002). Health care systems in transition: Spain. European Observatory on Health Systems and Policies.

Robinson, R. (1999). Health care systems in transition: United Kingdom. European Observatory on Health Systems and Policies.

Schmitz, M. (2005). Luxembourg. In J. Hermesse (Ed.), Healthcare Protection Today: Structures and Trends in 12 Countries (pp. 153-170). Association Internationale de la Mutualite, Belgium.

Schulte, B. (1996). Social protection for dependence in old age: The case of Germany. In R. Eisen & F. Sloan (Eds.), Long term care: Economic issues and policy solutions (pp. 151-157). Kluwer Academic Publishers, Boston, MA, USA..

Yu, W., Ravelo, A., Wagner, T. H., & Barnett, P. G., (2004). The relationships among age, chronic condition, and healthcare costs. The American Journal of Managed Care, Clinical, December, 909-916

Patient Health Care Management – Facts and Challenges in the Future

> Michael Sherf, Corinne Comte
Planning & Health Policy Division,
Clalit Health Services

INTRODUCTION

The Israeli Health System

By a law enacted in 1995, the Israeli public health system insures universal access to a comprehensive basket of services, and grants freedom of choice between four health funds. The law's main purpose is to encourage competition and improve quality and customers' satisfaction. The national health expenditure represents 8.1% of the gross domestic product (CBS, 2006), 72% being financed by public funds based on a dedicated income tax and government budget. These figures are comparable to the average in the Organization for Economic Cooperation and Development countries (OECD, 2007).

By tradition, Israel's health care system is strongly community-based, which is of significance when comparing the Israeli system's resources to those in other countries. For instance, the number of general hospital beds per capita and the average length of stay in general hospital beds are relatively low as compared to the average in the OECD (2.2/1,000 vs. 4.4/1,000, 4.1 days vs. 7.5 days, respectively), whereas the number of physicians per capita is high (3.4/1,000 vs. 2.8/1,000).

The main challenges facing the Israeli health system are similar to those observed in other developed countries. While health costs are increasing, mainly due to the fast pace of new technologies and the aging of the population, the public health budget is eroding, when the share of government budget allocated to health is fluctuating according to the country's priorities (i.e., security, education).

Clalit Health Services

Since founded in 1911 as the first health maintenance organization (HMO) in Israel, and according to its vision, "Dedicated to a Healthy Israel," Clalit has influenced the basics of the Israeli health system. Clalit's network includes more than 1,300 community clinics, 14 hospitals (among them nine general hospitals) and subsidiaries which provide services such as advanced diagnostics as well as services that are not included in the basket defined by law. Clalit also covers services which are not included in the basket through supplementary health insurance.

Clalit is the largest health fund in Israel, with a 54% market share (3.8 million insured), a workforce of 32 thousand employees and a yearly budget of more than four billion dollars. Clalit manages a sizeable volume of yearly activities, including 16 million primary care visits, 8 million specialty care visits in the community, 2.2 million ambulatory care visits, 1 million emergency room visits and 0.6 million hospitalizations.

Compared to other health funds, Clalit's population is older, more heterogeneous and less affluent. More than 70% of the elderly as well as of the Arab population are insured by Clalit, and Clalit has the largest share of the lower socioeconomic strata. In addition, Clalit's population morbidity rates, among ages 21 and above, are higher (table 1). As was previously mentioned, by law all citizens have the freedom to choose from among four health funds, and the funds are obligated to insure every citizen according to his or her choice. While this was not a legal requirement prior to the enactment of the National Health Insurance Law in 1995, Clalit never denied membership based on risks such as age, health or socioeconomic status. With the enactment of the law, the majority did not switch funds; thus Clalit's population is older with a more significant burden of disease.

Table 1

Prevalence Chronic Disease	Clalit	Israel
Diabetes	9.2%	8.1%
Heart Disease	9.4%	8.7%
Hypertension	22.3%	20.0%
Source: Central Bureau of Statistics - National Health survey, 2003-2004		

THE MAJOR CHALLENGE OF PATIENT HEALTH CARE MANAGEMENT

The major challenge of patient health care management relates to chronic disease. According to the WHO (WHO, 2007, WHO global report), the disease profile of the world is changing and the future epidemics are unlikely to resemble those of the past, as a result of progress in infectious disease control. It is the alarming epidemics of heart disease, stroke, cancer and other chronic diseases that for the near future will claim the greatest toll in deaths and disabilities. Despite advances in medicine, chronic diseases remain the main mortality factors as it is estimated that 60% all deaths are due to chronic diseases; it is estimated that the total number of people dying from chronic diseases is double that of all infectious diseases and that deaths from chronic diseases will increase 17% between 2005 and 2015.

In Israel, as in other parts of the world, the burden of chronic disease becomes a growing impediment to economic development. Burden of disease is defined by the WHO as "the total significance of disease for society beyond the immediate cost of treatment" (WHO, 2007, Burden of Disease).

While modifiable behavioral factors (i.e., unhealthy diet, physical inactivity, tobacco use) are commonly recognized as risk factors for chronic diseases, evidence is increasing that other factors (i.e., comorbidity, socioeconomic status, ethnicity, genetics) lie beneath those diseases and may contribute to unwanted variation in care. Chronic disease risk factors and their part in the burden of disease are further discussed below.

Chronic Disease Risk Factors

Modifiable risk factors

A relatively few risk factors (i.e., high cholesterol, high blood pressure, obesity, smoking and alcohol) cause the majority of the chronic disease burden. A change in dietary habits, physical activity and tobacco control have a major impact in reducing the rates of these chronic diseases, often in a relatively short time (WHO, 2007, Facts related to chronic diseases).

Morbidity and comorbidity

According to Engström, Carlsson, Östgren, Nilsson, Borgquist (2006), about 37.7% of the variation in individual patient costs could be explained by morbidity weights expressing the individual combination of diagnoses and thus comorbidity, and age and gender add about 0.8%. Furthermore, in that study, the patients with more complex constellations of type of morbidity were generally more resource consuming, indicating the influence of comorbidity. In addition, among patients with similar multiple chronic morbidities, studies reveal high individual variation in health consumption which results mainly from lack of consensus regarding best medical practice (Huttin, 1997), as well as from disparate patients' choice as the result of insufficient patients' guidance and empowerment (Segal, 1998).

Socioeconomic status

While age is a well established factor related to chronic disease (Martin, 2003), a less recognized notion, receiving greater attention today, is the effect of socioeconomic status on the burden of chronic disease. According to the WHO, "a person's health is influenced by the conditions in which she or he lives. Social and economic conditions - such as poverty, social exclusion, unemployment, and poor housing - strongly influence health. They contribute to inequities in health, explaining why people living in poverty die sooner and get sick more often than those living in more privileged conditions" (WHO, 2007, Socioeconomic determinants of health).

Ethnicity

According to the American Center for Disease Control, "compelling evidence indicates that race and ethnicity correlate with persistent, and often increasing, health disparities among U.S. populations … and demands national attention…. Eliminating racial and ethnic disparities in health will require enhanced efforts at preventing disease, promoting health and delivering appropriate care. This will necessitate improved collection and use of standardized data to correctly identify all high risk populations and monitor the effectiveness of health interventions targeting these groups" (CDC, 2007).

Genetics

According to the American Center for Disease Control, "the completion of the Human Genome Project in 2003 has accelerated the discovery of many variants being studied for association with diseases of major public health importance, including adult chronic diseases. Applications of genetic information in disease diagnosis and prevention must be driven by evidence on the value of such information to improve health outcomes" (CDC, Chronic Disease Prevention, National Office of Public Health Genomics).

The Burden of Chronic Disease at Clalit

With an older and sicker population, Clalit faces the challenge of the burden of chronic disease. More than 40% of Clalit's insured suffer from at least one chronic disease, among those approximately 60% with co-morbidities. This figure is undoubtedly an under-estimation since mental health morbidity is under-reported, as mental health services are the government's responsibility. The cost of caring for people with a chronic condition amounts to 85% of the total cost of caring for all of Clalit's insured.

A refined analysis shows that 26% of Clalit's insured, suffering from one or more of nine specific conditions, incur 72% of Clalit's total cost (table 2). As one may anticipate, these conditions are hyperlipidemia, hypertension, diabetes, ischemic heart disease, asthma, malignancy, cerebrovascular accidents (CVA), congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD). The cost of caring for patients with one or more of these specific conditions is more than 7 times higher than that of a "healthy customer" (with no chronic disease of any kind).

Table 2

Disease	Percent of Insured
COPD	1.4%
CHF	1.5%
CVA	1.8%
Malignancy	3.4%
Asthma	4.7%
IHD	5.7%
Diabetes	5.9%
Hypertension	12.0%
Hyperlipidemia	15.7%
Total	*26%*
Cost Ratio (vs no chronic disease)	*7.1*
Source: Clalit Health Services, 2005	

The impact of severity and comorbidity

As expected, severity and comorbidity increase cost. For example, according to Clalit's data, severity doubles the cost of IHD patients, and quadruples the cost of asthma patients. Similarly, the cost of caring for patients suffering from hypertension coupled with another condition is more than 30% higher than the cost of caring for patients suffering from hypertension only (table 3).

Table 3

Co-Morbidity		Severity	
Hypertension	**Cost Ratio**	**IHD**	**Cost Ratio**
+ IHD	12	Mild	7.9
+ IHD + Diabetes	21	Severe	35.9
+ Malignancy	17	**IHD Total**	**15.6**
+ Asthma	8	**Asthma**	
+ Other	22	Mild	4.6
Hypertension only	7	Moderate	8.4
Hypertension Total	**11.7**	Severe	16.5
		Asthma Total	**5.2**
Source: Clalit Health Services, 2005			

The impact of socioeconomic status

At present, Clalit's customers' socio-economic status is estimated based on geographic socioeconomic indexes as defined by the Israeli National Bureau of Statistics. According to Clalit's data, diabetic patients of low socioeconomic status are less stabilized as compared to those of a higher status, and their cost is 58% higher (table 4). However, there appears to be no variation in care, since no significant difference is found between the different socioeconomic groups in the percentage of diabetes patients being followed up (HbA1c test).

Table 4

Socio Economic Index	HgA1c Test among Diabetes Patients	Stabilized Diabetes (HgbA1c<7%)
Low	85.6%	**37.4%**
Medium	85.0%	44.5%
High	85.8%	50.7%
Total	**85.5%**	**44.7%**
Source: Clalit Health Services, 2005		

The impact of age

While the effect of age on morbidity and health cost is well established, the figures are still impressive (table 5). 85% of the elderly at Clalit bear one or more of the nine chronic conditions described above, the resulting prevalence being three times higher than in the total population. Moreover, those elderly chronic patients are relatively more complex and challenging to manage as 71.4% of them bear more than one condition, as compared to 57% in the total population. The implication is highly significant for Clalit, as it is the predominant health fund among the elderly, with more than 70% market share and 13% of Clalit's customers are elderly (compared with 10% nationally).

Table 5

Disease	Prevalence among 65+	Prevalence among all Ages
COPD	7.1%	1.4%
Asthma	7.6%	4.7%
CHF	9.1%	1.5%
CVA	9.8%	1.8%
Malignancy	14.5%	3.4%
Diabetes	23.9%	5.9%
IHD	30.1%	5.7%
Hyperlipidemia	57.2%	15.7%
Hypertension	57.2%	12.0%
Total	***85%***	***26%***
Source: Clalit Health Services, 2005		

The impact of ethnicity

As mentioned earlier, Clalit is the predominant health fund among the Arab population in Israel, with more than 70% market share and nearly 1 million insured who represent 20% of Clalit's insured. The Arab population is relatively diverse with 82% Moslems (among them 13% Bedouins), 9% Christians and 9% Druze. As a result of high fertility, the Arab population is very young, its median age being 19.7 years (18.5 for Moslems, 22.7 for Druze, 27.9 for Christians) compared to 30.3 years for the Jewish population (Ministry of Health, 2005, pp 21-25).

High rates of non-stabilized diseases such as diabetes and cardiovascular diseases are observed in this ethnic group: a comparison of the standardized (by age and gender) prevalence rate (per thousand) of chronic diseases by ethnic groups, based on Clalit's data, shows that diabetes prevalence is more than double among Arabs than among Jews (80.5 vs. 45.9), and hypertension, hyperlipidemia and IHD are significantly more prevalent (110 vs. 84.9, 97.2 vs. 93.1, 55.5 vs. 42, respectively).

These figures are in accordance with those published by the Israeli Ministry of Health in an extensive report relating to the health of the Arab population in Israel (2005). The report includes additional significant findings as summarized below.

Predominant risk factors in the Arab population are smoking among men (45% prevalence among Arabs as compared to 28% among Jews) and obesity among women (42% Arab women with BMI>= 30 as compared to 22% Jewish women).Infant anemia is more prevalent among Arabs than among Jews (15.5% vs. 9.3%).

The Arab population reveals high rates of genetic defects, due to the preponderance of intra-family marriages (up to 54% among Moslems), which more than double the odds. Infant mortality due to genetic defects is three times higher in the Arab population as compared to the Jewish population and total infant mortality rates are high (8.6 for Moslems, 7.1 for Druze, 3.2 for Christians, 3.6 for Jews). In addition, child injuries are more frequent among the Arabs, with subsequent mortality rates five times higher in the age group 0-4 (0.5% vs. 0.1%).

CLALIT'S PATIENT HEALTH MANAGEMENT

Clalit's Strategy - Adapted Care Programs

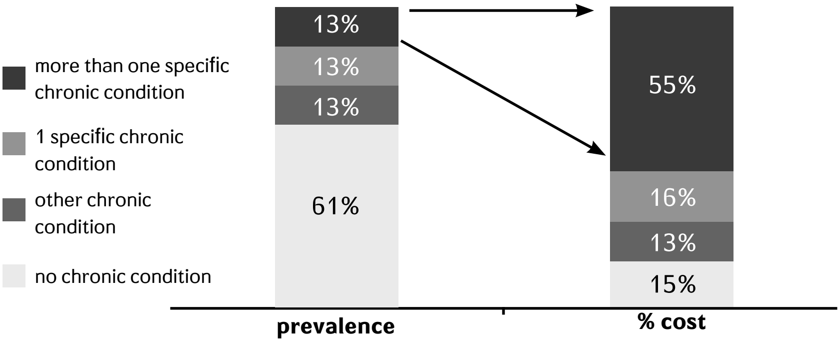
Clalit's health management strategy is to adapt care to targeted population groups, while addressing the specific needs of the individual within the group. The task is challenging, as Clalit's data reveal extremely high individual variation in health consumption, especially among complex patients with comorbidities.

Clalit's strategy relies on segmenting the population according to parameters such as socio-demographic factors (i.e., age, gender, ethnicity, behavior), health status (i.e., chronic disease, complex patient, disability, "the healthy") and service consumption factors (i.e., heavy use and "not visiting"). The interventions are tailored to these segments by adapting to their specific needs a variety of programs, such as disease management (for the chronic patient) and case management (for the complex patient). For example, Clalit has developed a program for diabetes care and health promotion which addresses the cultural specificity of the Arab population (language adaptation, nutrition guidance). The intervention programs are designed to reach the target populations at the various points of care (such as clinics and home visits) as well as in their daily settings (such as schools and nursing homes).

As will be extensively described below, Clalit's information systems provide comprehensive patient information at all points of care, allowing the intervention programs to address the specific needs of the individual within the segmented population. As an example, a trigger tool is being implemented in the computerized medical record, which will recommend specific actions to be taken according to the patient profile (i.e., mammography, occult blood test). In the last decade Clalit has invested tremendous effort in the development and implementation of information systems for the benefit of its customers. However, the information systems have various limitations, as will be discussed further below, some of which are in the process of being addressed (such as availability of socioeconomic data).

When segmenting the population according to chronic conditions, it is observed that 13% of Clalit's insured, suffering from more than one of the predominant chronic conditions, incur 55% of the cost. These patients are referred to as "complex patients" and the majority, of course, are elderly (figure 1). Depending on the number of chronic conditions, Clalit can respond either with case management, disease management or a more comprehensive approach as described below.

Figure 1



Source - Clalit Health Services, 2005

Case management

Clalit has implemented case management for the complex patients in its community clinics. In this instance, the case manager, responsible for the coordination of care, is a nurse.

Disease management

Disease management addresses the needs of the patients defined in figure 1 as "1 specific chronic condition". Clalit has well established disease management programs, based on clinical guidelines and quality indicators, for conditions such as diabetes, CHF, hypertension, asthma and Hyperlipidemia. A disease management program for COPD is in its planning stage.

Comprehensive care programs

Clalit's comprehensive approach to health management is illustrated by its comprehensive care program for the elderly. This intervention program includes identification of patients at risk of deterioration and early intervention in the community. Data mining, a prediction tool based on validated algorithm using data from Clalit's extensive data warehouse, is applied to identify elderly at risk of deterioration. Patients' lists are generated, and distributed to the clinics for validation and intervention, based on the team's knowledge of the clinic's population. It is the clinic team's responsibility to tailor the interventions to the patient's profile using services such as geriatric evaluation and case management as well as referral to appropriate care such as disease management programs and continuity of care units. In addition, an extensive team education program has been established in order to enhance awareness to the particularity of the elderly, including issues such as fall prevention, drugs complexity, and empowerment of informal carer. To date, merely three years after the program was launched, impressive medical and economic results have been achieved for the 20,000 elderly enrolled, with a reduction of unnecessary hospitalizations and other improvements as shown by our medical indicators.

It is estimated that by the end of 2007, this figure will double and more than 50% of patients at high risk will be enrolled in the intervention program for the elderly.

An additional example of tailored comprehensive intervention is the program developed to address the specific cultural and health related needs of the Arab population. This program includes components such as: genetic information and counseling in order to reduce birth defects, supervision of anemia, prevention of childhood injuries, early intervention for diabetes and cardiovascular diseases, guidance on diet and physical activity, and monitoring of body mass index. The results are impressive and show improvement in all fields of intervention. In the period 2003-2005, diabetes follow up (HgbA1c testing) and stabilization (HgbA1c test < 7) in the Arab population has improved by 20% and 17% respectively as compared to 8% and 12% in the Jewish population. In 2005, just one year after intervention to reduce infant anemia started, a 16% improvement is observed in the Arab population as compared to 9% in the Jewish population.

Screening and early detection

Two major extensive screening programs have been established in areas of intervention and have proven efficient: breast cancer (mammography, ages: 50-74, every 2 years) and colon cancer (occult blood, ages: 50-74, every year) screening. These programs are managed by Clalit's epidemiology unit. The response rates of the target populations which are constantly improving, meet international standards, and they are particularly impressive for colon cancer screening, which has reached 16% in less than 3 years.

An illustration of Clalit's strategy for addressing specific population needs is the operation of mobile diagnostic units which perform mammography in rural areas (such as in the south of the country in order to reach the Bedouin population).

Health promotion

Clalit promotes patient's empowerment and behavioral changes that could affect health, by focusing on topics (i.e., smoking, physical activity) and reaching target groups in their natural settings (schools, workplace) as well as in the clinics. For instance, three groups are being targeted for smoking secession/prevention intervention: youths and their parents, pregnant women, and chronic patients. Clalit's smoking secession workshops show impressive results with a success rate (after one year) of 50%.

Clalit has developed extensive health promotion material and means that facilitate patient's empowerment, including written pamphlets, workshops, counseling and information dissemination (internet portal platform).

Clalit is endorsing health promotion in cooperation with local authorities, as is the case with the creation of walking paths and walking groups in many cities. On a broader scale, Clalit's intervention includes involving policy makers, management and mass media in order to influence and shape consensus and public opinion.

Keys to Implementation

Team empowerment and self management

The successful implementation of the various intervention models developed at Clalit greatly relies upon the primary care teams as it best knows and understands the needs of the population it serves. The role of the entire team, and more specifically its drive to carry out proactive care, are crucial since the major point of contact with patients is the primary care clinic in the community. Clalit's philosophy is that team accountability and empowerment are the keys to its achievements. A major step toward team empowerment has been implemented at Clalit, with decentralization and self management of community clinics which operate as business units with annual budgets and programs, performance indicators (medical quality, service and financial) and performance based incentives. None of this could be achieved without Clalit's advanced technology and information systems which provide operational and management decision capabilities.

Advanced information systems

Clalit's advanced information systems allow for collection and provision of patient data at all points of care. The electronic medical record (EMR) in the clinics includes cumulative patient visit data such as diagnoses, markers, prescriptions, lab results and specialty consulting visit reports. The EMR also supports decision making as it includes features such as drug interactions and clinical guidelines. At other points of care, including hospitals, patient data can be accessed through a virtual file that includes elements of the EMR and other crucial data from additional operational systems. This virtual file provides data necessary for effective patient care at all points of care and particularly for case management.

Patient data from all operational systems are collected in an integrated computerized database (data warehouse) which includes more than 4 billion records. In addition, a unique decision support system, called Bina, draws data from the database in order to allow better care and management decisions at every operational and management level. Bina integrates the data of all patients and generates a large variety of ad-hoc reports and statistics, including medical quality indicators. Medical quality indicator data can be generated according to numerous parameters (i.e., gender, ethnic group, age) with the capability of drilling down to the specific physician and patient level. The medical indicators in Bina are used to support clinical and managerial decision-making related to the management of diseases such as diabetes. In this case, the system provides information about the percentage of the target population tested for HgbA1c, which is an indication of how much follow up is being performed and the percentage of stabilized patient (among the ones tested for HgbA1c), which is an indicator of compliance and response to treatment. According to the values of the indicators, intervention may address patient compliance (patient education and empowerment), or physician/primary care team practice. The capacity to drill down to a specific patient's information enables potential users (i.e., Clalit, doctor or team) to address the particular needs of the patient (compliance, response to care).

The data warehouse also provides the basis for data mining, a technique for developing and validating statistical models. As mentioned earlier, this technique was applied in the comprehensive program for the elderly to identify patients at risk of deterioration.

THE FUTURE

Paradigm Shift — An Expanded View of Health

The advance in infection control has brought a shift in the burden of disease from infectious to chronic diseases. If no action is taken, as population is aging, the future brings with it a continuous growth in the burden of chronic diseases. For a brighter future, a more sophisticated understanding of chronic disease is essential and paradigm shifts are prerequisites. It is Clalit's belief that an expanded view of health is the engine that will drive paradigm shifts. This expanded health view includes social, mental, behavioral and genetic dimensions. As we have established earlier, socio-economic factors are critical determinants in the burden of chronic disease. Studies have already shown that mental health patients utilize more health services than others: according to the WHO, "one in four patients visiting a health service has at least one mental, neurological or behavioral disorder but most of these disorders are neither diagnosed nor treated" (WHO, 2007, Mental Health). It has been estimated that genetic disorders and congenital abnormalities occur in about 2%-5% of all live births, account for up to 30% of pediatric hospital admissions and cause about 50% of childhood deaths in industrialized countries (Hamamy, 1997).

How much of an expanded view of health does Clalit have? Clalit has invested significant efforts in information technology, bringing increasing data and knowledge into patients' management. If, as planned by the government, mental health will become the responsibility of health funds, mental health data will be gathered, bringing new dimensions to the understanding of health. Socio-economic factors are already being addressed as is the case in the program for the elderly, where special attention is being given to informal caretakers. However, data is lacking in this area, as items such as income or years of education, which are common proxies for social status, are not available. As mentioned before, at present, Clalit's customers' socio-economic status is estimated based on geographic socioeconomic indexes as defined by the Israeli National Bureau of Statistics. More efforts have to be made to include social aspects in care management and more cooperation is needed with government institutions in order to enlarge socioeconomic data, while preserving information confidentiality.

The ethical issues concerning genetic information have long been debated, as alarming scenarios of a discriminating future are plentiful, and are beyond the scope of this presentation. However, after consensus is reached, wise utilization of developments can undoubtedly find their place in the field of health management. For instance, pharmacogenomics will offer the potential to improve drug response, thus improving the odds for successful treatment (Human Genome Project, 2007).

Reduce Variability

Clalit has achieved good results in acute care, chronic care and care for communities as our quality of medical care indicators show improvement in all fields of intervention. For instance, in just 4 years diabetic patient stabilization has improved by more than 22%, reaching 49%. However, these are average figures and when addressing specific parameters such as age or ethnicity, large variability is being observed. As a result, Clalit is initiating an effort to reduce between-groups variability. This is reflected in the introduction of adjusted clinical indicators as well as in the recent decision to establish clinical guidelines and medical indicators adapted to the elderly. In addition, while clinical guidelines and medical indicators are being used in most cases (i.e., diabetes, asthma, hypertension, hyperlipidemia), more attention needs to be given to the management of complex patients. This involves considerable efforts, since consensus among professionals and experts from the various fields is required, as evidence based guidelines are often lacking.

A still more challenging task for the future is to reduce within-group variability. Developments in this direction are being observed with the recent introduction of "health coaching" (Adelman, 2005) in the USA. Health coaching targets "intervention sensitive" populations, which are defined as such that guidance, support and ultimately empowerment may significantly reduce within-group variability. Health coaching, as it is has been implemented in the USA, provides proactive phone and mail support by nursing staff available 24 hours a day, to targeted patients (reminders, guidance, routine contacts). In a more extensive though less proactive way (no target population, no reminders), Clalit has established a call center which provides guidance and support regarding health issues, and is accessible to the population of all four health funds.

Promote and Support Proactive Medicine

Proactive medicine has to be endorsed, promoted and supported. 73% of Clalit's patients visit their primary care physicians at least once a year. 50% visit more than 3 times a year. These encounters are the "low branch," easy to seize opportunities to maximize the points of contact with customers. The primary care team needs the best possible support in order to maximize the encounter. With this philosophy in mind, Clalit is about to release a trigger tool in the EMR which promotes good medical practice, such as measuring height and weight, and recording smoking status. The next generation of data mining will bring with it the ability to better perform proactive medicine based on prediction models such as future morbidity, drug side effects, treatment efficacy and cost effectiveness.

In addition, early detection and prevention need to be reinforced by means of additional intervention programs in fields proven efficient such as screening, and by enlarging existing interventions and improving response rates.

CONCLUSION

The chronic disease threat can be addressed using existing knowledge and the solutions are effective. As knowledge is increasing, comprehensive and integrated actions are the means to achieve progress (or improvement). These actions require numerous challenging paradigm shifts including focusing on the diseased person and his/her uniqueness rather than on the disease; preventing rather than curing/alleviating; addressing complexity rather than single factors; and least but not last adopting an expanded definition of health as defined in the WHO Constitution: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." The sky is the limit.

REFERENCES

Adelman, A. M. (2005). Integrating a health coach into primary care: Reflections from the Penn State ambulatory research network. Annals of Family Medicine, 3(2), 33-35.

CBS (2006). Continuous decrease in the national health expenditure as a percentage of the GDP. Retrieved April 22, 2007, from http://www1.cbs.gov.il/reader/newhodaot/hodaa_template.html?hodaa=200608183

CDC (2006). Chronic Disease Prevention. National Office of Public Health Genomics. Retrieved April 22, 2007, from http://www.cdc.gov/nccdphp/programs/genomics.htm

CDC (2007). Eliminating Racial & Ethnic Health Disparities. Retrieved April 22, 2007, from http://www.cdc.gov/omh/AboutUs/disparities.htm

Engström, S. G., Carlsson, L., Östgren, C., Nilsson, G. H., & Borgquist L. A. (2006). The importance of comorbidity in analysing patient costs in Swedish primary care.

BMC Public Health, 6: 36. Retrieved April 22, 2007, from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1459136

Hamamy, H. (1997). Genetic disorders and congenital abnormalities: strategies for reducing the burden in the region. Eastern Mediterranean Health Journal, 3(1), 123-132.

Human Genome Project (2007). Pharmacogenomics. Retrieved, April 2, 2007, from http://www.ornl.gov/sci/techresources/Human_Genome/medicine/pharma.shtml#benefits

Huttin, C. (1997). The use of clinical guidelines to improve medical practice: Main issues in the United States. International Journal for Quality in Health Care, 9(3), 207-214.

Martin, J. P. (2003). The experience of OECD countries in coping with rising health costs.

OECD, Testimony before the joint economic committee, 2. Retrieved April 22, 2007, from http://www.oecdwash.org/PDFILES/martin_testimony.pdf

Ministry of Health, Center for Disease Control (2005). The Arab population health 2004, publication 226. Retrieved April 22, 2007, from http://www.health.gov.il/download/icdc/BookArab.pdf

OECD (2007). OECD health data 2007. Retrieved April 22, 2007, from http://oberon.sourceoecd.org/vl=7796192/cl=17/nw=1/rpsv/factbook/

Segal, L. (1998). The importance of patient empowerment in health system reform. Health Policy, 44 (1), 31-44.

WHO (2007). Health systems: Concepts, design & performance glossary. Retrieved April 22, 2007, from http://www.emro.who.int/mei/mep/Healthsystemsglossary.htm

WHO (2005). Preventing chronic diseases: a vital investment. Global report. Retrieved April 22, 2007, from http://www.who.int/chp/chronic_disease_report/contents/en/index.html

WHO (2003). Global strategy on diet, physical activity and health: Facts related to chronic diseases. Retrieved April 22, 2007, from http://www.who.int/dietphysicalactivity/publications/facts/chronic/en/

WHO (2006). Socioeconomic determinants of health. Retrieved, April 22, 2007, from http://www.euro.who.int/socialdeterminants

WHO (2007). Mental Health, the bare facts. Retrieved, April 22, 2007, from http://www.who.int/mental_health/en/

We Can Do Better: Improving the Health of the American People*

> Steven A. Schroeder
Department of Medicine, University of California at San Francisco

The United States spends more on health care than any other nation in the world, yet it ranks poorly in nearly every measure of health status. How can this be? What explains this apparent paradox?

The two-part answer is deceptively simple—first, the pathways to better health do not generally depend on better health care, and second, even in those instances where health care is important, too many Americans either don't get it, receive it too late, or get poor quality. In this paper I first summarize the United States' international health status rankings. Next, using the concept of determinants of premature deaths as a key measure of health status, I discuss pathways to improvement, emphasizing lessons learned from tobacco control, as well as the reality that better health performance (lower mortality and better function) cannot be achieved without greater attention to the less fortunate. I conclude with speculations on why we have not focused on improving health in the United States and what it would take to make that happen.

HEALTH STATUS OF THE AMERICAN PUBLIC

Among the 30 developed nations comprising the Organization for Economic Cooperation and Development (OECD), the United States ranks

---

* This article has been reprinted with the permission of The New England Journal of Medicine, in which it was originally published as a Special Article on September 20, 2007, pp. 357:1221.

near the bottom in most health status measures (Table 1).[1-4] (One measure where the United States does better is life expectancy from age 65, possible reflecting full health insurance for this population).

Among the 192 nations for which 2004 data are available we stand number 46 in average life expectancy from birth and 42 in infant mortality rate.[5,6]

Table 1: Health Status: United States vs. 29 Other OECD Countries

Health Status Measure	U.S.A.	U.S. rank in OECD (out of 30 countries)	Top ranked country in OECD
Infant Mortality (deaths in first year of life/1000 live births)-2001			
All races	6.8	25	Iceland (2.7)
Whites only	5.7	22	
Maternal Mortality (deaths per 100,000 births)—2001*			
All races	9.9	22	Switzerland (1.4)
Whites only	7.2	19	
Life Expectancy from birth (years)-2003			
All Women	80.1	23	Japan (85.3)
White women	80.5	22	
All men	74.8	22	Iceland (79.7)
White men	75.3	19	
Life expectancy from age 65 (years)-2003**			
All women	19.8	10	Japan (23)
White women	19.8	10	
All men	16.8	9	Iceland (18.1)
White men	16.9	9	

*OECD data missing for 5 countries
**OECD data missing for 6 countries

It is remarkable how complacently the public and the medical profession accept these unfavorable comparisons, in contrast to how carefully we track health systems measures such as the size of the NIH budget, trends in national health spending, or the number of Americans who lack health insurance. One reason for this indifference may be the rationalization that the United States is more heterogeneous than nations at the top of the rankings, such as Japan, Switzerland, and Iceland. It is true that within the United States large disparities exist in health status—by geography, race/ethnicity, and class.[7-9] But even when comparisons are limited to white Americans, our performance is still dismal (Table 1). And if the performance for white Americans matched the leading nations, it would still be incumbent upon us to improve the entire nation's health.

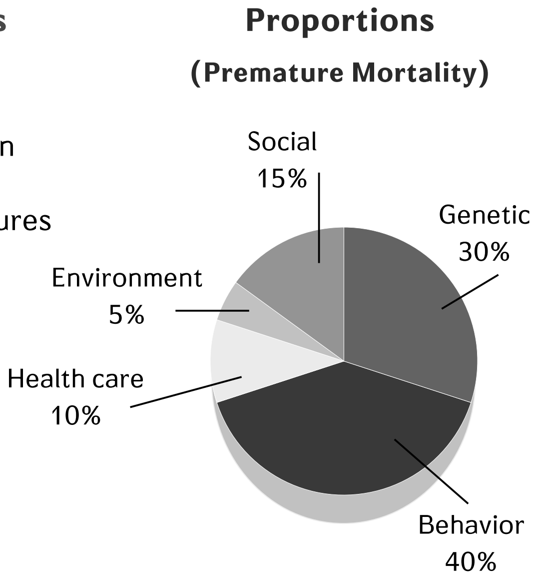
PATHWAYS TO IMPROVING POPULATION HEALTH

Health is influenced by five domains--genetics, social, environmental, behavioral, and health care (Figure 1).[10,11]

Figure 1

Determinants of Health

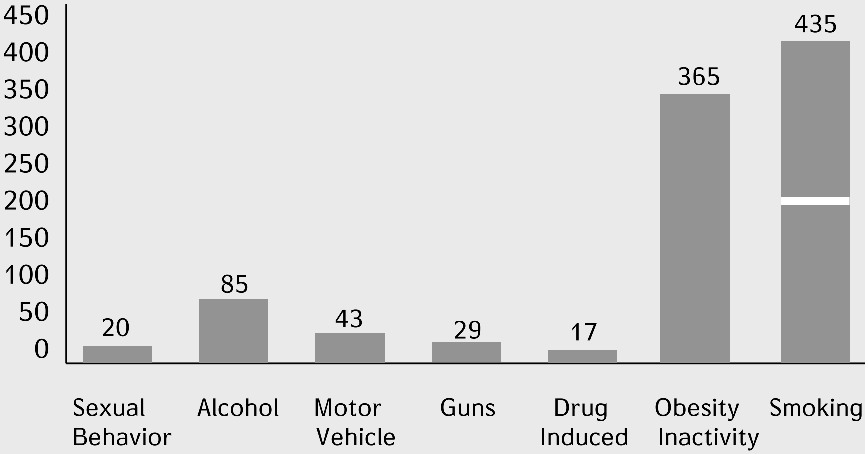
- Genetic predisposition
- Behavioral patterns
- Environmental exposures
- Social circumstances
- Health care



Source: McGinnis JM, Russo PG, Knickman, JR. Health Affairs, April 2002

When it comes to reducing early deaths, medical care has a relatively minor role. Even if the entire American population had access to excellent medical care—which it does not—only a small fraction of these deaths could be prevented. By contrast, the single greatest opportunity to improve health and reduce premature deaths lies with personal behavior. Figure 2 compares underlying behavioral causes of deaths in the United States, which account for nearly 50 percent of all deaths.[12,13] Though there has been disagreement over the actual numbers for the combination of obesity and physical inactivity, it is clear that it and smoking are the top two behavioral causes of premature mortality.[12,13]

Figure 2: Behavioral Causes of Annual Deaths in the United States, 2000



Among the deaths from smoking, the horizontal bar indicates the approximately 200,000 people who had mental illness or a problem with substance abuse.

Source: Mokdad et al; JAMA 2004; 291:1238-1245 Mokdad et al; JAMA 2005; 293:293

ADDRESSING UNHEALTHY BEHAVIOR

Clinicians and policymakers may question whether behavior is susceptible to change or whether attempts to change behavior lie outside the province of traditional medical care.[14] They may expect future successes to follow the pattern whereby immunization and antibiotics improved health in the twentieth century. If the public's health is to improve, however, it is more likely to come through behavioral change than technological innovation. Experience demonstrates that it *is* possible to change behavior, as illustrated by seat belt use and consumption of products high in saturated fats. But tobacco best demonstrates how rapidly positive behavior change can occur.

The case of tobacco

Smoking prevalence among American men declined from 57 percent in 1955 to 23 percent today, and among women from 34 percent in 1965 to 18 percent.[15,16] Why did tobacco use fall so rapidly? The surgeon general's 1964 report linking smoking and lung cancer was followed by multiple reports connecting active and passive smoking to myriad other diseases. Early anti-smoking advocates, initially isolated, became emboldened by the cascade of scientific evidence, especially about the risk of second-hand smoke exposure. Counter-marketing—first in the 1960's and then more recently by several states and the American Legacy Foundation's truth® campaign—linked the creativity of Madison Avenue with messages about the duplicity of the tobacco industry to produce compelling anti-smoking messages.[17] Laws, regulations, and litigation, particularly at the state and community level, led to smoke-free public places and rises in the tax on cigarettes—two of the strongest evidence-based tobacco control measures.[15,18,19] In this regard, local governments have been far ahead of the federal government, and have inspired European countries such as Ireland and the United Kingdom to go smoke-free.[15,20] And new medications augmented face-to-face and telephonic counseling techniques to increase the odds that clinicians can help smokers quit.[16,21,22]

It is tempting to be lulled by this progress and shift attention to other problems, such as the recent obesity epidemic. But there are still 44.5 million smokers in the United States, and tobacco use kills 435,000 Americans each year, up to fifteen years earlier than non-smokers and with those final years often ravaged by dyspnea and pain.[15,21] In addition, smoking among pregnant women is a major contributor to premature births and infant mortality.[21] Smoking is increasingly concentrated in the lower socio-economic classes as well as those with mental illness and/or substance abuse.[16,23,24] Persons with chronic mental illness die 25 years earlier than others, and a large percentage of those lost years reflects smoking.[25] Our Smoking Cessation Leadership Center at UCSF estimates – based on the high rates and intensity of tobacco use in these populations – that as many as 200,000 of the 440,000 premature tobacco deaths occur in persons with chronic mental illness and/or substance abuse problems.[23,26] Understanding why these patients smoke and how to help them quit should be a key national research priority. Given the health impact of smoking, the relative inattention to tobacco by responsible federal and state agencies – whose job is to protect the health of the public – is baffling and disappointing.

The United States is approaching a "tobacco tipping point." Some segments of the American population already have very low rates of smoking, including physicians (about 2%), persons with graduate education (8%), and residents of Utah (11%) and California (14%).[26] When Kaiser Permanente of Northern California implemented a multi-system approach to help smokers quit, its smoking rates dropped to 9%.[26] Two basic strategies would enable the United States to meet its Healthy People 2010 tobacco use objectives of 12 percent population prevalence: prevent young people from starting to smoke, and help smokers quit. Of these, smoking cessation brings by far the largest short-term impact. Of the current 44.5 million smokers, 70% claim they would like to quit.[21] Assuming that one half of those 31 million potential non-smokers will die because of smoking, that translates into 15.5 million potentially preventable premature deaths.[21,27] Merely increasing the baseline quit rate from the current 2.5% of smokers who quit to 10%—a rate seen in placebo groups in most published trials of new cessation drugs—would prevent 1,170,000 premature deaths. No other medical or public health intervention approaches this degree of impact! And we already have the tools to accomplish it.[15,28]

Could obesity be the next tobacco?

Although there is still much to do in tobacco control, it is nevertheless touted as a model for combating obesity, the other major potentially preventable cause of death and disability. Smoking and obesity share many characteristics (Table 2). Both are highly prevalent, start in childhood or adolescence, were relatively uncommon until the first (smoking) or second (obesity) half of the 20th century, are major risk factors for chronic disease, involve intensively marketed products, are more common in lower socio-economic classes, exhibit major regional variations—with rates higher in southern and poorer states-, carry a stigma, are difficult to treat, and are less enthusiastically embraced by clinicians than other medical conditions.

Table 2: Similarities and Differences between Tobacco Use and Obesity

Characteristic	Tobacco	Obesity
High prevalence	X	X
Begins in youth	X	X
20th century phenomenon	X	X
Major health implications	X	X
Heavy and influential industry promotion	X	X
Inverse linkage to class	X	X
Major regional variations	X	X
Stigma	X	X
Difficult to treat	X	X
Clinician antipathy	X	X
Definition is relative and debatable		X
Cessation not an option		X
No chemical addictive component		X
Harmful at low doses	X	
Behavior harms others	X	
Extent of documented industry duplicity	X	
History of successful litigation	X	
Large cash settlements by industry	X	
Evidence-based treatment	X	
Economic incentives available	X	X
Economic incentives in place	X	
Successful counter-marketing campaigns	X	

Obesity differs, however, from tobacco in many ways (Table 2). The binary definition of smoking status (smoker or not) does not apply to obesity. The body mass index, the closest to an obesity gold standard definition, misclassifies as overweight persons with large muscle mass—such as California's governor. It is not biologically possible to stop eating, and minimal amounts of food are not hazardous, in contrast to light smoking. There is no addictive analogue to nicotine in food. Non-smokers mobilize against tobacco because they fear injury from second-hand exposure, a peril absent for obesity. The food industry is less concentrated than the tobacco industry, and while its advertising practices have been criticized as predatory to children and deceptive regarding content of ingredients, it has yet to fall into tobacco's ill repute. For these reasons, litigation is a more problematic strategy and industry payments—like the Master Settlement Agreement between the tobacco industry and 46 state attorneys general to recapture the Medicaid costs of treating tobacco related diseases—less likely.[15] Finally, except for the invasive option of bariatric surgery, obesity treatment has even fewer clinical tools than tobacco cessation.

Some policy instruments, however, do exist to combat obesity.[29-31] Selective taxes and subsidies could be used as incentives to change what foods are grown, brought to market, and consumed, though the politics involved in designating favored and penalized food components would be fierce.[32] Restrictions could also apply to the use of food stamps. Given recent data that children see from 27 to 48 food advertisements for each one promoting fitness or nutrition, regulations could require shifting that balance and/or participating in sustained social marketing efforts such as the truth ® campaign in tobacco.[17,33] Requiring more accurate labeling of caloric content and ingredients, especially in fast food outlets, could sensitize customers to what they eat. Better pharmaceutical products and counseling programs could motivate clinicians to view obesity treatment more enthusiastically. In contrast to these policies, which require either national legislation, regulation, or research investment, momentum is already building at the local level. Some schools have banned the sale of soft drinks and now offer more balanced lunches. Opportunities for physical activity at work, in school, and in the community have been enhanced in a small but expanding number of locations.

ADDRESSING OTHER CAUSES OF PREMATURE DEATHS BESIDES BEHAVIORAL FACTORS

Improving population health will require addressing the remaining components of Figure 1—those social, health care, and environmental factors that promote or impede health (to date we lack tools to change our genes, although behavioral and environmental factors can modify the expression of genetic risks such as obesity). Social factors refer to the reality that people in lower socio-economic classes die earlier and suffer more disability than those of higher socioeconomic status, and that this pattern holds true in a stepwise fashion from the lowest to the highest classes.[34-39] In this context, class is a composite construct of income, wealth, education, employment, and neighborhood. One reason for the class gradient of health is that those in lower classes are more likely to have unhealthy behaviors, in part because of inadequate local food choices and recreational opportunities. Yet, even when behavior is held constant, people in lower classes are less healthy and die earlier than others.[34-39] It is likely that the deleterious health aspects of class reflect both absolute and relative material deprivation at the lower end of the spectrum and psychosocial stress along the entire continuum. In contrast to the attention focused on health care and behavior, class has been an "ignored determinant of the nation's health."[34] Health care disparities have become a concern of some policymakers and researchers, but because the United States uses a racial rather than a class lens to analyze social differences, studies commonly highlight racial and ethnic disparities in receipt of health care, rather than class differences in health.

But aren't class gradients a fixture of all societies? And if so, how could they be diminished? The fact is that nations differ greatly in their degree of social inequality, and that - even within the United States - earning potentials and tax policies have fluctuated over time, resulting in narrowing and widening of class differences. There exist potential mechanisms to address the effect of class on health.[34] There should be more research investment to understand the connection between class and health. More fundamental, however, is recognition that social policies involving basic aspects of life and well-being (e.g., education, taxation, transportation, and housing) have important health consequences. Just as new building construction requires environmental impact analyses, taxation policies could be subjected to health impact analyses. When public policies widen the gap between rich and poor, they may also negatively impact population health. One reason the United States does poorly in international health comparisons may be that we value entrepreneurialism over egalitarianism. Our willingness to tolerate large gaps in income, wealth, educational quality, and housing brings unintended health consequences. Until we are willing to confront this reality, we will suffer a relatively heavier health burden from social circumstances.

One nation attempting to address the class/health issue is The United Kingdom. Its 1998 Acheson Commission addressed ways to improve health in lower social classes through 39 policy recommendations spanning areas such as poverty, income, tax and benefits, education, employment, housing, environment, transportation, and nutrition; only three pertained directly to health care.[40] The Commission made three general recommendations: all policies that influence health should be evaluated for their impact on health inequalities; a high priority should be given to health of families with children; and there should be reductions in income inequality and improved living standards for the poor. Although implementation of these recommendations has been incomplete, the mere fact of their existence means more attention is paid to the health impact of social policies. This element is missing in American policy discussions, notably with recent income tax policy.

While inadequate health care accounts for only ten percent of premature deaths,[*] it receives by far the most resources and attention of the components of Figure 1. In the case of heart disease, it is estimated that health care accounted for half the 40 percent declines in deaths over the past two decades.[41] Health care expenditures in 2006 were estimated to be $ 2.1 trillion, accounting for 16% of our gross domestic product.[42] By contrast, few other countries even reach double digit health care spending. There are two basic ways by which health care can affect health status—quality and access. Although quality deficiencies in the United States have been widely documented[43], it is not evident that do worse in this dimension

---

[*] Exclusive reliance on international comparisons of mortality may shortchange the relative performance of the U.S. health care system. Perhaps our high rates of medical technology use (joint prostheses, surgery for visual and hearing impairment, etc.) translate into comparatively better function. To date there are no good international comparisons of functional status to test that theory, but if it were substantiated it would stake an even more compelling reason to expand health insurance coverage

than the other OECD nations. By contrast, in the area of access we trail nearly all: 45 million citizens (plus millions of immigrants) lack health insurance, and millions more are seriously underinsured. Lack of health insurance leads to poorer health.[44] Not surprisingly, the uninsured are disproportionately found among the lower socioeconomic classes.

Environmental factors such as exposure to lead paint, polluted air and water, dangerous neighborhoods, and lack of outlets for physical activity also contribute to premature mortality. Those in lower socioeconomic classes have greater exposure to these health-compromising conditions. As with social determinants of health and health insurance coverage, remedies for environmental risk factors lie predominantly in the political arena.[45]

IMPROVING POPULATION HEALTH REQUIRES CONCENTRATING ON THE LESS FORTUNATE

Since all the actionable determinants of health—personal behavior, social factors, health care, and the environment—disproportionately affect the poor, strategies to improve national health rankings must concentrate on this population. To the extent that the United States has any health strategy, it is developing new medical technologies and supporting basic biomedical research. We already lead the world in the per capita use of most diagnostic and therapeutic medical technologies, and have recently doubled the NIH budget. These popular achievements, however, are unlikely to improve our relative health performance. It is arguable that the status quo expresses accurately the national political will—a relentless search for better health among the middle and upper classes—which is also evident in how we consistently outspend all other countries in the use of alternative medicines and cosmetic surgeries, and how health "cures" and "scares" are so commonly featured in our popular media.[46] By contrast, our investment in improving population health—whether judged by proportion of research investment, insurance coverage for benefits, or governmental public health activities - is anemic.[47-49] Although the Department of Health and Human Services periodically produces admirable population health goals—most recently the Healthy People 2010 Objectives[50]— no entity has the authority to implement them, and achieving them has yet to penetrate the political process.

WHY HAVEN'T AMERICANS FOCUSED ON THE FACTORS THAT CAN IMPROVE HEALTH?

The United States' comparatively weak health status stems from two fundamental aspects of its political economy. The first is that the disadvantaged are less well represented in the political sphere here than in most developed countries, which commonly feature an active labor movement and robust political labor parties. Without their own strong voice, citizen health advocacy in the United States commonly coalesces around particular illnesses, such as breast cancer, HIV/AIDS, or autism. These efforts are led by middle class advocates whose lives have been touched by the disease. There have been a few successful public advocacy campaigns on issues of population health—efforts to ban exposure to second-hand smoke or to curtail drunk driving—but these are relatively uncommon.[45] Because the biggest gains in population health will come from attention to the less well off, the lack of a political voice arguing for more resources to improve healthy behaviors, reduce social disparities, increase access to health care, and reduce environmental threats will perpetuate the status quo. Cohesion on social advocacy in the United States is also fragmented by tensions between racial and class disparities.[34] To the extent that poverty is viewed as an issue of racial justice, it ignores the many whites who are poor, thereby reducing the ranks of potential advocates.

The more limited American health role of government is the second explanation. Many are familiar with our outlier status as the only developed nation without universal health care coverage.[51] Less obvious is the dispersed and relatively weak status of the various agencies responsible for population health, as well as the fact that they are so disconnected from the delivery of health services. Additionally, America's rhetorical emphasis on individual responsibility creates a reluctance to intervene in what are seen as personal behavioral choices.

HOW CAN THE NATION'S HEALTH IMPROVE?

Given that the political dynamics of the United States are unlikely to change soon, and that the less fortunate will continue to have weak representation, are we consigned to low-tier population health status? In my view, there is room for cautious optimism. One reason is that, despite the twin epidemics of HIV/AIDS and obesity, our population has never been healthier, even though it lags behind so many other countries. The gain came from improvements in personal behavior (e.g., tobacco control), social and environmental factors (e.g., reduced homicide and motor vehicle accident rates, and fluoridated water), and medical care (e.g., vaccines and cardiovascular drugs). The largest potential area for further population health improvement lies with behavioral risk factors, especially tobacco and obesity. We already have tools at hand to make progress in tobacco control, and some of those tools are applicable to obesity. Improvement in most of the other factors requires political action, starting with relentless measurement and focus on actual health status and the actions that could improve it. Conversely, not to act means accepting the status quo of America's poor health status.

Improving population health would be more than a statistical accomplishment. It could enhance the workforce and national economy, reduce health care expenditures, and – most importantly — improve the lives of those affected and their families. But absent strong political voice from the less fortunate themselves, it becomes incumbent upon health professionals, especially physicians, to become champions for better population health. Such a role resonates with our deepest professional values, and is why many chose medicine as a profession. It is also one of the most productive expressions of patriotism. We take great pride in asserting that we are number one in wealth, Nobel prizes, and military strength. Why don't we try to become number one in health?

Acknowledgments

I am indebted to Stephen Isaacs for editorial assistance, to Michael McGinnis, Harold Sox, Stephen Shortell, and Nancy Adler for comments on an earlier draft, and to Kristen Kekich and Katherine Kostrzewa for technical support. None of the above worthies are responsible for the opinions expressed in this paper, or for any errors.

REFERENCES

1. OECD Health Data 2006, October 2006 (2001 figures).
2. Centers for Disease Control/National Center for Health Statistics (2006). *Infant, Neonatal, and Postneonatal Deaths, Percent of Total Deaths, and Mortality Rates for the 15 Leading Causes of Infant Death by Race and Sex: United States, 2001*. Retrieved April 16, 2007 from http://www.cdc.gov/search.do?action=search&queryText=infant+mortality+rate+2001&x=18&y=15 (2001 figures for U.S. & Whites)
3. Hoyert, D. L. (2007) *Maternal Mortality and Related Concepts.* National Center for Health Statistics. Vital Health Stat 3 (33):4.
4. U.S. Department of Health and Human Services/ Centers for Disease Control/ National Center for Health Statistics.(2006). *Chartbook on trends in the health of Americans*. Table 27. Life expectancy at birth, at age 65 years of age, and at age 75 years of age, by race and sex: United States, selected years 1900-2004, p.193. Retrieved April 16, 2007 from http//www.cdc.gov/nchs/fastats/lifeexpec.htm.
5. WHO Core Health Indicators. Retrieved April 4, 2007 from http://www3.who.int/whosis/core/core_select_process.cfm
6. Minino, A. M., Heron, M., & Smith, B. L. *Deaths: Preliminary data for 2004.* Health E-Stats. Released April 19, 2006. Retrieved April 16, 2007 from http://www.cdc.gov/nchs/fastats/lifeexpec.htm
7. Harper, S., Lynch, J., Burris, S., & Davey Smith, G. (2007). Trends in the Black-White life expectancy gap in the United States, 1983-2003. *Journal of the American Medical Association, 297,* 1224-1232.
8. Murray, J. L., Kulkarni, S. C., Michaud, C., Tomijima, N., Bulzacchelli, M. T., Iandiorio, T. J., & Ezzati, M. (2006). Eight Americas: Investigating mortality disparities across races, counties, and race-counties in the United States. *PLoS Medicine 3*, 1513-1523.
9. Woolf, S. H., Johnson, R. E., Phillips, R.L., & Philipsen, M. (2007) Giving everyone the health of the educated: An examination of whether social change would save more lives than medical advances. *American Journal of Public Health, 97,* 679-683.
10. McGinnis, J. M., Williams-Russo, P., & Knickman, J. R. (2002). The case for more active policy attention to health promotion. *Health Affairs 21*, 78-93.
11. McGinnis, J.M., & Foege, W.H. (1993). Actual causes of death in the Untied States. *Journal of the American Medical Association,* 270, 2207-2212.
12. Mokdad, A. H., Marks, J. S., Stroup, J. S., & Gerberding, J. L. (2004). Actual causes of death in the United States, 2000. *Journal of the American Medical Association, 291*, 1238-1245.

13. Mokdad, A. H., Marks, J. S., Stroup, J. S., & Gerberding, J. L. (2005). Correction: Actual causes of death in the United States, 2000. Letter to the editor. *Journal of the American Medical Association, 293*, 293.
14. Seldin, D. W. (1981). The Boundaries of medicine. *Transactions of the Association of American Physicians. 38*, lxxv-lxxxvi.
15. Schroeder, S. A. (2004). Tobacco Control in the Wake of the 1998 Master Settlement Agreement. *New England Journal of Medicine, 350*, 293-301.
16. Schroeder, S. A. (2005). What to do with the patient who smokes? Medical grand rounds at UCSF. Journal of the American Medical Association, 294, 482-487.
17. Farrelly, M. C., Healton, C. H., Davis, K. C., Messeri, P., Hersey, J. C., & Haviland, M. L. (2002). Getting to the truth: evaluating national tobacco countermarketing campaigns. *American Journal of Public Health, 92*, 6, 901-907.
18. Warner, K. E. (2006). Tobacco policy research: insights and contributions to public health policy. In K. E. Warner (Ed.), *Tobacco Control Policy* (pp. 3-86). San Francisco: Jossey Bass.
19. Schroeder, S. A. (2005). An agenda to combat substance abuse. *Health Affairs*, *24*, 1005-1013.
20. Koh, H. K., Joosens, L. X., & Connolly, G.N. (2007). Making smoking history worldwide. *New England Journal of Medicine, 396,* 1496-1498.
21. Fiore, M. C., Bailey, W.C., Cohen, S. J., Dorfman, S. F., Goldstein, M. G., Gritz, E. R., et al. (2000). *Treating Tobacco Use and Dependence: Clinical Practice Guideline.* Rockville, MD: Public Health Service.
22. Schroeder, S. A. & Sox, H. C. (2006). Varenicline—a new designer drug to help smokers quit. *Annals of Internal Medicine, 145*, 784-785.
23. Lasser, K., Boyd, J. W., Woolhandler, S., Himmelstein, D. U., McCormick, D., & Bor, D.H. (2000). Smoking and mental illness: A population-based prevalence study. *Journal of the American Medical Association,.284*, 2606-2610.
24. Zeidonis, D. M., Williams, J. M., Steinberg, M. L., Smelson, D., Krejci, J., Sussner, B. D., et al. (2005). Addressing tobacco dependence among veterans with a psychiatric disorder: A neglected epidemic of major clinical and public health concern. In S. L. Isaacs, S. A. Schroeder, & J. A. Simon (Eds.), *VA in the vanguard: Building on success in smoking cessation.* Washington, D. C: U.S. Department of Veterans Affairs. Available at http://smokingcessationleadership.ucsf.edu/VA.htm, pages 141-170.
25. Colton, C. W., & Manderscheid, R. W. (2006). Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Preventing Chronic Disease* [serial online] [*04.05.2007*]. Available from: URL: http://www.cdc.gov/pcd/issues/2006/apr/05_0180.htm.
26. Smoking Cessation Leadership Center. Retrieved April 5, http://smokingcessationleadership.ucsf.edu

27. Doll, R., Peto, R., Boreham, J., & Sutherland, I. (2004). Mortality in relation to smoking: 50 years'observations on male British doctors. *British Medical Journal, 328,* 1519-1527.
28. Fiore, M. C., Croyle, R. T., Curry, S. J., Cutler, C. M., Davis, R. M., Gordon, C., et al. (2004). Preventing 3 million premature deaths and helping 5 million smokers quit: A national action plan for tobacco cessation. *American Journal of Public Health, 94*, 205-210.
29. Nestle, M. (2006). Food marketing and childhood obesity—a matter of policy. *New England Journal of Medicine, 354*, 2527-2529
30. Mello, M. M., Studdert, D. M., & Brennan, T. A. (2006). Obesity—the new frontier of public health law. *New England Journal of Medicine, 354*, 2601-2610.
31. Gostlin, L. O. (2007). Law as a tool to facilitate healthier lifestyles and prevent obesity. *Journal of the American Medical Association, 297,* 87-90.
32. Pollan, M. (2007). You are what you grow. New York Times Sunday Magazine, April
22, 2007, pages 15-18.
33. Kaiser Family Foundation, Food for Thought: Television Food Advertising to Children in the United States, March 2007, p. 3.
34. Isaacs, S. L., & Schroeder, S. A. (2004). Class: The ignored determinant of the nation's health. *New England Journal of Medicine, 351,* 1137-1142.
35. Adler, N. E., Boyce, W. T., Chesney, M. A., Folkman, S., & Syme, S. L. (1993) Socioeconomic inequalities in health: No easy solution. *Journal of the American Medical Association, 269*, 3140-3145.
36. McDonough, P., Duncan, G. J., Williams, D. R., & House, J. (1997). Income dynamics and adult mortality in the United States, 1972 through 1989. *American Journal of Public Health, 87*, 1476-1483.
37. Marmot, M. G. (2001). Inequalities in health. *New England Journal of Medicine, 345,* 134-136.
38. Williams, D. R., & Collins, C. (1995). US socioeconomic and racial differences in health: patterns and explanations. Annual Review of Sociology, 21, 349-386.
39. Minkler, M., Fuller-Thomson, E., & Guralnik, J. M. (2006). Gradient of disability across the socioeconomic spectrum in the Unites States. *New England Journal of Medicine, 355*, 695-703.
40. Independent inquiry into Inequalities in Health Report. London: The Stationery Office, 1998. Retrieved April 6, 2007 at http://www.archive.official-documents.co.uk/document/doh/ih/contents.htm
41. Ford, E. S., Ajani, U. A., Croft, J. B., Critchley, J. A., Labarthe, D. R., Kottke, T. E., et al. (2007). Explaining the decrease in U.S, deaths from coronary disease, 1980-2000. *New England Journal of Medicine, 356*, 2388-2398.
42. Poisal, J. A., Truffer, C., Smith, S., Sisko, A., Cowan, C., Keehan, S., et al. (2007). Health spending projections through 2016: Modest changes obscure Part D's impact. *Health Affairs, 26*, 2, W242-253; pub on line 21 Feb 2007.
43. Institute of Medicine, National Academy of Sciences (2000).To err is human: Building a safer health system. Washington, D. C.: National Academy Press.

44. Institute of Medicine, National Academy of Sciences. (2003). Hidden costs, value lost: Uninsurance in America. Washington, D. C.: National Academy Press.
45. Isaacs, S. L., & Schroeder, S. A. (2001). Where the public good prevailed: Lessons from success stories in health. *The American Prospect. 12*, 26-30.
46. Gawande, A. (2007). Annals of medicine: The way we age now. *The New Yorker, 2997*, 50-59.
47. McGinnis, J. M. (2001). Does proof matter? Why strong evidence sometimes yields weak action. *American Journal of Health Promotion, 15*, 391-396.
48. Kindig, D. A. (2007). A pay-for-population health performance system. *Journal of the American Medical Association*, 296, 2611-2613.
49. Woolf, S. H. (2007). Potential health and economic consequences of misplaced priorities. *Journal of the American Medical Association, 297,* 523-526
50. *Healthy people 2010: Understanding and improving health* (2001). Washington, D. C.: US Dept. of Health and Human Services.
51. Schroeder, S. A. (1996). The medically uninsured: Will they always be with us? *New England Journal of Medicine, 334*, 1130-1133.

PART 2

Are We Facing a Scarcity of Innovative Ideas for Reforms?

Introduction

The last decades of the 20th century saw the demise of grand ideas on the design of social and economic systems. While the fall of the communist system signaled in the eyes of many the triumph of "capitalism" this is only partially true. What really triumphed was the mixed system of the market and the welfare state. It triumphed to some extent due to the ability of predominantly market democracies to add a variant of a welfare state, with significant government intervention to a market system in order, among other things, to take care of social needs that the market was unable to attend to. The triumph is thus due in part to the ability of the capitalist system to compromise and to mix together elements of two systems rather than to stick to one "pure" grand design. The last few decades witnessed further inroads of market-like and competitive elements and of material incentives into the design of social services. They came in response to macroeconomic constraints on the size of the welfare state in the face of increasing needs, to increased realization of "government failures", and to shifts in the taste of the population, toward more client friendly and more specialized and personalized services.

During the second half of the 20th century public finance and provision of healthcare took two major forms: almost full financing and provision by the government, like the British NHS and, even a more extreme variant, in Communist countries; and the Bismarkian system (which started earlier), where financing and the delivery of services were provided through non profit (NP) sickness-funds, operated mostly by trade unions and under an umbrella of government legislation, regulation, and financial contributions. In addition to the social mission, the public orientation of healthcare systems was motivated by the prevalence of market and information failures in both health insurance and healthcare.

The process of the mixing of market-like elements government into the public system, while it carries some ideological motivation, has been driven mainly by a pragmatic approach aimed to improve the performance of the system, and as a response to the pressures mentioned above. While the general idea of creating a more efficient and responsive system with a proper public – private (P/P) mix may be considered a significant innovation of sorts, the basic idea of a mixed P/P economy in order to achieve both economic and social goals is, as mentioned above, the road traveled by the Western democracies as an alternative to the grand and "pure" social designs. Furthermore, the search for an appropriate P/P mix involves a meticulous process of trial and error, forward and backward, of marginal changes in the doses of the different elements in the P/P mix, of some failures and few successes. This process, dubbed by Saltman as the "melting boundaries", is a tedious and often frustrating process and hence the frequent disappointments and actual failures.

The discussions and papers included in the "health care reforms" track of the conference, and the selection thereof presented in this volume, reflect the issues listed above, they expand and deepen their scope and significance in many dimensions. To the papers included under Chapter II of the conference we added in the present volume those introductory and concluding presentations to the conference that dealt mostly with the reform issue (Shani, Saltman, Stein, Israeli and Lev) The deliberations of this track opened by remarks by Josep Figueras who chaired a panel that included Wynand van de Ven, Gur Ofer, Reinhard Busse and David Wilsford.

The opening remarks by Figueras as well as papers by Shani, Saltman, Marmor, deal with the many difficulties of the reform process. What is sometime dubbed "reformitis" is accused of exaggerations, of using slogans and "fashions" instead of substance (Marmor), of moving too fast and with little preparation, the speed being inversely correlated with evidence, of transferring ideas across borders to ill prepared environments and different cultures and traditions, of replacing knowledge with ideology. Shani blames what he considers the poor results of the reforms so far, especially with regard to the chronically ill, on lags in the introduction of information technology (IT) and of evidence-based medicine (EBM), and to the decline in the trust by the public and stakeholders in the medical profession and in its ability to regulate itself. With regard to the introduction of market tools, it is claimed that in many cases while the underpinning of the economic theory and logic are well understood, their expected impact is much less so. A smaller than expected impact of market tools and incentives came up in a number of papers in other chapters of the conference (i.e., McGuire, Le Grand). One characteristic of the process of reforms is its movement back and forth in a pendulum fashion. Saltman describes such a process along the centralization axes, where a movement of decentralization over the last decades of the 20th century seems to have reversed itself recently, at least in a number of European countries. The pendulum-like movement, which is also typical in many market and managerial reforms, like "managed competition" in the US and "internal competition" in the UK, is superfluous and exaggerated. In this connection one has to remember the critical role of the government, either in traditional areas as an offset to market failures or in a renewed role of regulation of the new market-like innovations (Israeli, van de Ven, others). One element of the recentralization trend in a number of countries involved the transfer or return of the role of financing to the central government, being justified on both efficiency and equity grounds (Saltman, Ofer). The complexities and frustrations of a hybrid system made of markets tools and government interventions were underlined by Avi Israeli, who found market as well as government failures in almost any element of the system, and challenged the audience to come up with any reasonable construction.

Yet, all the above is also typical of a process of trial and error and could reflect the gradual movement toward a more appropriate design that will harness competitive forces to ensure efficiency while maintaining solidarity. For example, the sometimes disappointing results of the introduction of market-like tools on the supply side of healthcare provision are explained sometimes by the difficulty to change the behavioral culture of physicians, based on long term traditions. But instead of giving up there may be room to reinforce such tools with competition and more consumer choice on the demand side (van de Ven). Van de Ven supports demand side competition elements also as a response to the observed decline of solidarity in healthcare explained by a shift in the distribution of health problems, an increase in problems that depend on behavior and lifestyle and a decline in those caused by bad luck.

On the institutional aspect of the P/P mix, Ofer is advocating a greater role to well re-designed and "genuine" non profits, where the objective function combines efficiency, quality and solidarity in appropriate measures, and where the combination of market and regulation tools produce milder, "middle road" intensities in their "bite". NPs can be run as self governing structures, public trusts, foundations and the like. In order to make these new institutions effective, they have to adopt, in addition to an appropriate legal structure, a consistent (new) organizational and behavioral culture.

A third direction of reform may be termed "the quality improvement movement", including a variety of tools: technology assessment, benchmarking and target (public league) setting (and P4P), post medical training and re-accreditation, all belong to the wave of EBM. Such reforms proceed as top down as well as bottom up. It is difficult to assess their contribution, mainly due to lack of rigor in their quality assessment (Busse in the round table; see also the paper by Kahn in this chapter.) Per contra, Rosen shows that in Israel, at least over a short period when top down reform stalled, such reforms did seem to have the potential for a significant long term impact. An example of such an important top down program that has been initiated , "Health Israel 2020" is described by Lev in the concluding paper.

In addition to the reform difficulties listed so far, consideration needs to be give to implementation barriers. Implementation is blocked or distorted by a long list of factors: bad preparation of the program and of the relevant groups of stakeholders, underestimation of needed funds (Guy on the mental health reform in Israel), the resistance of vested interests and stakeholders, the path dependency of institutional structure, the complex nature of the health care system, the confusion of policy makers when confronted with diverse paradigms presented by different disciplinary perspectives (Wilsford, Figueras). Figueras wonders whether the reform discourse could be upgraded to a more cohesive multi-disciplinary level (or "post disciplinary") level. According to Busse, another health specific source of resistance to changes is the conflict over resources between cost saving and cost expanding new medical technologies.

In order to succeed in the implementation of non-incremental reforms, reformers should look for "windows of opportunity" that are provided by external shocks or crises, when new ideas conform with established tracks of interests, or with a change in the position of a major interest group, or when there is charismatic leadership (Wilsford). A guarded optimistic breeze is provided by Chinitz, who shows that polls taken over the period 1997-2006 among the public and stakeholders show a trend of increasing understanding and trust in the healthcare reform in Israel over time. Public understanding and trust are key conditions for successful implementation.

The former communist countries faced a special challenge of healthcare system reform as part of their much wider "transition". The old system of a unified national system financed and run by the government started to disintegrate and the countries were faced with a full menu of designs, including those that were only recently introduced in Western countries. Naturally many of these countries opted initially for variants with high doses of free market forces and competition; some among them have already retreated back to more conservative variants. Scholars from Russia, Poland, Slovakia and Hungary presented papers on the healthcare system transition in their countries and in the entire region, but unfortunately only the paper on Hungary is included here. The paper (by Mihályi) demonstrates a struggle to preserve the positive elements of the old system and to shed away its bad legacies, mostly the loss of social solidarity. I wonder if the decision to adopt the Dutch (and Slovakian) system of competitive sickness funds and competitive financing, scheduled for 2008, will prove to be the long term design.

Two papers in this chapter expand the discussion of reforms and challenges to new horizons. Mor-Yosef tells the story of the relations of Hadassah hospital in Israel with the media and the public during the illness of Prime Minister Sharon in 2006. It raises the dilemmas faced by the medical establishment in the information era. A paper by Stein opens up a discussion of the global dimensions of healthcare systems and reforms: So far globalization has created additional problems but has provided limited solutions. Stein calls for the international organizations to take charge and not leave the tasks to charitable organizations.

Gur Ofer

Fads in Medical Care Policy and Politics: New Ideas or Misleading Nostrums?

> Theodore Marmor
Public Policy & Management and Political Science,
Yale University School of Management

INTRODUCTION

My topic is fads in medical care policy, but in connection with the question of whether we are short of useful, innovative ideas in this area. My aim is to introduce the broader topic of fads, then to turn to how fads management commentary has shaped (and misshaped) understandings of medical care, and only then to consider whether my skepticism about innovative ideas is justified.

By fads I simply mean enthusiasms for particular ideas or practices. In clothing, we have no difficulty in identifying what is faddish. Either our adolescents or the press tell us what constitutes the current fad. In the world of ideas, there are similar rushes of enthusiasm, though the character and pace of change of these fads differ greatly over time and space. There is a considerable sociological literature on the subject of fads in social practices. There are fads in names for children, items of home decoration, television soap operas, and the like. But the fads that interest me in this essay concern fashionable managerial ideas, particularly ideas that in their dissemination are presented as panaceas for longstanding policy and organizational problems.

THE PROBLEM OF MANAGERIAL FADS

My fundamental contention is that the discussion of modern medicine's most prominent topics—cost, quality, access, and organization—is marked by *linguistic muddle* and *conceptual confusion*. I want to distinguish two sorts of jargon within the broader category of *business talk.* Bottom lines, entrepreneurship, free competitive markets, ands the like are illustrations of the first category of jargon. This largely comes out of business schools and management consulting firms, and makes its way into the general discourse via popular "business books." The second category is marketing jargon, or hype as I call it. This is quite different. Both types, to my mind, are threats to clear thought or reasoned argument.

One sees this vividly as the managerial fads of one period give way to the enthusiasms of the next. As John Hunt of the London Business School once put it, there is a "product cycle" in managerial fads[1]. New enthusiasms are promoted by authors and their publishers—with high hopes and inflated rhetoric. The fads are then abandoned—even by their authors—without much regret. Indeed, managerial gurus like Tom Peters shed failed models quite easily and embrace the newest fashions promiscuously. Declarations of failure follow cycles of enthusiasm, as the managerial journals and scholarly literature document. Both permit fame (and fortune) to be first made out of distributing the managerial equivalent of snake oil. And then scholars enhance their reputations out of discovering this pattern[2]. I might mention in passing the corruption that goes on, with consultancies buying up thousands of copies to get their author's book on the bestseller lists. The list makers are wise to this ploy now, but the public is not aware of this nefarious practice. I myself had never heard of it before investigating this subject.

---

[1] John W. Hunt, "An appetite for ideas," The Financial Times, May 3, 2001. Hunt's analysis is very similar to my own. He reviews the research that identifies the "path" of managerial ideas "from invention through acceptance to disenchantment and decline." And he emphasizes the speeding up of the fads, with chief executives, "exploiting and rejecting fashions within three or four years."

[2] I want to acknowledge two scholarly works which were very helpful in identifying and documenting these developments. Staffan Furusten's *Popular Management Books* is a sociological study of the origins and dissemination of managerial ideas in the United States and Western Europe; Andrzej Huczynski's *Management Gurus* is more concerned with how particular marketers of management ideas promote the dissemination of their nostrums.

Best Selling Books
Business

(Source: *The Wall Street Journal* Friday, October 26, 2001)

Rank	**Title (*Author*)**
1	Who Moved My Cheese? (*Spencer Johnson*)
2	Jack: Straight From the Gut (*Jack Welch*)
3	Good to Great (*Jim Collins*)
4	Fish! (*S. Lundin, H. Paul, J. Christensen*)
5	Rich Dad Poor Dad (*R. Kiyosaki, S. Lechter*)
6	7 Habits of Highly Effective People (*Stephen Covey*)
7	Side by Side Leadership (*Dennis A. Romig*)
8	Now, Discover Your Strengths (*M. Buckingham, D. Clifton*)
9	First, Break All the Rules (*M. Buckingham, C. Coffman*)
10	Gung Ho (*K. Blanchard, S. Bowles*)

Many readers will be familiar with some of the shifting fads in management—both for private and for public organizations. Let me briefly remind you of the shifts themselves. Twenty years ago or more, Management by Objective (MBO) and Zero Based Budgeting (ZBO) were the rage in boardrooms and bureaus. In recent years, the language of corporate seminars shifted to such expressions as "*re-engineering*" and "*core competencies.*" *Quality circles* were popular for a time soon to be displaced by an emphasis on synergy, mergers and acquisitions, and the like. At one point, big was better. Politicians as well as managers embraced larger scale operations, called *conglomerates* in the private sector and "*super-agencies*" in the public sector. Within a few years, small became beautiful. Divestiture, devolution, decentralization and specialization became the *watchwords* of managerial correctness. One need not remind an audience about the cycling and recycling of managerial models. But, for visual clarity, **take note** of the list an Australian management consultant provided me a few years ago:

Managerial Fads

1. Flatten the Structure – Eliminate Hierarchy
2. Empowerment – Leaderless Teams
3. TQ C/M/? – V A/B M/?
4. Vision, Mission, Values
5. Customer Focused / Service Organization
6. Trait Leadership
7. Continuous Improvement – Learning Organization
8. Process Re-engineering
9. Cultural Transformation

"Strongly held but largely unfounded beliefs and formulas about how to manage"

(Source: F. Hilmer and L. Donaldson. (1996) *Management Redeemed*, The Free Press)

There is already a great deal of contemporary discomfort with managerial fads, so I risk being accused of beating a dead horse. Let me use another visual aid (p.171), with tongue on cheek, to get us to a more "analytical "discussion of fads and what they produce.

More seriously, realism about what management can and cannot do might guard us against swallowing the more dangerous panaceas offered by misleading managerial gurus. Dissecting the linguistic modes of managerial fads highlights fallacies that are more serious in their effects than simple exaggeration. But let me elaborate the counter-argument that some have made about the effort this lecture represents.

My cautious warnings about the rhetoric of managerial thought are misplaced, I have been told, because sophisticated audiences simply ignore the sloganeering. They simply get on with their jobs. In this view, no one needs to worry about large numbers of misled and subsequently disappointed audiences. In short, my topic could be thought of as an indulgence, a wasteful deflection of your time and mine.

Bull**** Bingo

Do you keep falling asleep in meeting and seminars? What about those long and boring conference calls? Here is a way to change all of that!

How to play: Check off each block when you hear these words during a meeting, seminar or phone call. When you get five blocks horizontally, vertically or diagonally, stand up and shout **BULL****!!**

Synergy	Strategic Fit	Gap Analysis	Best Practice	Bottom Line
Revisit	Bandwidth	Hardball	Out of the Loop	Benchmark
Value-Added	Proactive	Win-Win	Think Outside the Box	Fast Track
Result-Driven	Empower [or] Empowerment	Knowledge Base	Total Quality [or] Quality Driven	Touch Base
Mindset	Client Focus[ed]	Ball Park	Game Plan	Leverage

Testimonials from satisfied players:

"I had only been in the meeting for five minutes when I won." – Jack W. – Boston

"My attention span at meetings has improved dramatically." – David D. – Florida

"What a gas. Meetings will never be the same for me after my first win." – Bill R. – New York City

"The atmosphere was tense in the last process meeting as 14 of us waited for the 5th box." – Ben G. – Denver

"The speaker was stunned as eight of us screamed 'Bull****' for the third time in 2 hours." – Kathleen L. – Atlanta

My response is this: whether managerial gurus convince audiences or not, they take up time and energy – if only because their language and notions bewilder. I am reminded of a conversation in the waiting room at the Department of Health in Whitehall in 2001. A group of four from a regional health authority were, to use the jargon itself, "debriefing." I listened as they tried to decipher the meaning of the bewildering terms used in the meeting from which they had just emerged. I could not help but hear their plaintive remarks and told them I was a student of managerial jargon and thought they would be much better off if they regarded the jargon much more skeptically. This appeared to give them some symptomatic relief.

All too many audiences find themselves either fooled or furious about what turns out to be misleading, needlessly obscure, or downright fraudulent language. At the very least, managerial obscurity directs discussion away from topics more worthy of the attention of those who provide medical care, receive care, pay for it, or manage those services.

WHY MANAGERIALISM (AND MARKET ENTHUSIASM) IN MEDICAL CARE?

I want now to turn to the context that proved to be such a fertile setting for the transfer of *business models* of management to medical care. The 1970s—marked by stagflation and intense fiscal pressure in all the industrial democracies—provided just such a context. In that decade medical care policy leapt to the forefront of public agendas. First, paying for medical care became a major burden on the budgets[3] of mature welfare states *precisely* when public finances fell sharply from prior forecasts. When fiscal strain comes, policy scrutiny is the predictable result. Accordingly, welfare states, as my friend and colleague Rudolf Klein argued in the late 1980s (Klein & O'Higgins, 1988), had less capacity for bold fiscal expansion in new areas. *This meant the management of existing programs necessarily assumed a larger share of the public agenda.* Tight welfare budgets foreclosed expansive reform. Lastly, there was what might be termed the wearing down—some people would say, "wearing out"—of the post-war consensus about the welfare state[4].

Begun in earnest during the 1973–74 oil shock, sustained by stagflation, and bolstered by electoral victories or the advance of parties opposed to welfare state expansion, these critics assumed a bolder posture. Mass publics came increasingly to hear challenges to social programs that had for decades

---

[3] Technically, this is not strictly true of course, as is evident in the sickness fund financing of care in Germany, the Netherlands, and elsewhere. But, since mandatory contributions are close cousins of 'taxes', budget officials must obviously treat these outlays as constraints on direct tax increases.

[4] The bulk of this ideological struggle took place, of course, within national borders, free from the spread of "foreign" ideas. To the extent similar arguments arose cross-nationally, as Kieke Okma has noted, mostly that represented "parallel development." But, there are striking contemporary examples of the explicit international transfer and highlighting of welfare state commentary. Some of this takes place through think tank networks; some takes place through media campaigns on behalf of particular figures; and, of course, some takes place through academic exchanges and official meetings. Charles Murray – the controversial author of *Losing Ground* (1984) and co-author of *The Bell Curve* (1994) – illustrates all three of these phenomena. The medium of transfer seems to have changed in the post-war period. Where the Beveridge Report would have been known to social policy elites very broadly, however much they used it, the modern form seems to be the long newspaper or magazine article and the media interview.

seemed sacrosanct (Marmor et al., 1992)[5]. From Mulroney to Thatcher, from New Zealand to the Netherlands—the message was one of necessary change. The incentives to explore transformative but not fiscally burdensome options became stronger. That context, I suggest, helps to explain the international pattern of welfare state review—including healthcare policy—over the last two decades of the twentieth century. And it also helps to explain why the appeal to market mechanisms and business-like management became so much more compelling: they were more sellable to more business-minded constituencies.

MARKET TALK, MANAGEMENT, AND MEDICAL CARE: THE IMPACT IN AMERICA ON THE MEDICAL WORLD AND THE PUBLIC

Here I want to return to "business discourse" distinction between managerialism and market enthusiasm drawn at the outset of this essay. There was a perceptible increase during the 1970s in proposals to make medicine better managed and subject to market-like competition. Simultaneously, a dramatic shift took place in the language of medical commentary—a case study, following Orwell, of "the politics of language." To change thinking, one manipulates language. The traditional doctor-patient relationship becomes, in the language of competitive markets, provider-consumer, buyer-seller, or supplier-demander. Medicine in this way becomes just another business. The fallout from this refashioned language came to be a threat to the professional ethos of medicine—*most obviously in America*, but *elsewhere as well.*

Traditionally, a significant share of the "income" doctors, nurses and other medical practitioners earn has been non-economic: self-esteem, respect from the community— indeed idealization as selfless professionals. In casting medical care as no different from other industries, medical professionals are reconceptualized. They no longer deserve (and increasingly no longer receive) as much of the non-economic benefits of

---

[5] This is the argument developed in Marmor, Mashaw, and Harvey, *America's Misunderstood Welfare State: Persistent Myths, Continuing Realities,* esp. ch.3. The wider scholarly literature on the subject is the focus of a review essay, "Understanding the Welfare State: Crisis, Critics, and Counter-critics," *Critical Review*, Vol.7, No.4, 1993, 461-77.

public esteem and gratitude. The stereotype of the medical professional as a self-interested (selfish) agent of business feeds on itself. And, over the last four decades of the twentieth century, the American public's esteem for medical practitioners did in fact fall sharply[6]. Public confidence in medicine and health institutions dropped from 73 percent to 33 percent between the mid-1960s and mid-1980s. While all major American institutions experienced a loss of public support, the medical profession lost support faster than any other professional group.

Part of the decreased satisfaction with American medicine undoubtedly arose from worries over our very high and rapidly rising costs. Although it is impossible to establish a clear causal connection between the demystification of the medical profession and the increased incomes of doctors, the phenomena went hand in hand. Despite sharp increases in the number of new physicians, doctors' incomes grew by 30 percent in the 5 years from 1984 to 1989—twice that of the increase of full-time workers over the same period (Fuchs, 1990). It should not be surprising that to the extent professional medical work was increasingly regarded as an ordinary commercial activity, higher physician incomes were increasingly understood as the result of market power or greed rather than a professional's just desserts.

External criticism and constraints on professional autonomy begat doctor dissatisfaction. Doctors complained bitterly about the loss of discretion. Elaborate, intrusive and administratively expensive procedures proliferated, including utilization reviews, requirements for pre-admission certification and other forms of second-guessing. In an often-quoted 1991 article in *The Atlantic,* Regina Herzlinger reported that despite increased incomes, more than a third of physicians in their fifties said they would not have attended medical school had they known what their futures had in store (Herzlinger,

---

[6] Public confidence in medicine and health institutions dropped from 73 to 33 per cent between the mid-1960s and mid-1980s. While all major American institutions experienced a loss of public support, the medical profession lost support faster than any other professional group. Insofar as high levels of public trust are associated with altruistic behavior and sense of social mission of a profession, at least some of the lost support was no doubt due to the increasing commercialization in the medical profession. In his analysis of a host of survey data, Blendon (1988) found that while most (64 per cent of those polled) supported advertising by physicians, 58 per cent did not expect it to be truthful.

1991).

The language of business management—and competitive markets—did not just affect doctors. Hospitals and hospital administrators recast themselves as businesses and began speaking the language of business in new terms. The hospital administrator increasingly became the chief executive officer. Assistant administrators were refashioned as vice-presidents for their respective functions. These changes were not merely semantic exercises. Rather, they represented a fateful shift in the way Americans were encouraged to think of medical care. The vision of a hospital as primarily a corporate business—and the concomitant shift in administrative power away from medical staff and toward professional managers – inevitably affected how Americans regarded medical care. It would be wrong to assume unanimity on this and equally wrong to presume that American physicians and nurses think of themselves as business figures. The point here is narrower. Over time, the managerial attack on the dominance of medical professionalism helped to deflate public confidence and to increase the probability of proposals threatening professional autonomy.

As hospital administrators gave way to chief executive officers (CEOs), so too did their incomes increase. By 1990, hospital CEOs earned an average base salary of over us $ 103,000; those receiving incentive pay averaged $ 125,000. 1990 was in the midst of a supposed "crisis" in health spending. And, by 2000, those figures had increased sharply.

There are, of course, advantages to treating hospitals more like a typical business firm. Improved capital budgeting, financial monitoring and accounting systems are all vital in getting better value for health expenditures. Nor can one pretend medical practitioners are all selfless workers concerned only for the welfare of their patients. Clearly economic motives are important, as they are for professors as well. Indeed, many of the concerns of those who subscribe to pro-competitive strategies are identical to my own. Asymmetries of information and bargaining strength between doctors and patients *do* require attention.

But the rhetoric of the *competitive market*—and the rhetoric of managerialism—helped to disguise what sets medicine apart from other industries. It was that broader development that made it possible for a Democratic president like Bill Clinton to marry ideas of universal health insurance to "pro-market" managerialism in the early 1990s. No one can make sense of Clinton's embrace of "*managed* competition" without appreciating just how much the celebrations of markets and *management* had depleted faith in ordinary public administration. It is worth noting that the very term managed competition is itself an oxymoron. A managed system is one whose parties control operations by various managerial techniques—for good or for ill. By contrast, the results of a competitive market are largely up for grabs. Individual actors pursue their own interests without central direction. No single actor can determine the outcome. Whatever coordination occurs is not by managerial design, but as a consequence of individual adaptations to market conditions. The results are not planned and may not be desirable. We regulate competition, well or poorly. And we manage resources, well or poorly. What no one does is manage competition.

In arguing against governmental provision of medical care (or the financing of it), traditional business advocates predictably argue that governments are not competent as managers. The inevitable concessions of the political process, they claim, deplete resolve and hamper efficiency so that programs over time bear less and less resemblance to their initial design and purpose.

Ironically, from the 1970s to the present, advocates of competition have proposed a variety of detailed government programs, laws and regulations designed to address and to eliminate the market failures that occur in unregulated medical markets. The dilemma hardly addressed in public discussion of competition in medical care, arises precisely here. What happens to the logic of competitive proposals when government incompetence contaminates the efforts to reform medical markets?

The answer is that most competitive plans are not and *were not* robust in precisely this crucial respect. They would not perform well unless conditions were just right. By the very detailing of the government actions required to eliminate market failures, backers of competitive market reform implicitly acknowledged that without these remedies, a competitive system does not work very well in medical care.

The characterization of medical care as just another business also had implications for the way in which the potential for improvement from government intervention came to be judged. The dichotomy drawn between private competition and public regulation invoked choice and well-functioning free markets on the one hand, and failed government programs on the other. But the dichotomy was, and is, artificial and misleading. The properties of the medical sector are such that substantial regulation is inevitable, as every serious writer on the subject has noted. Ironically, the most widely disseminated schemes of market competition in medicine have all entailed a myriad of regulatory restrictions on practitioners, patients, and program managers alike.

SO, HOW CAN WE MOVE FROM IDEALIZED MARKETS TO MISLEADING MANAGERIALISM: THE CASE OF MANAGED CARE

I want now to return to the connection between market enthusiasm and managerial fads, including language fads like persuasive definitions. Consider, for example, medical expressions like "managed care" or more general public management labels like "joined up" government or "integrated delivery systems." All these are slogans, persuasively defined terms that imply success by their very use. Consider also this feature: In every case, the opposite of such slogans has no appeal. So, for example, the appeal to integrated systems has no defenders of "disintegrated" ones. Disease management is set against the non-management of disease, a null category. Even that familiar slogan in research circles – evidence-based medicine, policy, or whatever – has no credible antonym.

Slogans / Antonyms

◆ Managed Care	◆ NON-Managed Care
◆ Integrated Delivery System	◆ DIS-Integrated Delivery System
◆ Joined Up Government	◆ DIS-Jointed Government
◆ Empowerment of Employees	◆ DIS-Empowerment of Employees
◆ Evidence-Based Medicine	◆ NON-Evidence-Based Medicine
◆ Customer Focused	◆ NON-Customer Focused
◆ Learning Organization	◆ NON-Learning Organization

Precisely because so much of the language used to describe medical care today is meant to convince rather than to describe or to explain, even thoughtful observers often end up endorsing claims whose validity they should be assessing. I can think of no better illustration of this process than the widespread appeal to "managed care" in medical reform circles. The expression "managed care"—is a product of both marketing sloganeering, and *managerial jargon*. Insofar as it is an incoherent notion, most claims about managed care suffer from incoherence as well. The term came into widespread usage only in the 1990s. The expression does not appear once, for example, in Paul Starr's exhaustive 1982 history *The Social Transformation of American Medicine*. The phrase first appeared in *The New York Times* in 1985 but surfaced in only a handful of articles during that decade. In the 1990s, however, *Times* articles mentioning the phrase exploded, increasing from 27 in 1990 to 287 in 1994 to 587 in 1998. Because "managed care" has become something of a household term, it is difficult to recognize how recently it entered medical discourse.

What exactly managed care is, however, has never been entirely clear, even among its strongest proponents.

- To some, the crucial distinguishing feature is a shift in financing from indemnity-style fee-for-service, in which the insurer is little more than a bill-payer, to per capita payment methods. Yet there is nothing intrinsic to fee-for-service payment that requires that reimbursement be open-ended or insurance payers passive. Many, if not most, American health insurance plans that are labeled "managed care" do not, in fact, rely primarily on capitation payment of doctors.
- To others, the distinctive characteristic of managed care is the creation of administrative protocols for reviewing and sometimes denying care demanded by patients or preferred by medical professionals. But such micro-level managerial controls are not *universal* among so-called managed care health plans either. In fact micro management may be made less necessary by payments methods, like capitation or regulated fee-for-service reimbursement, that create more diffuse constraints on medical practice instead of regulating the details of day-to-day medical practice.
- Finally, to some, what distinguishes managed care is the establishment of integrated networks of health professionals from whom patients are required to obtain care. Yet some so-called managed care plans

> have no such networks. And what is called a network by many plans is little more than a list of providers willing to accept discounted fee-for-service payments.

In short, what constitutes the subject matter of managed care is utterly obscure[7]. Even thoughtful critics of managed care face confusion. Donald Light's essay, "Managed Care: false and real solutions," described managed care as "the hot new export from the United States, promoted by major consultants as the most efficient way to integrate primary care, sub-specialization, and everything in between." He goes on to suggest that " these days [1994], the term managed care means any of several institutional arrangements," but then goes on to employ the expression even though it is not clear which of the "several" arrangements constitutes the relevant noun. It reminds one of the joke that if you don't know where you are going, any road will get you there. So it is with managed care. If it has no settled meaning, conversations about it are certain to be misleading.

Conflating organization, technique, and incentives leads to serious confusion. When we contrast health plans we often compare them across incommensurable dimensions (assuming, for example, that an HMO is somehow more "managed" than a well controlled fee-for-service plan). It means, too, that we are tempted to presume necessary relationships between particular features of health plans (such as their payment method) and specific outcomes that are alleged to follow from these features (such as the degree of integration of medical finance and delivery)—even when not true. And finally, it encourages a wild goose chase of efforts to come up

---

[7] Even thoughtful critics of managed care face confusion. Donald Light's essay, "Managed Care: false and real solutions," described managed care as "the hot new export from the United States, promoted by major consultants as the most efficient way to integrate primary care, sub-specialization, and everything in between." He goes on to suggest that "these days [1994], the term managed care means any of several institutional arrangements," but then goes on to employ the expression even though it is not clear which of the "several" arrangements constitutes the relevant noun. It reminds one of the joke that if you don't know where you are going, any road will get you there. So it is with managed care. If it has no settled meaning, conversations about it are certain to be misleading.

with black-and-white standards for identifying plan types. As health organizations employ increasingly diverse payment methods and organizational forms, the search for the "essence" of a particular plan will become all the more futile.

The "managed care revolution" is really a set of related trends, few of which are accurately captured by the blanket term. When these trends are distinguished from one another, the evidence suggests that American health insurance has moved simultaneously in several different, perhaps even contradictory, directions in recent years, and that many of the changes are longer standing than the rhetoric of managed-care celebrants implies.

Labels and categories are indispensable, but they clarify, not simply amplify hyperbole. "Managed care" fails that test. And I wish I could get it—and its cousins—banished.

From this extended American example of linguistic and conceptual muddle, let me turn to the use of managerial jargon in the UK context. But first, let me contrast the cross-Atlantic contexts. In the United States, the language of medical managerialism—and managerial practices more generally—has produced a backlash, a sense of outraged anger. The disputes about a patient's bill of rights, for example, revealed this. The critics of the managers of health insurance plans portray them as greedy profiteers who extracted funds from the health insurance pools to line their pockets and obscured what they were doing under misleading labels like managed care, integrated delivery systems, and the like.

To turn to the NHS, the complaint is much more likely to be dismay at managerial changes that are recurrently imposed in the name of slogans, but with the force of budgetary authority. In the US, where no one is in charge of a national system of medical care financing, obscurantism more easily leads to dispersed rage and a search for scapegoats in the face of distress whose sources are not simple to identify. In the NHS context, where somebody is indeed in charge of policy, perhaps excessively so, sullen resentment appears a more common response to managerial excess.

NHS MANAGEMENT: STYLES AND RESPONSES

Visitors from abroad should, in my view, adopt a posture of hesitant certitude in commenting on the complexities of policy and management in another country. So, what might this outsider say prudently about the reactions not only to the newly announced policy of dispersing managerial authority but also to the style of policy making and management in the NHS more generally? Here the outsider has considerable help from a number of scholars who have written about what can be called the new public management in the United Kingdom. I have relied on that literature in understanding the type of managerial rhetoric now dominant and in making sense of why reactions to managerial fads here are often so hostile.

My guides to what is called the new public management in Britain are the writings of Michael Barzelay, Christopher Hood, and Michael Power—and Rudolf Klein. Power has brilliantly summarized the central ideas, suggesting that the new public management "consists of a cluster of ideas borrowed from the *conceptual framework of private sector management.*" Among the ideas most emphasized are:

1. cost control, financial transparency, decentralization of management authority;
2. the creation and enhancement of market and quasi-market mechanisms separating purchasing and providing functions and their linkage via contracts;
3. accountability to customers for the quality of service via the creation of performance indicators[8] (Power, 1997).

It does not take exhaustive research to see just how widely these ideas have spread in the world of the NHS. For example, consider this brief survey of faddish presentation of managerial ideas in recent years. In December, 1997, the white paper announcing the "New NHS" promised dramatic changes in the way Labour would manage things. "Integrated care" would replace the internal market of the Thatcher reforms, building on "what has worked, but discard[ing] what has failed." This, we were told, would save huge amounts of red tape and put "money into frontline patient care." Here we have the familiar appeal to a persuasively defined slogan—*integration*. Audits, it was claimed, would lead to improvement in patient care. But that aim has hardly

---

[8] Michael Power, *The Audit Society: Rituals of Verification*, p.43. See also, Michael Barzelay, *The New Public Management* (Berkeley: University of California Press, 2001) and Christopher Hood, *The Art of the State* (Oxford: Oxford University Press, 1998).

been embraced by those whose professional performance is the object of improvement. Performance targets, quantitative measures, monitoring, and evaluating—these became watchwords of NHS reforms.

But the reality appears to contain more variability than these expressions suggest. As Christopher Hood has argued, the new public management is more a story of successive shifts in approach over the last twenty years than of steady reinforcement of a single trend. Indeed, Hood suggests a shift in emphasis over the 1980s "from efforts to…equip ministers to be effective managers of their departments…to the effort to take management away from ministers…by the creation of executive agencies at arm's length from the departments." The drumbeat of changing fads is evident in Hood's depiction of the themes of managerial innovation. So one notes the "move from the stress on 'results' or 'outputs' that were the catchwords of public management reformers in the early 1980s to the stress on 'governance' (a euphemism for 'process') as the hot topic of the mid-1990s." Rather than a coherent doctrine, these persistent adjustments in doctrine might be regarded, Hood notes, as "ceaseless activity to grapple with the unacknowledged consequences of yesterday's mistakes."[9]

It is to the "ceaseless activity" that I want to call attention. It is striking to the visitor how unanimous NHS commentators are in both their criticism of and their cynicism about proposed NHS shifts in policy and management. Rudolf Klein, in discussing a "much advertised" speech about devolution by the Secretary of State for Health, predicted that "the first reaction to Mr. Millburn's speech is...likely to be cynicism." In published reactions to the Milburn policy during the summer of 2001, both analytical rage and policy skepticism were widespread. This seemed true from observers as different as Nicholas Bosanquet and Charles Webster, and across a wide spectrum of general political views. To this observer, it seems plain that Bosanquet and Webster are not ideological cousins, but they both find nothing to recommend in the NHS's mode of policy making. Bosanquet's claim that "there never has been a greater gap between the view of solutions at the center and the realities as they appear day to day at the local level" should, if true, worry the government greatly. And that critical stance is common from

---

[9] Hood, *The Art of the State* (Oxford University Press, 1998), p. 201.

David Hunter (emphasizing the dismay of managers) to Charles Webster (emphasizing the secret and detached quality of the Blair government's policy making in healthcare) to Bob Sang's invocation of high managerial doctrine in lamenting what the NHS debate lacks. Only Jennifer Dixon saw a "chink of light," itself a qualifying metaphor for Dixon's effort to explain the "gripes" about what she describes as New Labor's "tendency towards hierarchy and centralism." Hierarchy and centralism – that is the common theme of the criticism here and the explanation of why these analysts were so cynical about the NHS plan to shift the balance of power (Bosanquet et al., 2001).

What the outsider wonders about is whether there was any reason to think this 2001 plan was any more than another centralist move in decentralist clothing. The NHS appears to have been on a centralizing mission for decades now, masking that for a time with one or another reorganization. And the reorganizations themselves have sapped morale and disturbed lives enough to make managers more likely candidates for psychotherapy than corporatist cooperators with central office. None of these commentators find much to say about announced aims of Shifting the Balance. Since paying more attention to "local level" actors—providers, patients, and payers—is what most of the commentators applaud, this inattention to the stated policy goals is striking testimony to the distrust of the NHS and its policy making modes.

There are good grounds for that distrust in the reviews of NHS history since the 1970s. First, as Webster notes incisively, the rhetoric of local level decision making goes back to 1979, but the reality of both the Thatcher and Blair policies have not "been conducive to such decentralization of power." David Hunter emphasizes, as do others, what he calls "control freakery" and concludes that managers at the local level have been "unwilling to say what they think" about proposals like Mr. Millburn's on shifting the balance. And most of the comments converge on disbelieving the commitment to devolution, whatever the rhetoric. They believe the history, the Blair (and Thatcher) style of policy making, and the structure of British government support their cynical reaction.

While appreciating the grounds of these critiques, I want to offer two somewhat different perspectives on this evaluation. First, I want to call attention to the more general trends in national health decision-making that are not at all the topic in this NHS debate. From Australia to New

Zealand, from the US to Canada, from Holland to Germany, dismay about modern medical care financing, quality, and management is apparent. The attack on medical errors and the distrust of physician self-government are trends that are cross-national in the OECD world. What is more, the claim that good science, proper information, and appropriate monitoring can raise the quality of health care among industrial democracies is an article of faith among the devotees of what could be called the "new public management" in medical care.

These views are neither new nor restricted to public management. They inform not only the development in the United States of new agencies of government devoted to the improvement of quality standards as well as the rise of private firms advertising their capacity to separate good from bad hospitals, competent from incompetent physicians, and worthy from worthless drugs. A UK audience will think of NICE, a Canadian audience will think of the Canadian Institute for Health Information, CIHI, and others will find their own acronyms. But the common element is distrust of collegial authority and either celebration of market means or government hierarchies as the right measure for a lamentable state of "local self-government" of clinical matters.

What distinguishes the NHS is the degree of centralism in the day-to-day mode of policy making. As David Hunter rightly notes, a non-political NHS is a fantasy, a goal that will not (and could not) be entertained in a democratic society. But the extent of the political control has varied across time in the UK. There were decades when central budgetary control combined with considerable medical and managerial discretion about how to live within budgets. Not so for more than the last decade.

This brings us back to the question of whether this new turn of policy is to be taken seriously. The only grounds for doing so is to see the connection, as Rudolf Klein did, between the "corset of control" that the Blair government has already established and a new freedom justified by the conviction that it will not be a "license for poor standards or inadequate performance." This interpretation rests on the premise that no British government could ignore inappropriate variation in care standards. But, if the new Modernization Agency could count on prior constraints, then its posture could be one of promoting good practice without missionary zeal.

This is the most generous interpretation one could make of the logic of the Blair government's newest policy. But it also suggests a way of discussing such policy initiatives: namely, to add to justified criticism and cynicism a set of indicators of what would count as evidence that the new policy was being carried out. Without that, commentary stays girdled by past disappointments and leaves little opportunity for those within government to show they mean what they say.

A RETURN TO REALISM: WHY SENSIBLE MANAGEMENT REQUIRES MODESTY, NOT ZEAL

The review of these cynical responses to the most recent shifts in NHS managerial directives does not mean I endorse all the criticism (or cynicism). But it does remind one of both the persistence of organizational changes and the weariness of those whose lives are thereby affected. At the same time, the prominence of cynical commentary reminds one of the costs of massive gaps between what is claimed and what is true. And that in turn leads me to comment on the incantation throughout contemporary management talk about the importance of having clear, measurable, and limited organizational objectives. An unfortunate consequence of the injection of managerial fads into medical care is the suggestion that there is some one right way, some panacea, for rationalizing the delivery of decent, affordable medical care.

The objectives of any institution are multiple, shifting, and often contradictory. It would be quite surprising if any single managerial approach could cope effectively with differing objectives, let alone with changes in priority among different objectives over time. To make this point clear, consider for a moment just how one might answer the following question: "What is a hospital's purpose?" At different periods, and often during the same period, one might answer that hospitals:

1. Contain the spread of contagious diseases.
2. Provide hygienic surroundings for otherwise dangerous interventions.
3. Economize on the cost of access to expensive technology.
4. Provide respite from normal social roles that are producing physical or mental breakdown in patients.
5. Economize on the transmission of information and the processes of learning among professionals who have clinical responsibilities and require multiple clinical encounters to validate their procedures.

6. Centralize medical activities sufficiently to achieve economies of scale in different health care tasks.
7. Provide symbolic reassurance that social effort is being devoted to the health of citizens in cultures with considerable faith in technological remedies.
8. Improve the health of the population.

Hospitals, in short, serve quite varied purposes, all of which cannot be pursued through the same internal authority structure, with the same information technology, or on the same scales. They give rise to starkly different images of what counts as a well-managed hospital. For example, emphasizing purposes l or 4 implies a relaxed approach to length of stay; stressing purposes 3 or 6 might mean treating longer hospital stays as evidence of managerial failure. Purpose 5 suggests a team approach to management, with authority centralized among the professionals; purpose 3 bolsters hierarchical forms of bureaucratic authority. Purposes l through 7 suggest allocations of authority within the hospital as a separate institution; purpose 8 suggests a much broader structure of authority, one including outside stakeholders with the power to define and redefine the institution's primary mission.

What should one make of this? The first lesson here is a simple one. Institutions such as hospitals have multiple tasks which imply different managerial approaches. Good management is not what slogan the administrator has emblazoned on the tee shirts of employees but how well the manager's particular approach balances the different demands of the multiple purposes of the institution. I would not belabor this simple point but for the overwhelming evidence that it is often, if not usually, forgotten. Indeed, when some clone of managerial guru Tom Peters next says to health care managers that to have multiple objectives, or even two objectives, is to have no objectives at all, he or she should be condemned to spend the rest of his or her life in the ER.

A second observation about managerial technique is the truism that every upside has a downside. For instance, when moving into a world of managerial cost containment, we should reflect on what can be lost as well as gained. Cost containment in practice stresses the reduction of questionable doctor/patient encounters, diagnostic procedures, and treatments. The bureaucratic routines required to implement these actions may or may not contain costs. But they may very seriously reduce the choices, morale and satisfaction of both patient and health care professional. Different managerial techniques and different organizational configurations will be required if old values are not to be unduly sacrificed to mindless cost control. Moreover, the managerial techniques imposed in the name of reducing costs do little to encourage innovation, patient control, or professional autonomy. Repeating the mantra of TGM or "integrated systems management" every day will not eliminate the stress built into serving different purposes and clienteles with multiple objectives. Good management requires multiple approaches to balance the "goods" and the "bads" of each approach. In other words, there are no managerial panaceas available—now or ever.

Finally, there is a deep ambivalence in managerial theorizing about the effectiveness of, very broadly speaking, *technological* as opposed to *cultural* solutions to managerial problems. On the one hand, there are technological recommendations based on improved structures, processes, and technologies and, on the other, cultural ones based on learning, motivation, and culture. One cannot decide which managerial strategy to believe in because both work some of the time, but neither works all of the time.

The same is true in the reorganization of health care systems. It is hard to believe that a cultural approach will be appealing from the standpoint of cost containment. Managing costs is mostly about information systems, the determination of what is cost-effective, and the delivery of incentives or coercion to act on those judgements. On the other hand, if there is cultural vision of the caring medical professional, there will be a need for internal structures that emphasize professional autonomy, team effort, group responsibility, and patient involvement in an overall culture of humane care. Under such circumstances, managerial arrangements will to some degree work at cross-purposes. The technology of cost containment confronts the professional culture of patient care. Good managers balance these perspectives in ways that cope with our conflicting purposes and our necessarily inconsistent desires.

Management is not a solution to seemingly intractable stresses. Rather it is a means of coping with and sometimes improving only marginally tractable situations. This more modest vision of management has much to teach those in the reform business about the appropriate level of aspiration for anyone engaged in re-forming complex systems. But management thinkers cannot teach others that lesson until they give up the quasi-religious adoption of one management slogan after another as the solution to getting management right. There is no best management theory, technique or slogan. In particular contexts, some are better than others. But that must be shown, not glibly claimed by persuasive definitions that presume saying so makes something so.

REFERENCES

Blendon, R. (1988). The public's view of the future of medical care. *Journal of the American Medical Association*, 259, 3587-3593.

Bosanquet, N., Dixon, J., Harvey, T., Hunter, D., Sang, B., Pollack, A., et al. (2001). Across the great divide: Discussing the undiscussable. *British Journal of Healthcare Management,* 7(10), 395 – 401.

Fuchs, V. R. (1990). The health sector's share of the gross national product. *Science*, 247, 534-537.

Furusten, S. (1999). *Popular management books*. London: Routledge.

Herzlinger, R. (1991). Healthy competition. *The Atlantic*, 268, 71.

Huczynski, A. (1996). *Management gurus*. London: Routledge.

Klein, R., & O'Higgins, M. (1998). Defusing the crisis of the welfare state: A new interpretation. In R. Marmor & J. Mashaw (Eds.), *Social security: Beyond the rhetoric of crisis* (pp. 219-224). Princeton, N.J.: Princeton University Press.

Light, D. (1994). Managed care: False and real solutions. *The Lancet*, 344, 1197-1199.

Marmor, R., Mashaw, J., & P. Harvey (1992). *America's misunderstood welfare state: Persistent myths, continuing realities*. New York: Basic Books.

Power, M. (1997). *The audit society: Rituals of verification*. Oxford: Oxford University Press.

Healthcare Systems in Limbo

> Mordechai Shani
The Chaim Sheba Medical Center

The international health policy virus of reform is affecting all countries in various degrees. These efforts to reform health care delivery and finance in all affluent countries are characterized by decades of unresolved issues.

Goethe said that ignoring the history of the last 3,000 years forces us to repeat the same mistakes. Regarding the delivery of health care, one has to study only the last three decades; mistakes are repeated as in a game of trial and error.

In 1982 a paper examined the Australian health care financing over a decade. The name of the article is "Unscrambling the Omelet" (Deeble, 1982). The paper describes how the conservative party has changed completely, in five stages, Medibank I of the labor party. The same omelet was produced later by the labor party when it returned to government.

A similar experience occurred in England when the labor party came to power in 1997. In stage one the labor party believed that if changes introduced by the conservatives were reversed, all would be well. The third stage of the same labor party was reinvention of the market mechanism of the conservatives, complemented by substantially increased funding. Even the architecture of the NHS is back to where it started with ten strategic health authorities similar to the regional health authorities, 152 primary care trusts which used to be district health authorities and even G.P. fund-holding being reintroduced as "Practice Level Budgeting". Every step in this cycle has been presented as if it were a consistent progression towards a predetermined goal. Cynics may prefer to see it as an awfully expensive way of educating labor ministers (Hawkes, 2006).

Individual countries continue to replicate policies, some of which have proven to be inefficient, and adopt others that have no evidence base. The continuing failure to deliver appropriate care, particularly to the chronically ill who are the main consumer of health care, and the absence of outcome measures of success continue to waste resources and at the same time feed a public demand for more health care, often of uncertain value to their health.

It is useless to talk about the United States, since the American health care system is not really a system. It is a dysfunctional, disordered, and chaotic series of arrangements for the financing and delivery of health care, which we call a system (Relman, 2005; "Time for a Debate", 2006).

Annual per capita U.S. health spending tops $ 7100, fails to cover 46 million people while an additional 100 million are underinsured, and achieves among the worst health care outcomes in the developed world. The cost of administrative waste alone is enough to cover the 46 million uninsured.

In an effort to control costs, the Bush administration is promoting a new initiative called "consumer-directed health care". The idea is that consumers should play more of a role, that health care be directed by consumers. And so the way to make all this work is to encourage people to buy low premium, high deductible plans, which put the consumer at greater risk. This is a great deal for well-to-do, healthy people. They end up with a big tax-free IRA. But if you are poor and need medical care, you face the choice of spending more than you can afford or not getting the care you need (Bloche, 2006; Remler & Giled, 2006; McManus, Berman, McInery, & Tang, 2006).

"Consumer-directed health care" will play itself out over the next five to ten years, by which time it will become perfectly clear it has not worked. Medicare will be going broke, government will be accumulating vast deficits, and private business will not be able to afford the costs of health care for its employees ("All Insurers Face Similar Spending Growth", 2006).

Therefore let's concentrate on Europe, Australia, New Zealand, Japan, and Canada. The pressure on publicly financed systems to meet ever rising expectations is fierce. Tied in with this pressure is the increasing involvement of the private sector, with respect to both financing and – probably to a greater degree – provision. But do profit making organizations really share societal goals, or are they at least able to meet enough of society's goals, whilst pursuing their own ends of making more profit from their greater health sector involvement? Concern regarding the escalating costs and uncertain quality of largely private sector dental provision across Europe provokes some skepticism that the greater involvement of the private sector is necessarily the best way forward.

In the late 1980s and early to mid-1990s, governments in a number of countries introduced market-like processes into national health service health care systems. These types of reforms are also known as managed competition reforms and internal market reforms and were adopted in countries such as Italy, New Zealand, Spain, Sweden, and the United Kingdom. Market-based approaches usually involved a combination of the following four policies:
(1) increased cost sharing for patients through user fees, (2) the separation of purchaser-provider functions, (3) management reforms of hospitals, sometimes paired with profit or return on capital expectations, and (4) provider competition. Reforms were based on economic theories and the experience of the governments as they reformed other sectors. In some cases, these reforms led to subsequent reaction against markets and toward increased government financing and regulation (Laugesen, 2005).

Market reform has not been well accepted in health care. It is instructive to understand why laissez-faire approaches and competition are tolerated in some areas of public policy more than in health care. First, voters view health care as *different*. Whereas policy-making elites in the 1990s thought health care needed solutions similar to state-owned businesses, voters tend to regard health care as different from the businesses reformed by government into profitable entities. As a result, they are less willing to support market reform policies of health care. Second, creating health care markets and entrepreneurial behavior is more difficult than generating other kinds of markets, for a number of reasons. First, the scale is larger, in terms of resources and people, and the task of encouraging formerly professional bureaucratic organizations to embrace competition is challenging. Secondly, the conflicting objectives of market reforms, which give some actors the responsibility for equity and others the responsibility for efficiency, create distinctions that are artificial and difficult to clearly and consistently follow. Implementation thus leaves reformers, and their policies, vulnerable (Maynard, 2005; Maarse, 2006).

Public opposition in all cases stalled most of the proposed financing reforms and delayed implementation of other policies in Italy and Spain. Provider competition and private sector provision is variable and plays a minor role in most of these countries. In Sweden and Spain, the local and federal political structures hampered efforts at the central level to impose uniformity, but in both cases, some regions or counties implemented more market-oriented purchaser separations and hospital management reforms (Anell, 2005; Lopez-Casasnovas, Costa-Font & Planas, 2005).

The inability of the political parties to impose real reforms is manifested in the Netherlands. Nineteen years after the Dekker plan and a decade after the declaration that the Dekker plan is dead, the reform implemented in the Netherlands in January 2006 is the rebranded Dekker plan with competition on the demand and supply sides of the health care market in the Netherlands (Custers, Arah & Klazinga, 2007).

The dominant consensus is that the solidarity principle, with patient access determined not by willingness and ability to pay but by the principle of need, is still shaping the funding and delivery of health care. That consensus in Europe is replicated in other affluent countries, such as Australia, New Zealand, Canada and Japan.

CENTRALIZATION AND DECENTRALIZATION

The dilemma of centralization or the devolution of authority to regions exists in many European countries. Delegation is most commonly to regional government, but may also be to provider groups as in England. Here one can see different approaches of the last 15 years.

The 1992 reform in Italy was aimed at transferring responsibility for organizing health care to the regions and at introducing managerialism through the transformation of USLs (Unita Sanitaire Locali) into public enterprises. The reform relegated local government to the sidelines and granted significant administrative and financial independence to the local health authorities and to major hospitals. Economies of scale were sought by reducing the number of ASLs (Aziende Sanitaire Locali) from 659 in 1992 to 197 in 2000.

The greater independence given to the regions has accelerated the fragmentation of the system in terms of organization of the regional services and funding of providers. Recently, the trend has been for greater centralization in the governance of regional health systems. Two regions have set up a single ASL for the entire region and many others have unified responsibility for certain services (like emergency services or procurement) at a super-ASL level. So far, no comparative assessment of the different models has been made (France, Taroni & Donatini, 2005; France & Taroni, 2005).

A particularly interesting feature of the Spanish article is the way in which devolution of political authority to subnational governments served to open a democratic window, advancing and securing the universal public system in the face of ambivalence at the national level (Lopez-Casasnovas et al. 2005). (Canada provides a similar example.)

In January, 2002, the Norwegian Central Government took over all public hospitals from the county governments. The main lesson to be learned is that central government involvement in local government decision making can lead to obscure responsibilities and lack of transparency.

Some of the problems underlying the Norwegian reforms are common to other Scandinavian countries. However, they have been tackled in different ways. For example, Sweden continued to develop a regional county based model, while reconsidering how the health sector should be organized (Laegreid, Opedal, & Stigen, 2005).

Denmark introduced structural reforms that include amalgamations and reduction in the number of county units. In Denmark, the number of counties fell from 14 to five, to create a population base sufficient for the continued development of a reasonably specialized regional hospital system. The new regions have the responsibility for most health care activities; all hospital care, GPs, etc. (Strandberg-Larsen, Nielsen, Kransnik, & Vrangback, 2006).

INEQUITIES IN HEALTHCARE

Reforms based on markets and relying on competitive incentives to change provider or patient behavior have a particular tendency to generate inequities in access to care. Yet, even all the countries with predominantly public funding and a policy of solidarity demonstrate inequities among various sections of the population (Mackenbach, & Bakker, 2003; Burstrom, Johannesson, & Diderichsen, 2005; Jonsson, Schmidt, Sparring, & Tomson, 2006). Practically, this issue is not on the central agenda of any government (Mackenbach, & Bakker, 2003; Hubel, & Price, 2006).

Research shows that people's social and economic circumstances affect their health throughout life. It follows therefore that effective health policy must be formulated in a way that will positively affect people's social and economic circumstances. The best answers to the related problems of improving population health disparities do not lie in greater access to medical care for individuals, but in greater investments in the social and economic well-being of whole populations.

QUALITY OF HEALTHCARE

The quality of care provided varies among providers. Whether the care is preventive, acute, or chronic, it frequently does not meet professional standards. A large part of our quality problem is the amount of inappropriate care that is dispensed. Elimination of such non-beneficial and potentially harmful care would lead to a large savings in human and financial costs. However, there are also many examples of people who receive either too little or technically poor care (Maynard, 2005).

Considerable effort has been devoted in the last ten years to questions about clinical behavior and clinical practice, yet definitive answers remain elusive.

Current policy places a great deal of importance on the publication of quality and other information, which, it is hoped, will influence patients' decisions and redress the information imbalance between providers and patients. However, it is not clear what the likely effect of such measures will be in each health care system, given the fact that most countries are not a marketized system in which patient choice is central. Moreover, the evidence shows that, even in more marketized health systems, such as the Untied States, consumers mostly do not use such information when it is published. Information may not be sufficient – even a former U.S. president chose to have his coronary artery bypass grafting in a hospital ranked 27th in publicly available ratings. His behavior is in line with the conclusions of a review of the literature that showed that public disclosure of information has limited effect on the decisions of patients, payers, and referrers. This may have been a consequence of how the information was presented and made available.

While it has been shown that the providers of care respond to the increased information about themselves and their competitors, this may result in "gaming the system" and there can be negative effects on the quality of care. The introduction of report cards on providers in Pennsylvania and New York reduced patient welfare because providers became reluctant to treat sicker patients (Steinbrook, 2006).

In the U.S. context, research found the combination of consumer information and contracting based on quality indicators by purchasers acting as agents for patients to be a successful tool when it comes to improving quality of care while at the same time keeping the cost of care under control. This indicates that while simply providing more information for patients does not seem to improve quality care, in combination with financial incentives, it might be useful (Pham, Coughlan, & O'Malley, 2006; Lindenauer, Remus, Roman, Rothberg, Benjamin, & Bratzler, 2007; Davis, 2007).

It is also puzzling as to why the healthcare industry is very slow in adopting IT systems similar to air transportation and banking. Furthermore, even when it is developed, there is no attention paid to the definition and the severity of the major chronic diseases which are costly and have high morbidity and mortality (Pham et al., 2006). There is much less emphasis on the issue of quality in primary and secondary care. Regarding quality, the usual measures are failures in health care, such as mortality, complications, errors and infections rather than outcomes of the patient's physical, psychological and social functions.

Here I would like to draw the attention to the quality and outcomes framework points (QOFS) of general practice in England. The QOF scheme provides comprehensive information of the most common chronic diseases, beside data on clinical care and the patient's experience ("GP's Services Improve on Last Year ", 2006).

Various stakeholders agree that we need to shift the emphasis of reform from regulating the quality of services we provide to controlling the quality of care which the patient receives. Medicare and other payers intend to stimulate this change through pay for performance (P4P) or "value-based purchasing". Under this system, Medicare, and other payers would link how much physicians and other providers are paid to their outcomes. The theory behind P4P is that increased pay will drive physicians and health care institution to work towards improved outcomes. Yet there is little evidence to support the effectiveness of paying for quality.

In the United Kingdom, the latest National Health Service contract with primary care physicians pegs as much as a third of their income to meeting performance goals (Doran et al.,2006).

A recent review finds little evidence to support the effectiveness of financial incentives to physicians and hospitals to motivate substantial changes on the part of the physicians and hospitals. One has only to recall that the majority of previous studies targeted individual physicians, while current programs are more likely to be directed at physicians' organizations or health systems (Kahn, Ault, Isenstein, Potetz, & Van Gelder, 2006; Epstein, 2006; Epstein, 2007; Rosenthal, & Frank, 2006; Bodenheimer, May, Berenson, & Coughlan, 2005).

Cochrane highlighted the absence of an evidence base of clinical effectiveness, let alone cost effectiveness for many of the interventions provided by physicians.

The policy shift of moving from decision making on the basis of mere clinical effectiveness remains difficult. Physicians were trained on the basis of the individual ethic of doing their best for the patient in front of them, and therefore might choose to deliver care inefficiently depriving at the same time other patients of care from which they would benefit (Maynard, 2005).

Social politics have continuously weakened the power of the physicians in the second half of the 20th century. During the last two decades the health insurance companies in Germany have controlled many aspects of medical practice, a trend reminiscent of that associated with medical care in the United States in the 1990s.

A similar experience has manifested itself in England, where the General Medical Council recently recommended scrapping the automatic majority of doctors on its governing council. This would end the longstanding principle of self regulation of the medical profession in the United Kingdom ("GMC Recommends Scrapping Medical Majority on its Council", 2006).

The international evidence demonstrates that the medical profession has failed to regulate itself efficiently and is not challenged by the government or purchasers of health care.

The lack of trust in the healthcare systems brings ominous results, from decreased health outcomes to increased costs, from organization inefficiencies to a pervasive pattern of litigation (Blendon, Brodie, Benson, Altman, & Buhr, 2006; McCannon, Schall, Calkins, & Nazem, 2006; Longo, Hewett, Ge, &.Schubert, 2005).

DISEASE MANAGEMENT

In many countries a new issue is whether nurses could cost effectively provide such services, mainly to chronic patients. In the insurance reform introduced in January 2007 in the Netherlands insurers are given the freedom to decide by whom care covered by the basic plan will be provided. For instance, they can decide that certain medical problems such as diabetes be treated by a specialized nurse instead of a doctor (Bartholomée, & Maarse, 2007).

Historically, most health services have focused on delivering care based on clinical need. Given the rising prevalence of long term conditions, and the fact that the conditions themselves and acute escalations can often be delayed or prevented, it is now becoming imperative that patients need a health service, not just a sickness service (Maynard, 2005).

Many European health systems already have a strong primary care focus, making them fertile breeding grounds for this approach to healthcare.

Disease management defined as the management of the health and wellbeing of patients with long term conditions is finally ready to make a definite breakthrough. The philosophy of promoting wellbeing, self care and self reliance makes economic as well as clinical sense.

There has to be a paradigm shift from reactive to proactive patient care and follow up and that means redefinition of roles and responsibilities. This comes with tasks being delegated from physicians to nurses and moving from a referral to a shared care system. New methods like proactive patient follow up and patients' reminders need to be put in place. The delivery system needs to be tailored to the characteristics of patients and the long term conditions they have (Mcgivney, & Mullen, 2005; Bourbeau, Schwartzman, & Bradley, 2007; Yarmo-Roberts, & Stoelwinder, 2006; Loric, Ritter, & Plant, 2005; Fricke, 2006).

The focus has to be on self management support, thus enabling patients to manage their conditions and achieve maximum compliance with treatment protocols (Frolich, Talavera, Broadhead, & Dudley, 2007; "Behavioural Medicine: Changing our Behaviour", 2006). This includes giving them psychological support, skills training, information and tools to manage their condition instead of just living with it.

In the United Kingdom most people acknowledge personal responsibility for their own health and 87% of them say they have to be "really ill" to visit the doctor. However, most general practitioners who responded to a study said they are often consulted about illnesses or symptoms that they consider to be minor. This correlates with a recent international study that compared data from Australia, Canada, New Zealand, U.S., and Germany with the four U.K. nations. It showed that British patients are the least likely to receive advice from doctors on disease prevention and lifestyle changes. Unfortunately, when they do receive information, it concerns only prices, and not behavior.

Even general practitioners throughout the world are not educated as to how to reinforce advice to patients, especially in this world of chronic disease.

Health care provision is inefficient and distorted by perverse incentives in all health systems, public and private. Typically, the incentive structure sustains a large hospital sector and inadequate investment in primary care gate keeping and the treatment of chronic diseases.

The concept of self management will have to lead to financial responsibilities on patients. In Germany there are financial disincentives for not participating in preventive measures in dental care. Recently the coalition government of Chancellor Angela Merkel proposed that cancer patients who don't undergo screening before their cancer is diagnosed have to pay extra payment. This is an incentive for healthy behavior; yet the antagonism was huge with cries that the proposal is "grotesque and cynical".

Doctors' behavior determines patient demand. Until the profession's behavior becomes more transparent, evidence-based and incentivized, the problems of delivering care with low marginal product to many acutely ill patients (even when this is demanded by patients), and failing to deliver appropriate care to the chronically ill, will characterize all health systems in Europe and elsewhere.

SUMMARY

Health reform occurs in practically every western country. Its main objective is cost containment, while market reform has not been well accepted in health care. There is not enough emphasis on issues like inequalities or information technology.

There has to be a paradigm shift from reactive to proactive patient care with better definitions of various chronic diseases and attention to severity of the disease.

REFERENCES

"All Insurers Face Similar Spending Growth" (2006). *Managed Care, 15,* 6, 65.

Anell, A. (2005). Swedish health care under pressure. *Health Economics, 14,* S237–S254.

Bartholomée, Y. & Maarse, H. (2007). Health insurance reforms in the Netherlands. *Eurohealth, 12*, 7-9.

"Behavioural Medicine: Changing our Behaviour" (2006). [Editorials]. *British Medical Journal, 332,* 437-438.

Blendon, R. J., Brodie, R., Benson, J. M., Altman, D. E., & Buhr,T. (2006). Americans' views of health care costs, access and quality. *The Milibank Quarterly, 84*, 623-657.

Bloche, M. G. (2006). Consumer-directed health care. *New England Journal of Medicine, 355*, 1756-1759.

Bodenheimer, T., May, J. H., Berenson, R. A. , &Coughlan, J. (December 2005). Can money buy quality? Physician response to pay for performance. *Issue Brief No.102.*

Bourbeau, J., Schwartzman, K., & Bradley, C. (2007). Economic benefits of self management education in COPD. *Chest, 130*, 1704-1711.

Burstrom, K., Johannesson, M., & Diderichsen, F. (2005). Increasing socio-economic inequalities in the life expectancy and Qalys in Sweden 1980-1997. *Health Economics, 14*, 831-850.

Custers, T., Arah, O. H., & Klazinga, N. S. (2007). Is there a business case for quality in the Netherlands? A critical analysis of the recent reforms of the health care system. *Health Policy, 82*, 226-239.

Davis, K. (2007). Paying for care episodes and care coordination. *New England Journal of Medicine, 356*, 1166-1168.

Deeble, J. S. (1982). Unscrambling the omelet: Public and private health care financing in Australia. In: C. McLachlan & H. Maynard (Eds.), *Public/private mix for health: The relevance and effects of change.* London: Nuffield Provincial Hospitals Trust, 425-465.

Doran, T., Fullwood, C., Gravelle, H., Reeves, D., Kontopantelis, E., Hiroeh, U., & Roland, M. (2006). Pay-for-performance program in family practices in the United Kingdom. *New England Journal of Medicine, 355,* 375-384.

Epstein, A. M. (2006). Paying for performance in the United States and abroad. *New England Journal of Medicine, 355*, 406-408.

Epstein, A. M. (2007). Pay for performance at the tipping point. *New England Journal of Medicine, 356*, 515-517

France, G., & Taroni, F. (2005). The evolution of health-policy making in Italy. *Journal of Health Politics, Policy and Law, 30*, 169-185.

France, G., Taroni, F., & Donatini, A. (2005). The Italian health care system. *Health Economics, 14*, S187-S202.

Fricke, K. (2006). Patient–centered case management in today's healthcare. *Lippincott's Case Management, 11,* 112-117.

Frolich, A., Talavera, J. A., Broadhead, P., & Dudley, R. A. (2007). A behavioral model of clinician responses to incentives to improve quality. *Health Policy, 80*, 179-193.

"GMC Recommends Scrapping Medical Majority on its Council" (2006). *British Medical Journal, 333*, 719.

"GP's Services Improve on Last Year" (2006). *British Medical Journal, 333*, 721.

Hawkes, W. J. N. (2006). Who's kicking who? *British Medical Journal, 333*, 645-648.

Hubel, M., & Price, C. (2006). Action by the European Union on health inequalities. *Eurohealth, 11*, 4-5.

Jonsson, P. M., Schmidt, I., Sparring, V., & Tomson, G. (2006). Gender equity in health care in Sweden – Minor improvements since the 1990s. *Health Policy, 77,* 24-36.

Kahn, C. N. III, Ault, T., Isenstein, H., Potetz, L. & Van Gelder, S. (2006). Snapshot of hospital quality reporting and pay for performance under Medicare. *Health Affairs, 25,* 148-162.

Laegreid, P., Opedal, S., & Stigen, I. M. (2005). The Norwegian hospital reform: Balancing political control and enterprise autonomy. *Journal of Health Politics, Policy & Law, 30*, 1027–1064.

Laugesen, M. (2005). Why some market reforms lack legitimacy in health care. *Journal of Health Politics, Policy & Law, 30*, 1065–1100.

Lindenauer, P. K., Remus, D., Roman, S., Rothberg, M. B., Benjamin, E. M., Ma, A., & Bratzler, D. W. (2007). Public reporting and pay for performance in hospital quality improvement. *New England Journal of Medicine, 356*, 486-496.

Longo, D. R., Hewett, J. E., Ge, B., &.Schubert, S. (2005). The Long Road to Patient Safety. *Journal of the American Medical Association, 294*, 2858-2865.

Lopez-Casasnovas, G., Costa-Font, J., & Planas, I. (2005). Diversity and regional inequalities in the Spanish system of health care services. *Health Economics, 14,* S221–S235.

Loric, K., Ritter, P. L., & Plant, K. (2005). A disease specific self-help program compared with a generalized chronic disease self-help program for arthritis patients. *Arthritis & Rheumatism, 53*, 950-957.

Maarse, H. (2006). The privatization of health care in Europe: An eight-country analysis. *Journal of Health Politics, Policy & Law, 31,* 981 – 1013.

Mackenbach, J. P., & Bakker, M. J. (2003). Tackling socioeconomic inequalities in health: analysis of European experiences. *The Lancet, 362*, 1409-1414.

Maynard, A. (2005). European health policy challenges. *Health Economics, 14,* S255-S263.

McCannon, C. J., Schall, M. W., Calkins, D. R., & Nazem, A. G. (2006). Saving 100,000 lives in U.S. hospitals - Quality improvement. *British Medical Journal, 332*, 1328-330.

Mcgivney, W. T., & Mullen, J. (2005). Cancer and managed care in the 21st century. *The American Journal of Managed Care, 11,* S509-S521.

McManus, M. A., Berman, S., McInery, T., & Tang, S. F. (2006). Weighing the risks of consumer-driven health plan for families. *Pediatrics, 117*, 1420-1424.

Pham, H. H., Coughlan, J., & O'Malley, A. S. (2006). The impact of quality–reporting programs on hospital operations. *Health Affairs, 25*, 1412-1422.

Relman, A. S. (2005). Reforming the U.S. health care system: What the legal and medical professions need to know. *Health Matrix, 15*, 423-431.

Remler, D. K., & Giled, S. A. (2006). How much more cost sharing will health savings accounts bring? *Health Affairs, 25*, 1070-1078.

Rosenthal, M. B., & Frank, R. G. (2006). What is the empirical basis for paying for quality in health care? *Medical Care Research and Review, 63*, 135-157.

Steinbrook, R. (2006). Public report cards – Cardiac surgery and beyond. *New England Journal of Medicine, 355,* 1847-1849.

Strandberg-Larsen, M., Nielsen, M. B., Kransnik, A., & Vrangback, K. (2006). Is Denmark prepared to meet future health care demands? *Eurohealth, 12*, 7–10.

"Time for a Debate on Health Care in the U.S.A." (2006). [Editorial]. *The Lancet, 368*, 963.

Yarmo-Roberts, D., & Stoelwinder, J. (2006). Untangling the web: The need to clarify care coordinating models for people with chronic and complex conditions. *Australian and New Zealand Journal of Public Health, 30,* 413-415.

Re-Centralization: The Next Long Wave in European Health Policy?

> Richard B. Saltman
Rollins School of Public Health, Emory University

I. DECENTRALIZATION AS 20TH CENTURY LONG WAVE

Economic theory has long been influenced by Kondratiev's concept of the "long wave." For Kondratiev (1984), the business cycle in developed economies runs in 50 to 54 year periods. While there has been considerable dispute as to when these cycles begin and end (e.g., did World War II alter the onset of the second cycle of the 20th century), the concept of the long wave itself still receives considerable respect in certain circles of economists.

When we turn from economic cycles generally to the specific characteristics of European health care systems, the concept of the long wave can be a useful analytical tool. Decentralization has been a strategic cornerstone of health policymaking in Europe since the 1960s (Saltman, Bankauskaite, & Vrangback, 2007). It has been one of two overlapping long waves that helped frame structural decisions in these health care systems. The second wave-market-influenced-entrepreneurialism - has run simultaneously with decentralization since the late 1980s. However, while this second, market-oriented wave has been controversial in some health policy circles, the concept of decentralization was readily accepted as useful in many national policy contexts. Over the second half of the 20th century, decentralization has unanimously become part of the "received wisdom" about what good health policy should include.

In the tax-funded health system in Nordic countries, for example, more operating responsibility as well as substantial political and fiscal decision-making have been decentralized within the public sector: from national to regional level (somatic hospitals in Norway in 1970; mental hospitals in Sweden in 1967), from regional to municipal level (elderly residential care in Sweden in 1992), and from national to municipal level (effective decision-making control over central hospitals in Finland in 1993, following the municipal "revolt" of spring 1988). In the tax-funded health systems in Southern Europe, many operating and political (but not fiscal) responsibilities were shifted from national to regional governments in Spain (to the 17 autonomous communities over an extended 22 year period from 1981 to 2003), and in Italy (to 22 regional governments from the late 1980s onward).

In the social health insurance funded countries in continental Europe such as Germany and the Netherlands, most operating and many fiscal (but not key political) decisions have long been delegated to private not-for-profit bodies (sickness funds and hospitals), under a form of "enforced self-regulation" grounded in explicit national statutory responsibilities (Saltman, Busse, & Figueras, 2004). In many cases, this particular form of decentralization has been in place since those systems' inception.

In the hybrid or mixed public-private form of social insurance system that has emerged since 1990 in many Central European countries, various forms of decentralization have been utilized. Reacting strongly to the previous, highly centralized Semashko model of Soviet times, countries like Hungary, Poland, and Estonia decentralized ownership of hospitals from national to local governments. Indeed, this break was seen as being so major that in the Czech Republic, decentralizing ownership to municipal governments was at the time termed "privatization." Similarly, the highly centralized funding structures of the Communist period were decentralized into regional social health insurance funds in countries such as Poland and the Czech Republic.

The strategic role of decentralization was further strengthened by changes in overall governmental structures in Europe stimulated by the growth in power of the European Union. During the 1980s and 1990s, national governments increasingly ceded areas of responsibility upward to the European Commission and subsequently to the European Parliament (and to the European Court of Justice as well). Similarly, at the same time that they were losing sovereign power upward to EU institutions, national governments also were losing responsibilities downward to increasingly assertive regions – a process captured by the popular 1990s discussion about a "Europe of Regions." This overall downgrading in the role of national governments seemed to reinforce the conventional wisdom that the days and role of centralized power at the national level were numbered.

II. THE RISE OF RE-CENTRALIZATION

In the first years of the 21st century, however, this conventional wisdom has started to come undone. Far from continuing to recede, the role of the state in the health sector has begun to strengthen measurably. Far from continuing the decentralization of authority away from national governments, state institutions have seized increasing responsibilities in both operating and funding European health care systems. Indeed, it appears that continued decentralization may no longer be the wave of the future.

These contraindications can be observed in many of the health systems noted earlier. In the tax-funded system in Norway, the national government took over ownership and operating responsibility for all hospitals in the entire country in January 2002, replacing the authority of the 19 regional governments (counties). The Norwegian government then set out a new set of rules for how hospitals were to be managed – as "public enterprises" – and lodged that responsibility in 5 newly created regional bodies appointed from Oslo. Financial responsibility for health care remained, as it was previously, a national responsibility as well.

In Denmark, the national government implemented major reforms of the health care system in January 2006. First, the central state took away all funding responsibility and control of hospital care from the 14 regional governments (county councils). Second, the regional governments themselves were restructured, reduced in number from 14 to five.

In addition, the Danish government plans to restructure the municipal level of government as well, reducing the total number of units from 400 to 98. This restructuring has health care implications, in that municipalities in Denmark are responsible for funding and operating several primary health services such as nursing home and home care, and will now become responsible for some preventive programs as well.

In Sweden, a royal commission is expected to recommend that the number of regional level governments (which have responsibilities for hospitals and primary care) be reduced from the current 21 to between six and eight. Similarly, in Finland, the national government is expected to propose that the number of central hospital units, currently 22, be reduced to about six, and also that the number of municipalities (responsible for primary, nursing home, and home care services) be merged into a substantially smaller number of units – from 450 to less than 100.

In the United Kingdom, similar rounds of structural re-centralization can be seen in the primary care trusts. Set up in England in 2001, they are expected to be reduced from 300 to 150. In Ireland's tax-funded health system, key operating responsibilities have been re-centralized from the regional health care boards back to central government.

A similar if less aggressive thrust toward more state control can also be observed in several social health insurance funded countries. In France, a segment of health care revenues has been shifted from employer and employee paid premiums to the national tax base since 2001, paid for by a newly levied wealth tax.

In Germany, the Merkel government continues to debate a major health reform in which the federal government would take on responsibility for pooling all contributions and then allocating them to the sickness funds on a capitation basis. While this funding model has been in place in the neighboring Netherlands for many years, in Germany it would represent a major move toward centralizing fiscal responsibility away from the sickness funds and into the hands of a national government body.

One can also see evidence of recent re-centralization in Central Europe among the 2005 accession states to the European Union. For example, in Poland in 2003, the central government transferred operating control over the social health insurance system from a set of 17 regional funds to the Ministry of Health.

III. REASONS FOR RE-CENTRALIZING

This process of re-centralization appears to reflect a complex set of concerns from the perspective of national health policymakers. Structurally, there are clear concerns about the aging of their populations (more elderly), the rapid growth of expensive new clinical technologies, and economic constraints on health sector funding generated by ongoing processes of European regionalization as well as globalization of markets. Administratively, there is evidence in countries like Finland and Norway (also concerns in Denmark) that local control over health sector decision-making has led to increased disparities in services provided and in outcomes to vulnerable populations – in short, decentralization has led to equity problems. Economically, there are worries that local finance bases are insufficient to fund expensive future care needs, and that local administrative arrangements are inefficient and duplicative. Lastly, politically – an important consideration in all Northern European tax-funded countries – there is a sense among national politicians that they are being blamed when the health system fails to meet the (expanding) expectations of the citizenry. Therefore, there is concern among these political actors that they must have in hand the necessary organizational levers to correct these problems and thus protect themselves. While many of these dilemmas concerning decentralization were predicted in theoretical assessments (Saltman & Bankauskaite, 2006), one can see strong elements of their concrete manifestation in the current movement toward re-centralization. Moreover, since these causal factors are long-term in nature, this causal assessment lends further strength to the argument that re-centralization may indeed represent a long-term structural shift in national health strategies.

IV. RE-CENTRALIZATION – THE NEXT LONG WAVE?

There are many questions that clearly arise from these examples: Do they represent just the normal ebb-and-flow of policy development in European health systems, or has there been a partial sea-change in the overall pattern of these decisions? Has the overall balance in national policy making shifted from a bias towards decentralization to one towards re-centralization? Is the era of decentralization over in Europe's health systems, and has a new long wave of re-centralization begun? Do these changes point towards a health policy future of stronger national governments and weaker regional and local government, and delegated private (SHI) institutions?

A further parallel issue here is whether a new long wave of re-centralization can co-exist comfortably – as decentralization did - with the parallel long-wave pattern of market-influenced entrepreneurial measures, particularly in more hierarchical tax-fund health systems? Will re-centralization and entrepreneurialism reinforce each other, as happened previously with decentralized local units?

An additional question concerns the continued pattern of regional decentralization of health sector decisions in Southern European countries like Italy and Spain. Regional governments in these two countries fiercely defend decentralization, forcing less convinced central governments (Spain in 2003, for example) to tread carefully in designing any efforts to monitor performance or set standards for quality and outcome. Thus, it would appear that these countries are continuing to pursue decentralization at precisely the same time that Nordic and other Northern European countries have shifted from decentralization to re-centralization of key elements of their health care system.

Of course, Spain and Italy have very different histories than do Northern European countries, with regional independence having been fueled by extensive pre-nation-state experience as well as a period in the twentieth century of fascist national rule. Moreover, both are geographically much larger than Nordic countries – although they are roughly equal in size to the United Kingdom and also Poland. Nonetheless, the current distribution of national trends leads one to question whether Italy and Spain are pursuing decentralization at precisely the same point in history at which Northern European countries are dramatically shifting away from decentralization in their health systems. Or perhaps the Southern Europeans are instead at a different, earlier stage of the decentralization-re-centralization cycle?

V. CONCLUDING OBSERVATIONS

These questions and others like them do not allow for ready answers. On the contrary, it will be necessary to observe developments for a period of years before current criss-crossing patterns lead to clear-cut conclusions. What does seem likely, based on existing systems evidenced to date, is that many European health systems will continue to see a tightening of state controls, especially over fiscal and quality-related matters. Moreover, this greater state role also will continue to be combined with growing public as well as private sector entrepreneurialism, despite the appearance that greater reliance on market-oriented decisions contradicts tighter state control over health system behavior. While the particular balance between increased state controls and increased entrepreneurial initiatives will vary from country to country, this new blend would appear to be the likely direction that many health systems will take in the short and medium term future.

REFERENCES

Kondratiev, N. D. (1984). *The long wave cycle*. New York: Richardson and Snyder.

Saltman, R. B., Bankauskaite, V., & Vrangback, K. (Eds.). (2007). *Decentralization in health care: Analysis and outcome*. London: Open University Press/ McGraw-Hill Education.

Saltman, R. B., Busse, R. & Figueras, J. (Eds.). (2004). *Social health insurance systems in Western Europe.* London: Open University Press/McGraw-Hill Education.

Saltman, R. B., & V. Bankauskaite (2006). Conceptualizing decentralization in health care systems: A functional perspective. *Health Economies, Policy, and Law, 1*(2), 127-147.

Norway (2007). Health Systems in Transition Series. Brussels: European Observatory on Health Systems and Policies.

Denmark (2007). Health Systems in Transition Series. Brussels: European Observatory on Health Systems and Policies.

Spain (2006). Health Systems in Transition Series. Brussels: European Observatory on Health Systems and Policies.

Health Care and the Market

> Avi Israeli
Ministry of Health, Israel

It is one of the basic premises of competition theory that competition maximizes social goods and is central to efficient service provision. A free market is perceived as encouraging initiative, change and innovation. Market mechanisms are supposed to be sensitive to consumers' wants and wishes, to generate wide freedom of choice, and so on.

Many markets do indeed demonstrate a direct correlation between competition, social goods and efficiency. But not the health care market.

What the individual consumer wants from the health care market is - health. But what the health care system creates and delivers is health care. And sometimes the relation between health and health care services can be problematic. Even a system that is efficient at creating health care will not necessarily be efficient at increasing health.

Health care products are consumed immediately on delivery. They cannot be exchanged for other products. Information on the nature and quality of services and products is not transparent to the consumer. In other words, health care products are different. There is asymmetry of information between supplier and consumer, and law and regulation extensively govern many aspects of the market. One of the results of this situation are market failures, of which the most prominent are moral hazard, adverse selection, and the problem of the agent principle in the doctor-patient relationship. It is the manufacturer and supplier who to a large extent determine the quantity, composition and quality of services provided, and the outcome of that is supplier-induced demand.

In a situation of competition we have good reason to be on the lookout for insurers (the health maintenance organizations) engaging in adverse selection of patients and cream skimming (the targeting of preferred patient groups).

The paramount problem of the health care field, and the one that disturbs this Ministry of Health Director-General more than any other, is how to guide competition which is preoccupied with the wrong things towards competition over the right things; in other words, how to guide the HMOs away from unnecessary competition over members and over reducing risks to themselves, and towards competition over the quality of care, and its availability, accessibility, scope and price.

So how do we steer the operations of a competitive health care system in the right direction? The first and foremost tool is of course legislation, under which I include control and enforcement mechanisms. But this is no simple matter. We are living in times when society perceives control as a game of cat and mouse. If the law does not specifically prohibit something, then you can do it. And trust is not necessarily a virtue and a value that all the players in the game respect. And that's not all!

Control and supervision generally concentrate on budgetary and financial issues, because these are easier to monitor and control, and ignore more substantive matters that are of much more interest to consumers and patients - the level and quality of service provision.

In the years since the National Health Insurance Act came into effect, competition between the HMOs has concentrated on marketing, on improving services and adding supplementary services likely to attract younger and healthier consumers. There has been almost no competition over the quality and quantity of care to more demanding and difficult patients, or to weak population groups, such as the elderly and the poor.

In recent years most marketing and incentivizing has been targeted at attracting the younger and the healthier: "Children are our baby," "We are the stork who brings children into the world." Advertising features sports events and a younger and more affluent population group and highlights the supplementary services the HMO provides. Competition between the HMOs has intensified markedly despite the fact that we are talking about a relatively centralized market. And despite the fact that competition between the HMOs has redoubled and there is much more advertising than there used to be, it is not at all clear what all this has done for the level of Israelis' health.

So, let's make things as simple as they can be and agree that the best market is a free market. As early as the 18th century, the Scottish economist, Adam Smith, demonstrated that "perfect competition" is a superb planning mechanism. The "invisible hand" of the market is the most efficient planner and organizer of all. Supply meets demand and settles into equilibrium. But we don't have the conditions for perfect competition and there are market failures. Furthermore, it is generally recognized that markets left to their own devices do not necessarily promote equity which is one of the principles which the National Health Insurance Act is based upon. And so - to cut a long story short - we have gone over to managed competition. Lawmakers and regulators have, as was to be expected, taken steps to eliminate market failures and increase competition. They have ordained that citizens shall have the freedom to transfer from HMO to HMO, that HMOs are obliged to accept every person applying to be a member, that there will be a flat uniform insurance premium and that each HMO must supply its members the same uniform basket of services.

To ease the complexity of the service system and the lack of information, and to help consumers make a rational choice of HMO, we can publish comparative data on quality of care. Then consumers can base their choice on that and other factors. Ostensibly, this solves the problem and makes the whole business straightforward.

So let's talk for a moment about "straightforward" choices. When you go to the supermarket do you choose a washing powder by its price? By its quality? By what you bought last time? By what your husband or wife says? I would assume that the key consideration is price and that, from time to time, you try a different brand. So now let us move on to choices that are less straightforward, less simple but more essential to our real life.

When did you last change the brand of instant coffee you drink? Do you just always drink the brand you have got used to? There is after all fierce competition between the coffee manufacturers over price and quality, and they make sure to keep advertising these facts. So how many of you have changed coffee brands? It is a well-known fact that brand loyalty is very high in the coffee market, and that people change brands very seldom.

So let's take an even more complex choice. Israel has three cellular phone companies who compete very aggressively over quality of service, product and price. How many of you swapped your mobile phone provider over the last few years? (If you swapped because your employer held a tender for mobile phone services and a new company won the tender, that doesn't count!)

Finally, let's consider a citizen with high blood pressure or diabetes or who is on dialysis or has cancer. We have just seen that we are unable to behave as a proper consumer in a competitive market should behave, even with respect to simple products. So, do you now want and expect a sick person to play by the rules of competition in the health care market? To change doctor? Swap HMO? And remember that even though their knowledge and expectations and sophistication are far greater than they used to be, switching HMO is still not an easy move to make.

However, the sick are not on their own in the market. Every HMO has a Commissioner for Patients' Enquiries and Complaints, whose job it is to ensure that each member gets the services he or she is entitled to. And in the Ministry of Health there is another Commissioner for Patients' Enquiries and Complaints working alongside me. We also have a Deputy Director-General for HMO Affairs who, without doubt and with no irony intended, is doing a superb job. So can we all go home and relax, sure in the knowledge that every HMO member is getting his full due entitlement? That everyone is behaving according to the rules of fair competition?

Theoretically, that's what should be happening and I really do believe that the general intention throughout the health care system is to deliver full entitlement and at the highest quality possible. But that is something very hard to achieve in daily practice. To ensure that all members everywhere get all they are entitled to. The provider organizations are huge, complex, cumbersome, powerful and sophisticated, and things are not so simple.

The government is expected to lay down rules and to control and supervise the enforcement of those rules. And indeed we are very good at making new rules and regulations. On the other hand, the staff positions for carrying out this control and supervision are being cut back all the time. And of course the Ministry of Health budget is also subject to constant cuts. And then they tell you: Delegate more duties and powers to the people in the field. So where does that leave us?

On one side, the regulator and the government are busy streamlining their operations and reducing the number of inspectors. The food inspectors will soon be inspecting sewage too, and in their spare time a few other products and services. You think I'm exaggerating? At the same time, the quantity of the Ministry's duties and responsibilities only grows and grows.

This is the background to the recent amendment to the Ombudsman

Law, giving the Ministry of Health ombudsman powers to enforce her rulings. Yet this makes no sense from a theoretical, scientific point of view. It is not correct for the regulator to enforce rulings and intervene in the workings of the market. But in practice we cannot do without powers of enforcement because, without them, managed competition will not work.

And while we are on the subject, please remember that the Ministry of Health has a dual function: it is both regulator and direct service provider.

I have already mentioned the problem of the agent principle. The length of time Ministry of Finance and Ministry of Health officials remain in their posts has also been discussed more than once and there is no point in saying more about that either.

One of the indicators of the degree of competition between HMOs is, as we have said, citizens switching from one HMO to another. Since 1998, the rate of such transfers has fallen to 1% per year and this decline is attributed to the restrictions imposed on advertising and marketing, and to moving changes in HMO registration from HMO premises to the post offices. And the percentage of the insured switching HMOs falls as their age rises. Past the age of 35 switching between HMOs dwindles away. Nor does switching happen in regions of the country where there is little or no competition between HMOs, in the north and south for example. In 1999-2000 we saw that poor people tended to switch more than the wealthy. Could this have been because the poor were sicker and less satisfied with the service they got? We have no explanation.

An area of activity that has seen a lot of investment in recent years is the publication of comparative outcome data as a device to promote care of higher quality. As a device for this purpose, the practice is far from straightforward. Firstly, incautious publication can do serious damage. On the other hand, well thought-out publication can provide a real impetus to improvement. But before one starts publishing performance data at individual provider level there are several prerequisites: you need a uniform definition of case mix and severity of illness; all indicators have to be well defined, validated, and standardized by age, gender, socio-economic status and service availability; and the publishing authority has to be very very sure that its data is correct, and that it is not leading the public to the wrong conclusions.

I am one of those who warmly support the idea of giving the public a full and clear accounting of clinical outcomes and publishing quality-of-care data. But lined up against me are many who are much more skeptical of the possibility of doing it at all, and even more skeptical of its effectiveness. We have to bear in mind that the public does not always enjoy free choice among service providers, that there is risk of adverse selection, and that many studies have demonstrated that public trust in the health care system is not increased by publication of such material. And even when the public does have the option of choosing where to obtain service, it does not do so. New York, for example, publishes comparative data on cardiac surgery, but ex-President Clinton chose to be operated on in a facility outside the top six and that was far more influential than all the years of performance data. The New York public said "data-shmata!" and went where Clinton went.

Another reason that has come to light accounting for the lack of genuine competition on quality of care is that the strong performers publish much more data than the weaker ones. Also, facilities and doctors too often refuse to treat at-risk patients who are liable to raise their proportion of negative outcomes. So by now you should be convinced that there are no simple answers.

Here you have before you a Director-General who knows the professional literature pretty well, is familiar with the experience of other systems around the world, and who has to take a decision. He really wants to do as well as he can for the Israeli public. So what should he do? Leave the market to free competition? Intervene? - if so, how much? What is the desirable level of competition? What fields can best be left to regulation by competition? How much regulation is good? How do we combine practice with theory?

Maybe one of you can give me some good answers. I would be grateful. Thank you.

Health System Reform: A Perpetual Emotion

> Wynand PMM van de Ven
Health Insurance, Erasmus University

1. INTRODUCTION

The organizers of the Conference confronted us with the challenging questions: "*Health systems: Are we in a post reform era*?" (conference title) and "*Are we facing a scarcity of innovative ideas?"* (one of the four main topics). In this paper I will explain why my answer to these questions is: *NO, NO*.

In the coming decades many countries may be confronted with an erosion of solidarity regarding the subsidizing of health care. The willingness in society to cross-subsidize health care expenses can be expected to decrease as the number of health problems related to lifestyle increases and the proportion of health expenses due to bad luck decreases. The tension due to the erosion of subsidizing solidarity will be reinforced by the increasing costs due to new medical technology. This tension increases the need to make choices about priorities in health care.

These choices and health system reforms are closely interrelated. The *supply*-side oriented incentives are often considered to be more effective than *demand*-side oriented incentives (Ellis & McGuire, 1993). Therefore, in many countries the primary focus of health system reform is on the *supply*-side oriented incentives. However, it is an illusion to expect economic thinking and efficiency from physicians if this is not expected from the consumer.

The model of Managed Competition in principle has the potential to appropriately deal with these new health policy challenges because it has a good balance of the different types of *supply*-side oriented and *consumer*-side oriented incentives. It gives consumers monetary incentives to go to efficient providers and it allows consumers to make a choice among insurance policies based on premium ***and*** quality of care, with the cross-subsidies being unrelated to this consumer choice. As an illustration we focus on the Netherlands, where a National Health Insurance based on Managed Competition was introduced on January 1st 2006.

In section 2 we will discuss the erosion of solidarity. In section 3 the health care reforms are placed in a dynamic context. Section 4 will focus on the Netherlands, the preconditions of the Managed Competition model and the complexity of implementing it. In section 5 it will be argued that consumer choice of health insurance coverage and solidarity can be combined, without creating a two-tier system. Section 6 presents the conclusions.

2. EROSION OF SUBSIDIZING SOLIDARITY

Most people seem to be willing to contribute to the costs of care for others who are not able to pay the costs themselves. These altruistic preferences (or feelings of solidarity) may be stronger for some health services than for others. Ceteris paribus an individual's willingness to support cross-subsidies for the health expenses of others will be lower, the greater the other's *own responsibility* in originating a medical condition is. Therefore, solidarity may increasingly come under pressure as an increasing number of health problems is related to one's lifestyle, e.g., overweight, smoking, alcohol, drugs abuse, insufficient exercising, fa(s)t food, and unsafe sex (Schroeder, 2007). For example, data from around the world show radical increases in obesity, for both adults and children (Kim & Popkin, 2006; Center for Disease Control and Prevention, http://www.cdc.gov/nccdphp/dnpa/obesity/). These increasing rates raise concern because overweight and obese individuals are at increased risk for many diseases and health conditions, including the following: hypertension (high blood pressure), osteoarthritis (a degeneration of cartilage and its underlying bone within a joint), dyslipidemia (for example, high total cholesterol or high levels of triglycerides), type 2 diabetes, coronary heart disease, stroke, gallbladder disease, sleep apnea and respiratory problems, and some cancers (endometrial, breast, and colon). (See http://www.cdc.gov/nccdphp/dnpa/obesity/ .)

Rapidly changing diets and reduced physical activity levels have led to a marked increase in the prevalencee of diet-related chronic diseases in both developed and developing countries (Kim & Popkin, 2006). In the United Kingdom the observed rising trends of overweight and obesity among children are likely to be reflected in future increases in adult obesity and associated morbidity (Chinn & Rona, 2001). In the USA smoking and deaths attributed to the constellation of poor diet and physical inactivity accounted for about one third of all deaths in 2004. The rapid increase in the prevalence of overweight means that this proportion is likely to increase substantially in the next years (Mokdad, Marks, Stroup, & Gerberding, 2004).

In many countries there is increasing discussion regarding people paying themselves for their lifestyle-related health problems, either through higher premiums or at the point of service. However, in most cases this is in practice not possible. First, in individual cases it is almost impossible to disentangle health expenses due to lifestyle and health expenses due to bad luck, even for the same diagnosis. For example, although 90% of all lung cancer is caused by smoking, it is impossible in individual cases of lung cancer to be sure that the cause is smoking. Secondly, most doctors do not want to be the judge, nor the one who must tell her patient that the insurer will not pay. Thirdly, it is hard to relate the premium to lifestyle and prevention: What exactly is the relationship between expenses and lifestyle? How does one measure and verify lifestyle and prevention? And what if it turns out that the actuarial premium for smokers is lower than for non-smokers because over the life span the average annual health expenses for smokers are lower than for non-smokers? The reason is that smokers live on average seven years fewer than non-smokers and the last seven years of the lives of non-smokers are very expensive (Barendregt, Bonneux, & van der Maas, 1997). Fourthly, given that someone is in serious medical need and cannot pay for treatment, society will pay due to altruistic preferences. Most people will not let a low-income smoker die of lung cancer. Thus, in general it is not feasible to let people pay themselves for their lifestyle-related health problems.

Nevertheless, as the proportion of health expenses due to bad luck will decrease as more and more diseases are lifestyle-related rather than "given by nature," the general feeling of solidarity and (ex-ante) altruistic preferences to subsidize the care of others can be expected to decline. This decrease of willingness to cross-subsidize is reinforced by a growing divergence of consumers' opinion about the desirability of certain types of health care, such as abortion, in vitro fertilization, Viagra, euthanasia, homeopathic care, and acupuncture. The tension due to the erosion of subsidizing solidarity will be reinforced by the cost increases due to new medical technology and ageing. This tension increases the need to make choices about priorities in health care.

One option is for politicians to ensure that public health expenditures grow slower than total health expenses; this can be done, for example, by increasing cost sharing (co-payments, deductibles), by introducing Health Savings Accounts, or by a reduction of the basic benefits package. Another option is to reform the health care system in such a way that both doctors and consumers are provided with incentives for efficiency and with choices concerning priorities in health care. This brings us to health care reforms.

3. WAVES OF HEALTH CARE REFORMS

Many health system reforms in high income countries can be considered as the third stage in the development of arrangements for financing and organizing health care (Hurst, 1990; Scotton, 1991; Cutler, 2002). These stages can take several decades, and are often overlapping. In the first stage the primary objective was the removal of financial barriers to access to health services. After many decades many countries succeeded in developing a system of universal access to care. The second stage was characterized by the control of the subsequent rise in health care expenditures, e.g., by rationing and establishing expenditure caps. However, containing costs in terms of holding health expenses below a certain percentage of gross national product is not the same as improving efficiency. Often this type of cost containment resulted in increasing waiting lists and dissatisfaction among both consumers and providers of care. The aim of the third stage is to improve the efficiency with which health services are produced and used, within the constraints of equitable access and control of total health care expenditures. This third stage is characterized by reinforcing incentives and competition.

These incentive-based reforms are of three types: (1) increased demand-side cost-sharing for *the patient*, such as user charges and medical savings accounts; (2) *purchasing insurance,* rather than paying at the time services are used (e.g., Germany, Israel, the Netherlands, Switzerland); (3)

supply-side cost-sharing and incentives within *the provider* community (e.g., United Kingdom, Sweden).

As argued above, the next decades may be characterized by a reduction of subsidizing solidarity. This can be considered a fourth stage of health system reform, which brings us back to the first stage. Therefore, health system reform is not a remnant of a previous era. Consequently the emotion resulting from health system reforms is not going to fade away: it is a perpetual emotion.

The great challenge for policy makers is how to (re)form the health care system such that it can deal with both the ***erosion of subsidizing solidarity*** and the ***increasing health care expenses*** in a way that is acceptable for society. Over time *demand-side* cost sharing will become less acceptable for risk-averse consumers due to the increasing financial risk as total health care costs rise. Because doctors are often the major decision makers in health care and because providers have more information about the risks and benefits than do consumers, the *supply*-side incentives are often considered to be more effective than *demand*-side incentives (Ellis & McGuire, 1993). Therefore, in many countries the focus is primarily on the *supply*-side oriented incentives. However, it is an illusion to expect economic thinking and efficiency from physicians if this is not expected from the consumer. If patients, for whatever reasons, prefer inefficient providers to efficient providers of care, and if "money follows the patient," both the patients and the money will go to inefficient providers. So it makes sense to give the consumer, analogously to the *natural* incentive to go to responsive providers, a *monetary* incentive to go to efficient providers.

The model of Managed Competition in principle has the potential to appropriately deal with these new health policy challenges because it has a good balance of the different types of *supply*-side oriented and ***consumer***-side oriented incentives. It gives consumers monetary incentives to go to efficient providers and it allows consumers to make a choice among insurance policies based on premium ***and*** quality of care, with the cross-subsidies being unrelated to this consumer choice.

4. MANAGED COMPETITION IN THE DUTCH HEALTHCARE SYSTEM

In the last decades the interest in the model of Managed Competition in health care has increased worldwide. In this model individual consumers have a periodic choice among competing health insurers (or "health plans") who either purchase care on behalf of their insured or deliver the care themselves (Enthoven, 1988). It is a competitive market in which the allocation and price-setting are determined in principle by the market, but where government (or a "sponsor") sets the rules of the game to achieve affordable health insurance and an efficient functioning of the market. The Managed Competition model requires several preconditions to be fulfilled, such as: good risk equalization; an effective competition policy in health care; good consumer information about the price and quality of the health providers; sufficient contracting freedom for the insurers and providers of care with respect to price, quality, and selective contracting; transparency (e.g., insurance products); supervision of quality of care; and a sufficient number of consumers must be price-sensitive at the margin. In addition, prices must reflect costs.

We focus on the Netherlands, where a National Health Insurance based on Managed Competition was introduced on January 1, 2006. The Health Insurance Act now obliges each person who legally lives or works in the Netherlands to buy individual private health insurance with a legally described benefits package (e.g., physician services, prescribed pharmaceuticals and hospital care) from a private insurance company.[1] In an international context the Netherlands' health system reform is unique: it is the first country in the world that is consistently implementing Enthoven's (1978) model of Managed Competition: a "National Health

---

[1] Before 2006 the Dutch health insurance system was segmented. Two thirds of the population had mandatory sickness fund insurance and the one third with the highest income could voluntarily buy private health insurance. The previous sickness fund insurance has been abolished.

Insurance based on Managed Competition in the Private Sector."[2]

Traditionally the Dutch health care system is characterized by heavy government regulation with respect to prices, capacity and infrastructure. Since the early 1990s market-oriented health care reforms have gradually been implemented in the social health insurance system. These reforms were based on the recommendations of the Dekker Committee (1987). However, a number of complicated preconditions had to be fulfilled in order to create the appropriate incentives for consumers, providers and health insurers. First, an adequate system of risk equalization had to be developed to combine competition with open enrolment and community-rated premiums and to prevent risk selection. Next, an adequate system of product classification and medical pricing had to be developed to give providers appropriate incentives for efficiency and to prevent stinting on the delivery of services. Third, an adequate system of outcome and quality measurement was necessary to enable fully specified contracts between health insurers and health care providers and to prevent competition focusing only on price. Fourth, an adequate system of consumer information about the price and quality being offered by health insurers and health care providers had to be developed to enable effective consumer choice. Finally, an adequate governance structure including an effective competition policy had to be developed.

Since none of these preconditions were fulfilled at the time the Dekker plan was published, a "radical" reform clearly was not feasible. During the 20 years following the Dekker plan, however, successive governments (both centre-right and centre-left coalitions) have consistently worked on the realization of the preconditions for managed competition.

---

2. Although the Israeli health system has similarities with the Managed Competition model, a major difference is that the Dutch government, in contrast to the Israeli government, has explicitly declared that it aims at implementing the Managed Competition model and that it aims at fulfilling all the above mentioned preconditions of this model. Essential differences are that in Israel there is no *premium* competition among the sickness funds, and there is no competition authority that supervises the sickness funds (to prevent cartel behavior). Finally, the Israeli government, in contrast to the Dutch government, does not put a high priority on implementing a sophisticated risk equalization system.

After decades of central price - and capacity-control by government, the Dutch health care system is in transition from central planning towards managed competition. Competing private health insurers are set to be(come) the prudent buyer of care on behalf of their insured. Insurers are compensated by a Risk Equalization Fund (REF) for the above-average expenses of the elderly and chronically ill. The insurers compete primarily on premium, service and supplementary health insurance (premium, benefits). Although large segments of the provider market are still heavily regulated by government (concerning, for example, prices, budgets, capacity), in some submarkets insurers and providers of care have started to negotiate prices, service and quality of care. Government sets the rules of the game to achieve public goals.

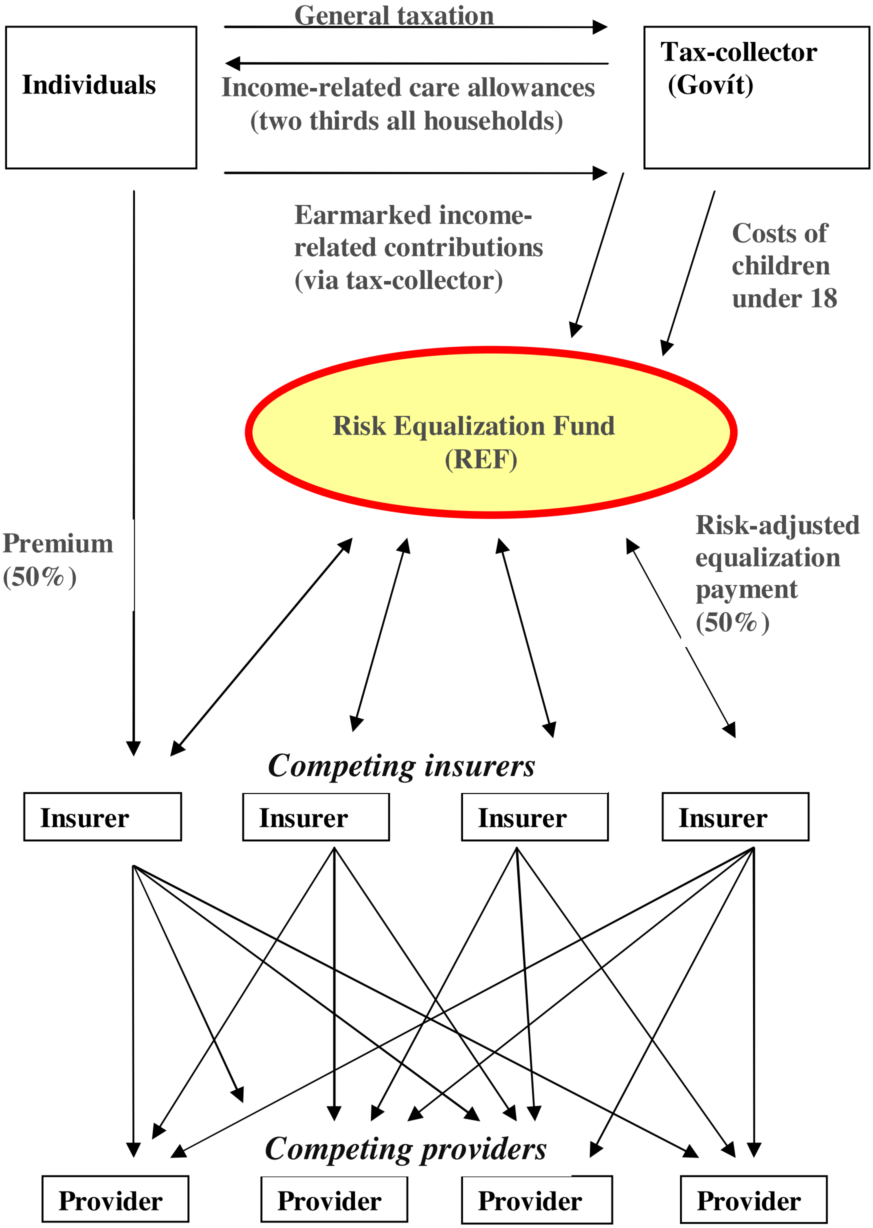
Financing

Figure 1 schematically depicts the institutions and the flows of money in accordance with the National Health Insurance Act, as of January 1, 2006.

According to the *Health Insurance Act,* all individuals have to pay an income-related contribution (6.5% of the first €30,600 of annual income) to the tax-collector, who transfers these contributions to the REF. Employers are legally obliged to compensate their employees for their income-related contributions (independent of the chosen insurer). These compensations are taxable income for the employees. In addition all adults must pay a community-rated premium to the chosen insurer. Each of the 30 insurers sets its own premium. For high risk insured the insurers receive a high risk-adjusted equalization payment from the REF. For low risk insured they have to pay an equalization payment to the REF. According to the Health Insurance Act the sum of the income-related contributions equals 50% of the total insurers' revenues. In 2007 the average premium equals about € 1100 per person (18+) per year.

About two-thirds of Dutch households receive a legally-based subsidy ("care allowance") from the government. This care allowance is income-related and in 2007 the maximum is € 432 per person per year (about 40 percent of the average premium for basic health insurance). Since the level of the allowance is independent of the choice of insurer, consumers are fully price sensitive. Children under 18 year do not have to pay a premium. Government provides the REF with compensation for the costs of children.

Figure 1: Flows of money in the Netherlands healthcare system, 2007 legislation



People are free to buy voluntary *supplementary health insurance* which is not included in the mandatory basic insurance, e.g., dental care, physiotherapy, glasses, cosmetic surgery, vaccinations (for tropical diseases) and sufficient coverage abroad. For supplementary health insurance there is no open enrollment and no premium rate restrictions; in principle insurers are free to risk-rate premiums and to underwrite/refuse applicants.

Entitlement

The following types of care are covered under the Health Insurance Act: general practitioner (GP) care, specialist care, prescribed pharmaceuticals, hospitalization, maternity care, dental care for children, some paramedical care, some medical devices, and transport of patients. The coverage also includes industrial accidents and occupational diseases. The basic benefits package is described in terms of "functions of care" and not, as in the previous Sickness Fund Act, in terms of "providers of care," i.e., "rehabilitation care" rather than "care delivered by rehabilitation institutions." This will break the previous monopoly of the rehabilitation institutions and will strongly increase the competition among those who can provide rehabilitation care. The Health Insurance Act prescribes *what* entitlements must be offered (i.e., the content and the extent of care) and *when* entitlements exist (the medical indication). The insurance contract must specify *who* provides the care, *where*, and under *what procedural conditions* (e.g., requirements for obtaining permission, referrals, and prescriptions). Insurers must specify in the contract with their insured the precise entitlements of the insured (e.g., a list of contracted providers, a list of covered pharmaceuticals, and procedural conditions), but they have much flexibility in doing so. In principle the consumers' entitlements can be "in kind," or reimbursement, or a combination of both. Insurers are free to selectively contract with providers and give their insured financial incentives to receive the care from the preferred providers. Alternatively, there may be insurance contracts with full reimbursement of all providers ("free choice of provider"). There can be a huge variation in the insured's entitlements, ranging from totally unmanaged care to strictly managed care (see below). However, the precise entitlements must be specified in the contract between the insurer and their insured.

All pharmaceuticals are divided, as far as possible, into groups of medicines that are therapeutically interchangeable. The maximum reimbursement for medicines in such a group is set on the average price of the medicines in the group. An insured person who chooses a medicine that is more expensive must pay the difference out of his own pocket. There is no reimbursement limit for covered medicines that are not interchangeable by another medicine. Insurers must specify in the insurance contract *which* medicines per group they reimburse. They are allowed to reimburse *only one* medicine in each group of medicines that are therapeutically interchangeable.

Consumer choice of health insurance

For each type of insurance contract an insurer is obliged to accept each applicant ("open enrollment") for the same premium ("community rating per product") per province.[3] The contract period is one year, so each year consumers are free to switch insurer. There are about 30 health insurers.

Risk Equalization Fund

To organise cross-subsidies the government has implemented a risk equalization system. This risk equalization system is similar to that in the former sickness fund market. Until 2002 the risk equalization payments were primarily based on age, gender, and indicators of disability and socio-economic status. Because the ex-ante risk-adjusted equalization payments insufficiently compensated the insurers for the (extreme) high expenditures of high-risk insured, insurers also received some ex-post compensations based on their actual expenses. They received a compensation of 90% of all expenses above a certain threshold-amount per insured per year and they shared their financial result (profit or losses) with the REF. Due to these *outlier risk sharing* and *proportional risk sharing* the insurer's financial risk, i.e., the proportion of efficiency gains or inefficiency losses

---

[3] The Netherlands has 16 million inhabitants and is divided into 12 provinces. In case an insurer has less than 850,000 insured, the insurer may confine its area of activity (and consequently the open enrolment requirement) to one or more *entire* province.

that on average is reflected in the financial result of the insurer, was 36% in 2000 (Van de Ven, van Vliet, & Lamers, 2004).

Since 2002 the following risk factors have been added: Pharmacy-based Cost Group (PCGs) in 2002 and Diagnostic Cost Groups (DCGs) and being self-employed (yes/no) in 2004. The R-square of the 2004-model is 0.17, which is a substantial improvement compared with the 0.06 R-square of the 2000-model (Van de Ven et al. 2004). Together with these improvements the Dutch government increased the insurers' financial risk from 36% (in 2000) to 53% (in 2006).[4] This was partly the result of an increase of the "outlier risk sharing"-threshold from €4,545 (in 2000) to €12,500 (in 2006).[5]

The Dutch government intends to further improve the risk equalization formula by adding new risk adjusters[6] such as indicators of mental illness and indicators of disability and functional restrictions, by multiyear DCGs rather than one-year DCGs (Lamers and Van Vliet, 1996), and by more effective forms of ex-post risk sharing (Van Barneveld et al., 2001) that in particular compensate insurers for high-risks who have a rare chronic disease with high expenses. In addition within a few years the DCGs will be based on both outpatient and inpatient diagnoses (derived from the so-called Diagnostic-Treatment-Combinations[7]) rather than only inpatient diagnoses. However, because of the technical complexities it will take several years before substantial improvements can be implemented.[8]

---

[4] There is no direct actuarial relation between the improvement of the risk equalization formula and the increased financial risk of the insurers.

[5] Around 1.2 % of the population has annual expenses above 12,500 euro.(Source: personal communication with Rene CJA van Vliet).

[6] Ministry of Health, Welfare and Sport, WOR-onderzoeksprogramma 2006-2007, 25 October 2006 (WOR 238).

[7] The hospital budgeting system is gradually being replaced by a system of payment per so-called Diagnostic-Treatment-Combinations (DTCs). DTCs are comparable with DRGs, but the difference is that with DTCs there is a fixed payment per episode of treatment (up to one year). The episode of treatment may include outpatient care only or a combination of inpatient and outpatient care (both before and after day surgery / hospitalization). Currently there are about 35,000 DTCs.

[8] Since January 1, 2007 insured can belong to multiple PCGs rather than only 1 PCG.

The more government succeeds in improving the risk equalization formula, the more the chronically ill will be the preferred clients for *efficient* insurers because the potential efficiency gains per person are higher for chronically ill than for healthy persons.[9]

In late 2005 some insurers advertised with special supplementary group insurance policies for diabetic patients ("We have the best care for you!"'). These special policies were developed in close cooperation with the national diabetes patient organization ("Diabetesvereniging Nederland"). This new development is directly related to the extension of the risk equalization system with a risk adjuster "Diabetes" since January 2006. Of course, one swallow does not a summer make.

Managed care

The Health Insurance Act (2006) provides the insurers with several tools for managing care. The basic benefits package is described in terms of functions of care (see *Entitlement*). This implies that insurers and consumers have ample room for differentiating the concrete entitlements in the insurance conditions. Preferred provider insurance arrangements and integrated delivery systems (such as Health Maintenance Organizations) are possible. Insurers are allowed to selectively contract with all types of health care providers, including hospitals.

Government intends to further reduce the current price regulation. Consequently, providers will get more freedom to set their price or to agree with insurers about the price of care provided to their insured. Insurers and providers are free to choose the tools (if any) for managing the care they apply, e.g., protocols, disease management, utilization management, referral cards or other forms of preauthorization of care, etc.

In principle the Health Insurance Act provides insurers (if they act as the purchaser of care) and the providers of care a certain amount of discretionary competence to decide about the cut-off point of cost-effectiveness they apply: e.g., €30,000 or €80,000 per QALY, as long as the quality of care fulfils the minimum standards set by government. In

---

[9] An insurer that is 10% more efficient than average prefers high-risk individuals to low-risk individuals because in absolute euros per person, a 10% efficiency gain on the high-risk individuals is greater than on the low-risk individuals.

other words, entitlements can differ with respect to the level of medical technology: e.g., different insurers may contract different groups of providers who use different protocols based on a cost-effectiveness cut-off point of €20,000 per QALY versus €100,000 per QALY.

Supervisory authorities

Government sets the rules of the game by means of legislation. Government empowers supervisory authorities to enforce the rules of the game, to protect consumers, and to secure good quality care and a well functioning market. The supervisory authorities are semi-public and function at arm's length from government. They closely coordinate their supervisory activities. The *Dutch Health Care Inspectorate* (Inspectie voor de Gezondheidszorg) supervises the quality of the care of the health care system, focuses on patient safety and effective care, and concentrates mostly on problems that individual consumers are unable to assess or influence themselves. The *Dutch Health Care Authority* (Nederlandse Zorgautoriteit) is responsible for managing the competition among health care providers / insurers and has the power to enforce "socially desirable" competition and to take action against providers and insurers with significant market power. The task of the *Dutch Competition Authority* (Nederlandse Mededingingsautoriteit) is (1) to prevent cartels, (2) to authorize or forbid mergers, and (3) to prevent the abuse of a dominant market position. The *Dutch Central Bank* (DNB) is the authority which supervises the financial solvency of the insurers. Finally, the *Financial Markets Authority* (AFM) supervises the insurers to make sure they provide financial services properly, and inform their insured persons properly about the premiums of the different insurance options they offer.

Policy question

The Dutch government has implemented a mandatory uniform health insurance with an annual consumer choice of health insurer. However, conditional upon having a system of cross-subsidies which makes health insurance affordable for everyone, an interesting policy question is whether it is necessary to have mandatory *uniform* health insurance: does one size fit all?

5. DOES ONE SIZE FIT ALL?

A challenging question for the Netherlands as well as for other countries is: Should the purchase of health insurance be mandatory? And if so, how much freedom should the consumer have in choosing his entitlements? Classic economic motives for government to make health insurance mandatory are the *prevention of free riding* and a *lack of foresight*.

If society is willing to subsidize some health services, some individuals may abuse this willingness by purposely not buying insurance coverage for these services, because they expect that others in society will be willing to pay if they really need them. The *prevention of free rider behavior* can be a motive for government to make subsidized insurance coverage for some health services mandatory for low-income people. For high-income people this argument is less relevant because they can (and therefore will have to) pay for most health services themselves.

Another motive for government to enforce mandatory coverage may be myopic behavior. Young and healthy individuals may not always know what is in their best interest. They may underestimate future risks, or even think that one or another disease will not affect them. Such short-sightedness could lead people to make the wrong decision when they have the choice between a certain immediate benefit (i.e., paying no premium) and having the risk of uncertain future costs (which can be unaffordably high).

For high-income people this paternalistic motive is less relevant than for low-income people, because on average they are better educated and can afford higher health expenditures (see, for example., Paolucci, van de Ven, & Schut, 2007).

It is interesting to apply the above arguments to the Dutch Health Insurance Act. According to this Act everybody must purchase private health insurance with a broad benefits package, and with the option of choosing a deductible of at most € 500 per person per year. Based on the above arguments a pragmatic recommendation to the Dutch government is to make the level of the voluntary deductible *income-related*. For high-income people there is no need to forbid them to take a deductible of, e.g., € 1000 or € 5000. For the lowest income groups the option of a deductible of € 500 may lead to free rider behavior. As long as the premium rebates for a deductible reflect the consumer's expected out-of-pocket payments, i.e., a low rebate for the low-risks and a high rebate for the high-risks, the cross-subsidies are not influenced by the voluntary option to choose a deductible.[10]

Another question is how much freedom a consumer could have in choosing his insurance entitlements. The Managed Competition model allows the consumer to make a choice among different sets of entitlements based, e.g., on the price and quality of care. This consumer choice does not affect the cross-subsidies as long as the premium differences across insurance products reflect the differences in predicted expenses among these products. The sponsor has to decide about the cost level of the services and the intensity of treatment that it considers as acceptable to subsidize.

The Dutch Health Insurance Act provides a nice illustration. This Act contains a functional description of the health insurance entitlements that everybody should buy. This allows for a huge variation in the insured's entitlements. In principle consumers could choose, e.g., between a ***Standard***-policy covering, e.g.,

- diagnostic tests which provide 99% certainty and which on average cost 100 euro per test predominantly generic drugs
- no cholesterol-reducing tablets if cessation of smoking would have the same effect
- good plastic hip

and a ***Golden***-policy covering, e.g.,

- diagnostic tests which provide 99.9% certainty and which on average cost 1000 euro per test
- all drugs
- cholesterol-reducing tablets even if cessation of smoking would have the same effect
- excellent golden hip

---

[10] For the complex relation between risk equalization and voluntary deductibles, see, e.g., Van Kleef et al. (2007).

By offering a choice of insurance contracts, the consumer can make - within a certain range of limits - a choice based on his own preferences with respect to health care, style of care and price. This type of consumer choice resembles Fuchs' (1969) and Pauly's (2005) proposals for competition among insurers on the basis of the rate at which new technology is introduced. Although we do not expect to soon see this type of competition with *explicit* quality of care differences in the Netherlands, it is likely that the quality competition will be more *implicit*, e.g., based on the reputation of the providers or the protocols they are using.

Critics may raise the question whether this type of consumer choice will result in *first*-class and *second*-class health care. The answer could be yes, first-class and second-class as with cars, where consumers to a certain extent can make a tradeoff between price and safety; but not as on cruise ships like the Titanic where 60% of the first-class passengers and 26% of the third-class passengers survived. An advantage of allowing competition on both the price and the quality of care is that one may expect that over time the quality/price ratio of new technologies will improve, just as with computers and mobile phones, and will become increasingly affordable for large groups of people. If Mercedes and Volvo wouldn't have been allowed to first implement new safety technologies like ABS and airbags in their luxurious limousines, these technologies wouldn't now be available in an affordable Volkswagen. By not blocking dynamic innovation, a Volkswagen now is much safer than a Mercedes or Volvo was 30 years ago. Another advantage is that new technologies first have to stand the test of the market. The market will signal the industry as to whether new technologies which are technically feasible are also economically feasible. If even the highest income groups do not consider a new medical technology to be worthwhile, there is no rationale to include it in the mandatory benefits package. Quality of care differences in insurance entitlements could be allowed as long the minimum quality of care is at an acceptable level. In the Netherlands the Inspectorate for Health monitors the quality of care and has far-reaching power (e.g., to close a hospital) if the quality of care is below minimum level. Given the inevitability that those who can pay will always find their (Golden policy) way, abroad or in their own country, policymakers should focus on the lowest income groups (by asking if the Standard policy is okay), and not on the happy few.

6. CONCLUSIONS AND DISCUSSION

In the coming decades many countries may be confronted with an erosion of subsidizing solidarity, as the number of health problems related to lifestyle is increasing, and the proportion of health expenses due to bad luck is decreasing. In addition health care expenditures are expected to rise further due to ageing and new developments in medical technology. These developments, together with the limited collective means and unlimited individual demands, will increase the tension in health care financing and the need to make choices about priorities in health care. The great challenge is to prevent an unacceptable two-tier health care system. In principle the model of Managed Competition has the potential to appropriately deal with these new health policy challenges because it appropriately balances the different types of *supply*-side oriented and *consumer*-side oriented incentives. The Managed Competition model allows the consumers to make a choice among insurance policies based on premium **and** quality of care, with the cross-subsidies being unrelated to this consumer choice.

As a case study we discussed the Netherlands, which is the first country in the world that is consistently implementing Enthoven's (1978) model of Managed Competition: "National Health Insurance based on Managed Competition in the Private Sector." Although elegant in theory, the implementation of the Managed Competition model appears to be complex in practice because it is hard to fulfil the necessary preconditions (mentioned above).

Since 1 January 2006 everybody in the Netherlands must buy individual private health insurance with a legally described benefits package. Insurers have incentives to become prudent buyers of care (in particular outpatient care) on behalf of their insured and to selectively contract with providers. In the Health Insurance Act (2006) the basic benefits package is described in terms of "functions of care" and not, as in the previous Sickness Fund Act, in terms of "providers of care." This may increase the competition among those providers who can deliver similar types of care. The insurers must specify in the contract with their insured the precise entitlements of their insured (e.g., list of selected preferred providers, and procedural conditions), and they have much flexibility to do so.

An interesting observation is that the Netherlands as well as many other countries have universal mandatory health insurance with a uniform benefits package for everyone. However, mandatory and uniform health insurance is not necessary to achieve affordable health insurance. As discussed above, mandatory solidarity contributions can be sufficient and the organization of cross-subsidies does not require everybody to have the same uniform insurance product. Government can allow consumers to make a choice among different sets of entitlements based, for example, on the price and quality of care, and with an income-related deductible. This consumer choice does not affect the cross-subsidies as long as the premium differences across insurance products reflect the differences in predicted expenses for these products. Government has to decide about the cost level of the services and the quality and intensity of treatment that it considers acceptable to subsidize.

The organizers of the Conference confronted us with challenging questions: *Health Systems: Are we in a Post Reform Era*? and *Are we facing a scarcity of innovative ideas*? As stated at the beginning of this paper and based on the above arguments my answer to these questions is: *NO, NO*.

The next wave of health care reform can be expected to be aimed at managing the health care system so that it can deal with both the erosion of subsidizing solidarity and the increasing health care expenses in a way that is acceptable for society. The great challenge will be to find the correct balance between affordability and efficiency. Health system reform is surely not a remnant of a previous era. Consequently the emotion resulting from health system reforms is not going to fade away: it is a perpetual emotion.

REFERENCES

Barendregt, J. J., Bonneux, L. & van der Maas, P. J. (1997). The health care costs of smoking, *New England Journal of Medicine, 337*, 1052-1057.

Chin, S., & Rona, R. J. (2001). Prevalence and trends in overweight and obesity in three cross sectional studies of British children, 1974-94. *British Medical Journal, 322*, 24-26.

Cutler, D. (2002). Equality, efficiency, and market fundamentals: the dynamics of international medical-care reform. *Journal of Economic Literature, 60*, 881-906.

Dekker-Committee, 1987, *Willingness to change (Bereidheid tot verandering),* Distributiecentrum Overheidspublicaties, Den Haag.

Ellis, R. P., & McGuire, T. G. (1993). Supply-side and demand-side cost sharing in health care. *Journal of Economic Perspectives, 7*(4), 135-151.

Enthoven, A. C. (1978). Consumer-Choice Health Plan; a national-health-insurance proposal based on regulated competition in the private sector. *New England Journal of Medicine, 298*, 709-720.

Enthoven, A. C. (1988). *Theory and practice of managed competition in health care finance.* Professor Dr. F. de Vries lecture in economics; volume 9. Amsterdam: Elsevier Science Publisher.

Fuchs, V. R. (1969). Let's make Volkswagen medicine compulsory, *Medical Economics,* November 10, 1969, 110-119.

Hurst, J. (1990). *The reform of health care systems in seven OECD countries.* Paper presented at the Second World Congress on Health Economics, Zurich.

Kim, S. & Popkin, B. M. (2006). Commentary: Understanding the epidemiology of overweight and obesity — e real global public health concern. *International Journal of Epidemiology, 35*, 60-67.

Lamers, L. M., van Vliet, R. C. J. A. (1996). Multiyear Diagnostic Information from prior hospitalizations as a risk-adjuster for capitation payments. *Medical Care,* 34, 549-561.

Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2004). Actual causes of death in the USA, 2000, *Journal of the American Medical Association, 291*(10), 1238-1245.

Paolucci, F., van de Ven, W. P. M. M., & Schut, F. T. (2007). Economic rationales for the design of health care financing schemes. Paper presented at the meeting of the European Health Policy Forum, Berlin, 20 April 2007.

Pauly, M.V. (2005). Competition and new technology. *Health Affairs 24*(6), 1523-1535.

Schroeder, S. (2007). Presentation at the Jerusalem Conference (see this volume).

Schut, F.T. (1995). *Competition in the Dutch health care sector*, dissertation, Erasmus University Rotterdam.

Scotton, R. B. (1991). *National health insurance in Australia: New concepts and new applications.* Working paper no. 11, National Centre for Health Program Evaluation, Melbourne.

Van Barneveld, E. M., Lamers, L. M., van Vliet, R. C. J. A., van de Ven, W. P. M. M. (2001). Risk sharing as a supplement to imperfect capitation: a tradeoff between selection and efficiency. *Journal of Health Economics, 20,* 147-168.

Van de Ven, W. P. M. M., & Ellis, R. P. (2000). Risk adjustment in competitive health insurance markets. In: A. J. Culyer & J. P. Newhouse (Eds.), *Handbook of Health Economics* (Chapter 14, pp. 755-845). Amsterdam: Elsevier.

Van de Ven, W. P. M. M, van Vliet, R. C. J. A., Schut, F. T., & van Barneveld, E. M. (2000). Access to coverage for high-risk consumers in a competitive individual health insurance market: via premium rate restrictions or risk-adjusted premium subsidies? *Journal of Health Economics 19*(3), 311-339.

Van de Ven, W. P. M. M., Beck, K., F.Buchner, et al. (2003). Risk adjustment and risk selection on the health insurer market in five European countries. *Health Policy, 65*(1), 75-98.

Van de Ven, W. P. M. M., van Vliet, R. C. J. A. & Lamers, L. M. (2004). Health-adjusted premium subsidies in the Netherlands. *Health Affairs, 23*(3), 45-55.

Van de Ven, W. P. M. M., Beck, K., van de Voorde, C., Wasem, J., & Zmora, I. (2007). Risk adjustment and risk selection in Europe: six years later. *Health Policy, 83,* 162-179.

Maimonides' "Golden Path": The Role of Nonprofits in Healthcare Systems

> Gur Ofer
Department of Economics,
The Hebrew University Jerusalem

I. INTRODUCTION

The last decades of the 20th century saw the demise of grand ideas on the design of social and economic systems. While the fall of the communist system signaled in the eyes of many the triumph of "capitalism", this is only partially true. What really triumphed was the mixed system of the market and the welfare state. It triumphed to some extent due to the ability of predominantly market democracies to add a variant of a welfare state, with significant government intervention, to a market system in order, among other reasons, to take care of social needs that the market was unable to attend to. The triumph is thus due in part to the ability of the capitalist system to compromise and to blend elements of two systems rather than to stick to one "pure" grand design.

The last few decades witnessed yet further shifts of the economic and social systems of the developed countries into more complex structures where public and private elements interact and cooperate much more closely and intensively in the design of subsystems, especially in the sphere of public-social services like education, healthcare, the welfare system, and material infrastructure. These came about as a result of difficulties in the functioning of the traditional publicly run welfare state and of changes in the preferences of the population. Over time there also seem to be some decline in the ideological motivation underlying the choice of the appropriate elements in the design of the provision of social services, and a greater reliance on their functional efficiency.

Healthcare systems were part of the welfare state and were run in most developed countries, either directly by the government or by a combination of government and organizations of the "third" or the non-profit (NP) sector, in most cases with a relatively smaller role left to the private for profit (FP) sector. The British NHS is an example of the dominance of the government in both the financing and the provision of services, while a number of countries in continental Europe feature systems of Sickness-Funds, where NP organizations play a major role.

In recent decades, health care spending has risen steeply in many countries. The main explanations are: Rapid technological development of new drugs and treatments for conditions that couldn't be treated effectively before; the population's increasing taste for diversity, an individual approach to patients and wider choice; and to some extent the aging of the population. Also contributing is the heavy government intervention including government efficiency failures. While parts of the increase in spending are to be expected and beneficial, other elements are considered superfluous and reflect inefficiencies. The latter, combined with general macroeconomic pressures on the size of public budgets, led government to look for ways to restrain the pace of health spending.

The main characteristic of this process of search for improvements in system design is the search for relatively small changes and marginal design shifts rather than for an all-encompassing new, grand idea. Also, while ideology still plays a role in debates over the proper design and the "right" P/P mix, it seems that there is a greater degree of consensus on the social goals and a larger part of the discussion is concentrated on issues of efficiency. The focus of reform is on the details much more than on different grand ideas.

Among the means used by countries to address this problem and to better meet the growing challenges of healthcare were the combining of public and market (private) tools in various configurations and designs. Several approaches involved a simple division of labor between the two sectors: a division of the provision between two baskets or two layers of services, or between public financing and private (including NP) provision (and insurance). In addition, more complex arrangements have been introduced: "Market-like" tools into the public sector, like "internal competition", the "new public management", cost sharing, the introduction of evidence based medicine (EBM), of market-like incentives and material rewards, the introduction of quality targets and measures, decentralization of public provision, and, finally, the relaxing of some of the bureaucratic rigidities in the public sector. This is a process that was dubbed by Richard Saltman the "melting private – public boundaries" (2003).

The NP is the appropriate institution that can usefully internalize many of the P/P features. NPs had been part of society since long ago and are to this day very common in healthcare systems. The earlier NPs were mission oriented healthcare providers, operated by churches and other welfare and charity organizations. They appeared as NP sickness-funds in the Bismarkian system of healthcare, and then spread in modern time also as hospitals and clinics, side by side with private, for profit organizations. To this day nearly two thirds of all American hospitals are NPs. In a way, the Hippocrates oath taken by graduating physicians since ancient times is a device intended to mitigate or constrain the mission or objective function of medical doctors from the sole pursuit of their wellbeing and income in order to be able to assume more responsibility over the wellbeing of their patients – in essence, turning the physician into a sort of NP.

The main reasons calling for large governmental and/or NPs' involvement in health care are first, market and information failures in the health insurance and the healthcare markets, as shown by Arrow (1963). These cause FP insurance companies and healthcare providers to perform less efficiently than public ones, at least on a theoretical level. The second reason for public intervention is the recognition that the market system cannot provide the levels of access, equity and solidarity sought by society. Third, a preference of NPs over the government as providers of services is explained in general by one of two situations: one is when the required service caters to a small group of people and there is no majority support or justification for public financing. The other is when the government is ready to finance the service but provision by NPs is preferred because of their greater operational flexibility and their being more client-friendly and sensitive, thus better able to attend to specific consumers' needs and preferences. The literature on the role of NPs is vast and much of the discussion, both theoretical and empirical, is contained within the framework of the "three failure theory" (Steinberg, 2006, pp. 119-135) where the division of labor in a market economy between the private, the government and the NP sectors is discussed in terms of the potential advantages and failures in the provision of various goods and services.

Some of these have already been mentioned above and to others we come back below, keeping the NPs in the center of discussion (Steinberg, 2006; Weisbrod, 1988).[1]

A unique feature of the P/P mix in NPs is their ability to apply tools borrowed from both the market and the bureaucratic ("command and control" ala Saltman [2003]) models at moderate intensities like "soft competition", light "bite" of incentives, etc. The paper follows the ideas along the line of Maimonides, a Jewish philosopher and physician of the 12th century. Moderation in the use of such tools is a great advantage of NPs, in the healthcare system in particular. The emphasis of this paper on the middle way feature of the NPs is somewhat different from the normal discussion in most of the literature that considers the NP just as one of three players, each with its own characteristics.

While the discussion in the paper is general, it relies to some extent on the Israeli experience, where four NP sickness funds (SFs) act as health insurance organizations and at the same time as providers, providing healthcare services to the entire population directly and through contracts. The bulk of their revenues, more than 90 percent, come from the government in the form of capitation payments based on the size and demographic structure of their membership. In exchange the SFs have to provide a (rather generous) set basket of health services. The government finances the SFs from the proceeds of an earmarked health tax and from general revenues. People can move across SFs periodically and the SFs cannot refuse anybody. In this way the SFs compete with each other on quality of service but not on price. This system was established by a law on national health insurance, enacted in 1994, that replaced a more traditional SF arrangement whereby members paid wage-based health care fees directly to the SFs. Partial mobility of members, large gaps between the health fee and the health risk of individual members, and an active selection of good risks by two SFs (the other two belonged to trade unions where only members could join the SF) resulted in unfair competition, unequal provision and access, and therefore serious inefficiencies. While two SFs behaved in an old fashioned "mission oriented" way, with little attention to

---

[1] A comprehensive survey on the theory and role as well as the research literature of NPs is included in Powell and Steinberg (2006). See also Glaeser, 2003.

financial stability, the other two, while unable to distribute profits outside, behaved closer to for-profits and accumulated substantial assets that were managed outside of the SF (but by their parent organizations). The change of the form of financing in 1995 involved a substantial transfer of funds from the two rich funds to the other two, but some of their advantage in terms of the profile of their membership and financial reserves remain to this day.

The general healthcare and the specific Israeli connections direct the discussion in the paper to one particular strand among the many types of NPs, those that contract with government to provide social services in its name and receive most of their financing from it. They are typically larger; they follow the "transaction model" and have many specific features, due to the special government role in their activities (Smith and Gronbjerg, 2006; Minkoff and Powell, 2006).

This paper is a conceptual framework that tries to understand the conditions and parameters required for a NP sector to be able to provide the appropriate institutional environment for the healthcare system. Following a section that highlights the virtue of Maimonides' "middle way", or "golden path" as a unique feature of the P/P mix in NPs, the paper proceeds as follows: In section III there is a discussion of the internal organization and governance requirements for the proper functioning of balanced NPs (SFs). Section IV turns to the relationship of the NPs with the external environment and the incentives around the NPs and section V discusses the contributions of "informal institutions", the behavioral culture of the stakeholders and players, to the proper operation of the system. Section VI applies the discussion to the new Israeli healthcare system and section VII concludes.

II. MAIMONIDES' "MIDDLE WAY" AS A KEY ELEMENT OF THE P/P MIX

As stated above, one dimension of the P/P mix is the intensity in which some of the new "market-like" instruments and institutions are applied. Here the "mix" doesn't refer to the composition of the elements imported from the public sector and the market, but to the extent or intensity applied when using such features. What is the right dose of competition, or the share of incentives for desired performance? When a physician is asked to take into account cost considerations, what is the best way to reach the right balance of care and cost economy? What is the best way to balance properly between the roles of insurance and of medical provision of a sickness-fund or an HMO?

The origin of the idea of balanced and moderate application of various efficiency and quality enhancing tools and behavioral traits goes back to the thinking of Moses Maimonides, a Jewish physician, philosopher and scholar of the 12th century, in Egypt who himself followed in this the Greek philosophers). He developed the idea of the "middle way" or "Golden path" of the intensity of given traits. He defined the "middle way" of various human characteristics thus: "The virtues are states of the soul and settled dispositions in the mean between two bad states, one of which is excessive, the other deficient" (1952, chap. 4, p. 4). Or: "The right way is the mean in every one of a person's character traits" *(Mishneh Torah* 1, character traits, 1.4.). Here, unlike in other P/P compositions, the choice is not between Le Grand's concept of "knights or knaves" but the right balance between knighthood and "knaveness" (2006; paper in this volume).

This paper, therefore, while studying some other aspects of the P/P mix as manifested in the NP institution, gives special attention to that aspect of the P/P mix of moderate application of tools taken from both the public sector and the market as manifested in the nature, the role and the mode of operation of NPs in health care systems.

The NP healthcare organization travels along the "golden path" between government-bureaucratic and for-profit market organizations; between "planning and control" and "steering and channeling" (Figueras & Saltman, 1997; Saltman, 2003); between balancing budgets and the provision of adequate level of services, between no, or weak "internal" competition and (fierce) market competition; between finance, insurance and provision that are public to those that are private, between high efficiency and quality on one side and equity and consumer sovereignty on the other.

The two main ideas of the paper, following the concept of the "middle way", are first, that moderate intensity in the application of policy tools by NPs helps to mitigate many undesired outcomes of applications of the same tools that are too strong or too weak, under conditions of market and of government failures, and thereby to achieve better outcomes, a better second best. Second, in order to function properly, all the stakeholders, inside and outside of the NPs should adapt a behavioral culture, informal rules of the game – the ″informal institutions″ a la Douglass North (1990) that conform as closely as possible to the ″formal″ institutional nature of the NPs; that is also treading a ″golden path″.

III. INTERNAL ORGANIZATION AND GOVERNANCE OF HEALTHCARE NPS (SICKNESS FUNDS)

NP organizations operate, and have operated in the past, under different legal umbrellas in different countries. The most important common element that defines ″nonprofit″ is that NPs cannot distribute profits, if made, to any outside stakeholder. All profits must be invested in improving the provision of services according to the mission of the NP. NPs are therefore owned and governed by communal and civil society organizations devoted to the service goals of the NPs. While traditional NPs used to be financed by charitable organizations and by philanthropy, as well as through service charges, many currently major NPs in the areas of education and health care (and a few others) are often financed, totally or mostly, by governments. Such cases reflect the recognition that while the government holds an advantage in the financing of many social services, NPs are better positioned to provide these services, in many cases more efficiently and in a manner that is more flexible and consumer – or client-friendly. Full or majority financing by the government provides the government with an additional influence over such NPs, in addition to its normal regulatory role, to which we will return later in this paper. As mentioned above the literature discusses this group of NPs as belonging to the ″transaction model″, those NPs that specialize in the provision (sale) of services (the ″demand and supply″ perspective (Smith and Gronbjerg, pp. 222-229). The SFs belong to this group and the discussion below draws extensively also on Minkoff and Powell (2006) and Ostrower and Stone (2006).

Most NPs have charters where the main goals or mission of the NP are stated. The essence of the stated goals or the mission of the NP usually refers to the provision of the relevant service, like healthcare, at the best possible level, given the budget constraint and the existing laws and regulations. Obviously, there is more than one way to fulfill such a goal and we will not go into this issue here. The important thing here is to make sure as far as possible that the rules of corporate governance of the NP aim to minimize possible diversion from the mission in the name of other, conflicting interests of internal stakeholders, board members, managers, or employees (physicians). The fact that profits cannot be distributed weakens the ability to use material incentives to keep the NPs, indeed their boards, to focus on the chartered mission. Therefore a more careful governance structure of NPs, at least as careful as in the case of private corporations, can reduce such misuse but cannot eliminate it completely. It is important to make sure that there is a strong owner or source of authority that is committed to the mission, that the members of the board don't represent other interests, that they be made fully accountable for their votes and decisions, and that they be selected as much as possible to fit the NP culture. There must also be strong self (internal) regulating bodies in place. Finally strong, but non-intruding, outside regulatory and control bodies are set to monitor the NPs externally. We will return to discuss the required arrangements that regulate the relations between the NPs and the government, other NPs, and their clients in Chapter V.

A word should be devoted to the nature of the source of authority of the NPs (SFs). In some cases authority rests naturally with a civic organization with a long-term reputation of interest and contribution to healthcare. In Israel, the US-based Hadassah Women's Organization is a good example of the authority over the Hadassah hospitals; it is the body that appoints their board members and carries out basic regulation over them. A number of other hospitals and universities have their own founders' organizations, "friends of…" with a long record of service. This is probably the best way to proceed with NPs that lack such support: If such organizations don't exist, or if those in place are inappropriate for the task, new ones have to be carefully created, so as to represent the civil society at large, with minimal or no representation of the government. The influence of the government should be concentrated in the formulation of the contract with the NPs, including incentives (see below), and in a proper regulation and control system. The literature discusses the frequent tension between the internal mission of the NP (or here SF) and the demands of the government (Ostrower and Stone).

The available literature on the operation of NPs in the sphere of healthcare is full of examples and behavioral models that show diversions from proper behavior, behavior that serves particular interests of stakeholders rather than the declared goal.[2] Such models include various concealed ways to distribute profits to managers and to others by paying high salaries, providing perks and the like. The most extreme case is the turning of the NP (here the hospital) into a "physicians' cooperative" where the actual goal is to maximize the income of the physicians (Pauly & Redisch; 1973, Steinberg, 2006). Other models focus on investing in superfluous high-brow technologies or flashy buildings in order to enhance the prestige of the management. Yet others cite lower efficiency resulting from lower attention of NPs to economic and financial management. In many cases it is difficult to identify to what extent the phenomena described above serve the main goals of the NP or the particular interests of managers and other stakeholders. This may be most problematic regarding the issue of higher quality of treatment and service observed in many NPs. Asymmetric information in the healthcare market and the inability of patients to observe the quality of the treatments may lead, under normal competition, to below optimal quality, a market failure that can be corrected by the NPs (Newhouse, 1970). Likewise a somewhat lower attention to efficiency and financial balance may also be compensated to some extent by higher attention to the quality of service.

A better balance between the quality of services and efficiency can be achieved when the healthcare NP combines inside one organization the provision of services and the insurance of its clients. As an insurer the NP has an incentive to save money and pay more attention to economic efficiency, while as a provider of services it tends to over provide. The two forces, when applied in the right measure, can offset each other. The American HMOs that appeared during the last decades of the 20th century, most of whom were for-profit, tended in general to over-emphasis their role as insurers, which may explain their later retreat.

Empirical studies that compare the performance of NPs and for-profits (mostly hospitals) in the US are on the whole non-conclusive on these scores, though Schlesinger and Gray do record some quality advantages in NP hospitals and HMOs (2006). By nature such studies are conducted in

---

[2] This is based, among others, on Steinberg , 2006;, Steinberg and Powell 2006; Schlesinger and Gray 2006; James and Rose-Ackerman, 1986; Sloan, 2000; and Weisbrod, 1988.

a market that includes both NPs and for-profit hospitals, an environment that pushes both into a more uniform behavior: NPs tend to become closer to for-profits and the latter "soften" their competitive drive (Sloan, 2000).

Bringing the managers and employees of NPs to fully identify with the mission of the organization may be somewhat more difficult than to do the same thing with the staff of for-profits, where the same principal-agent problem also exists. This calls for a focused definition of the goals of NPs and for consistent organizational, legal and regulatory structures. These include a system of optimal incentives inside the organizations and in their relations with the government, other suppliers of services and their members; and a culture of behavior of all stakeholders that is as closely consistent as possible with the legal nature and service atmosphere of the NPs. We will return later to these two aspects.

Internal incentives: In addition to the proper organizational structure and governance of the healthcare NP, there is the further need to bring on board the employees, especially the physicians, to behave according to the stated goals and operational culture of the organization. Physicians, in most cases and given their education and assumed mission, may tend to over-treat and pay less attention to efficiency considerations. The preferred way to tilt them toward the "golden path" is through education and training, preferably in the medical schools. In this way most of the decision making regarding the proper treatment is left with the physician, the best option, given the complexity and individual nature of medical treatment. However, until that bear fruits there may be a need to introduce mandatory treatment decision trees and restrictions on the choice of drugs, tests, etc.; and in addition the introduction of "soft" material incentives, like bonuses or a modest sharing by physicians in the insurance risk of the organization.

IV. THE "GOLDEN PATH" AND THE EXTERNAL ENVIRONMENT

In order for SFs to be able to perform as closely as possible to the golden path, a proper outside environment and rules of operation must prevail. These include arrangements that provide the proper atmosphere for the conduct of "soft" but fair competition: absence of price competition and minimization of selection of members with lower risks, a small number of competitors, free but modest movement of patients across NPs; and most important, a level field for all SFs to compete fairly. This is connected with the way the SFs are remunerated. We discuss these elements in order.

The nature and mission of the SFs and their culture of operation moderate their urge to compete intensively as do for-profits. The elimination of price competition through a system of a single payer (the government) further contributes to this goal. It also directs the competition to the more important aspects of healthcare, the quality of treatment and friendly service.

A relatively small number of larger SFs that covers the entire market also contributes to the moderation of competition. True, here there is some danger of collusion, though honest SFs are expected to refrain from too much of it. A major force that enhances competition in a for-profit environment is the entering of new and exit of old non efficient firms. Here such traffic is expected to be much more limited for the sake of stability. However, an occasional appearance of a new SF, even a moderate threat that this might happen, helps to keep the existing SFs on their toes.

Members should have the right to shift from one SF to another, more or less at any time. The normal link between patients and their medical services, especially with their personal doctor, is of a longer term nature, a fact that limits the tendency to move in the first place. Yet SFs need to feel some threat that this may happen. This feature, in combination with the limited number of providers and a modest entry/exit movement, all provide for the relative stability needed in a healthcare system, yet they also provide a fair degree of efficiency enhancing competition.

Level field: There are many ways to remunerate NPs, but here, for the sake of illustrating an important point, and following the Israeli experience, we focus on capitation payments to the SFs by the government. A system of such payments based on a reasonably good risk adjustment formula provides for fair and equal conditions for competition. It also helps to limit the extent of selection, or competition over high paying healthy members, as is the case in countries with traditional (Bismarckian) SF system with a wage-based fee system. The problem with a risk adjusted capitation system is that it is very difficult to arrive at a precise formula and therefore in for-profit competition much is left for competition over the best risks rather than over quality of service. By contrast, under a NP system with soft competition, even a far less precise formula, especially one that uses a small number of criteria, will not lead to significant distortion. NPs traveling along the "golden path" will tolerate a larger gap between the true formula and the one being used and, in the name of their mission, will refrain from taking full advantage of such loopholes. There are two lessons: first, while it is not clear how imprecise the remuneration formula can be under these circumstances, clearly a NP system can save much effort needed in order to construct a formula which is near perfect. Second, at the same time it is very important to ensure that the formula in use be updated periodically in order to avoid the opening of too wide a gap between the weights actually used and the appropriate ones.

Regulation: As stated above the SFs should have strong and as far as possible independent internal control bodies. Here again the "middle way" nature of the organization allows more chances for internal control to work well. But there should also be outside regulation and control, by a public statutory body, which I like, and the government and parliament. In any case, control and regulation have to be clearly distinct from intervention in the day to day operations and decision making, which should be avoided. The creation of the SFs as NPs, despite the fact that almost all their financing come from the government, is based on the conviction that they perform better than bureaucratic units. Too much interference, especially in daily operations, undermines the raison d'etre of establishing the NP in the first place.

Performance indices of healthcare providers are becoming more and more common incentives and regulatory tools. At the same time there is a debate in the literature on their impact and merit and on the best way to apply them. One criticism of the use of this tool is that it directs efforts to a few performance areas and pays less attention to important treatments that are not represented in the indices. This becomes more serious when material rewards are attached. Another issue is the extent to which public access to the performance outcomes causes good performers to limit access to their services, especially of high risk cases (Glazer & McGuire, 2003). All these problems might well be less severe under well behaving NPs, again, due to their more balanced approach between the provision of services and economic considerations. Here again, as in previous cases discussed here, the moderate nature of the NP helps to soften the bite, or the secondary negative effects of many incentives.

V. BEHAVIORAL CULTURE OF NP AND "RULES OF THE GAME"

The concept of the "middle way" or the "golden path" that governs the institutional framework of the NP sector, as seen above, should be supplemented by a consistent behavioral culture of all players, those inside the sector and those dealing with it, especially the government. In terms of the institutional theory of Douglass North, it is important that the "informal institutions" – the patterns of behavior and the rules of the game – be applied to the NP sector and will support the particular character of the "formal institutions" of this sector (North, 1990).

According to North, "formal institutions" consist of the legal structures that govern the conduct of business in the economy, including the various governing bodies, their mission, structure, governance and rules of operation and, an enforcement mechanism. However, in order to perform well, all players should adopt a behavioral culture that is consistent with the formal structure and that minimizes the need to use sanctions and the enforcement mechanisms, thus reducing friction and the "transaction costs" of doing business and enhancing both efficiency and the business environment.

As shown above, the formal mission and the institutional structure of any NP sector defies precise definition. The right balance between the amounts and quality of service on the one side, and efficiency considerations on the other is open to differing views and is very difficult monitor. This is in contrast with the (relatively) clearer goal of a business firm to maximize profits, or of a bureaucratic unit to obey orders of the superiors. In many cases the ultimate source of authority is less well defined and it is much more difficult to internalize the objectives and mode of operation of the organization, further down the hierarchical ladder. All these are more complex, less clear and more open to discussions and disagreements, and also less transparent than in the case of for-profits or government structures (where such problems also exist). It was stated above that due to the less clear mission of NPs, more attention must be paid to design their formal institutions with great care. Given the above it also follows that the proper function of the informal institutions is much more crucial in the case of the NP and the SF sector.

The above is much easier to state then to implement. A careful selection of appropriate managers, board members and staff is one way (Ostrower and Stone, 2006), and the balanced and "soft" incentive structure, both mentioned above is another. In his vision of the utopian healthcare system for the US, Victor Fuchs insisted that the providers of care, a version of full-staff HMOs, will be lead by physicians, assuming that such an arrangement will make them "NP like", with a right balance between care and efficiency (1996). He must have had in mind properly educated physicians for the purpose. Physicians or not, managers and board members must internalize the delicate balance of the mission and stated goals of the NP.

In this connection, an appropriate education of physicians, nurses and executives for work in NPs is another way to improve their performance. A long tradition of walking along an established and preferred "golden path" is the best guarantee to continue along, but establishing such a tradition is a difficult task and takes time; especially when it follows a period of walking along a different route.

The last few decades witnessed a tendency of NPs to add commercial activities to their basket of operation (Weisbrod, 1998; Minkoff & Powell, 2006). Some of these activities are marginal or peripheral to the main mission of the NPs, like charging for parking, opening cafeterias, gift-shops, etc., services that cater to the clients or visitors of such institutions. The last example - gift shops - already borders on activities that belong to the main mission of the NP, provided on a non-commercial basis. But then there are services that are provided by NPs on a commercial basis, programs that belong to the main mission of the (NP) organization. In healthcare, the main distinction is between services and programs that are part of the core operations, paid by capitation and part of the contract with the government, and "secondary" treatments, services and drugs (food additives), as well as supplementary health insurance to cover the above, sold directly to the members on a more commercial basis. The advantages of adding commercial services are that such programs can improve the financial position of NPs, they provide their members with a more holistic and complete range of services, and in some cases allow them to expand their core activities. The drawbacks are that the commercial activities may absorb an increasing proportion of the attention of the managers and even tilt their management culture toward a more profit oriented one and away from the "golden path". In such cases it becomes more complex to align the formal institutional framework of the NP with a set of informal institutions that also have to accommodate different missions. The ways to restrain the negative effects of commercial activities inside NPs are, first of all, to limit the volume of such activities to a small share of the entire volume of activities, to separate the management and the financial systems of the two activities, and, finally, the best approach is to frame the commercial activities, if at all possible, as a separate NP, behaving according to the stated NP culture.

VI. APPLICATION TO THE CASE OF ISRAEL

As stated above, the bulk of the health insurance and provision of healthcare in Israel is done by four NP sick funds, receiving capitation payments from the government in exchange for a set basket of healthcare services. Most of the primary and secondary (professional) services are provided directly by SFs' clinics, or through contracts with individual physicians, while some of the latter and most hospitalizations are provided through contracts with government owned or NP public hospitals (NPs). A third of the acute beds are owned and operated by the largest SF. In addition to the main basket of services the SFs run a voluntary second layer of "supplementary" insurance and a corresponding package of services which are provided on a semi commercial basis. There is a small sector of private insurance and private provision of services not included in the public basket.

The enactment of the national health insurance law transformed the formal institutional nature of the SFs from the old style of mostly "mission oriented", with little consideration for economic efficiency, into a more balanced structure with a formal and binding contract with the government, including both an obligation to provide a set basket of services at acceptable quality and a hard budget constraint. The SFs as well as the government found it very difficult to adjust their behavior to the new model. The SFs continued to rely on the government as a financer of last resort, as in the old days. At the same time the government continued to interfere in the daily operations of the SFs. Since 1995 there has been some improvement in the behavior of both sides, but the economic slowdown in the Israeli economy during the early 2000s witnessed a retreat. The government still doesn't trust the SFs to perform well without its watching closely over their shoulder; and the SFs are constantly suspicious of the government, concerned that it is looking for ways to cut their budgets. A more stable model of long term financing with clear rules of updating is still not in place.

One reason for a growing mistrust between the two is the fact that so far the SFs are governed either by the old, pre-law institutional structure, or by makeshift arrangements that were introduced without proper legislation when two SFs were separated from the respective trade unions, which were their sources of authority until 1994. To this day there is no uniformity in the formal language of the mission of the SFs, their source of authority, the way managers and board members are appointed, their governance structure, control and auditing mechanisms, etc.

The hard budget constraint imposed on the SFs had a positive influence on their conduct. In general they did pay more attention to costs and became more efficient. Yet, riding on a general wave of increasing respect for material outcomes in Israel, on top of the lack of proper "corporate governance" legislation for the SFs, there may have developed a degree of overshooting in the emphasis on the economic and profit motive among their managements. The added responsibility of the SFs over the second, "supplementary" layer of health insurance and services, may also have contributed to this tendency. The SFs spend large amounts of money on marketing their second layer of products and services (they are severely constrained by law from advertising their public basket). This is despite the fact that there is a legal separation between the two layers, where the second layer is also formally structured as a NP, and that no cross subsidization in either direction is allowed. As mentioned above, keeping the two layers of service with the same provider has many advantages. In view of a tendency toward over-commercialization, it may be prudent to limit the volume of the second layer to, let's say, around 10 percent of the public basket.

There are different views on whether the level of competition among the Israeli SFs is strong enough to generate the right amount of incentives. While only less than 1 percent of the population shifts SFs annually, it seems that the threat that this is possible is significant - there is anecdotal evidence of this, as well as the recurring talks (even a government decision) on the creation of a fifth SF. As mentioned above, competition through the second layer of services may be too strong, in addition to its bias away from the main basket of services.

VII. SUMMARY AND CONCLUSIONS

Andrei Shleifer, who seems to support the privatization of most government activities, mostly on the ground of the efficiency advantages of the market, advocated the assignment of the provision of healthcare services to the NP sector (1998). His main argument in support of this exception was the wide market and information failures in healthcare, leading to difficulties in reaching clear (complete) contracts that are necessary for smooth market transactions. NPs, with their joint commitment to quality care and efficiency, can better limit the potential distortions created by the above mentioned failures. This is true, provided that the NPs stay on the "middle way" and avoid straying in the direction toward FP behavior. Such a trend, dubbed commercialization, is taking place in the US, where the typical NPs in healthcare (mostly hospitals), are already closer to FPs than in other, West European countries. Estelle James (1998) shows that this trend of commercialization reflects the real behavioral preferences of the NPs and their managements, rather than the necessary means to compensate for a drop of government support and contributions, in order to preserve the main NP programs (pp. 248-249). Such tendencies shift the mission of the NPs away from their original target, and confuse the behavioral patterns of the stakeholders (the informal institutions), both of these steps leading away from Maimonides' "golden path", the essence of the NP. While Israel follows the US in a number of major social and economic trends, this is not the case so far with respect to the healthcare system. Let's not follow them. Instead, let's follow the teachings of Maimonides and stick to the "golden path".

REFERENCES

Burcay, E., & Weisbrod, B. A. (2003). Objective functions and compensation structures in nonprofit and for-profit organizations: Evidence from the "mixed" hospital industry. In E. Glaeser (Ed.), *The governance of not-for-profit firms* (pp. 117-142). Chicago:University of Chicago Press.

Figueras, J., & Saltman, R. B. (Eds.). (1997). *European health care reform: Analysis of current strategies.* Copenhagen: WHO, Regional Office for Europe.

Fuchs, V. (1996). Economics, values and health care reform. *American Economic Review, 86*(1):16.

Glaeser, E. (Ed.). (2003). *The governance of not-for-profit firms*. Chicago: University of Chicago Press.

Glaeser, E. (2003). Introduction. In Glaeser, E. (Ed.). *The governance of not-for-profit firms* (pp. 1-44). Chicago: University of Chicago Press.

Glazer, J., & McGuire, T. G. (2006). Optimal quality reporting in markets for health plans. *Journal of Health Economics, 25*(2): 295-310.

James, E. (1998). Commercialism among nonprofits: Objectives, opportunities, and constraints. In B. A. Weisbrod (Ed.), *To profit or not to profit: The commercial transformation of the nonprofit sector* (pp. 271-276). Cambridge, U. K.: Cambridge University Press.

James, E., & Rose-Ackerman, S. (1986). *The nonprofit enterprise in market economics.* Chur, Switzerland: Harwood Academic Publishers.

Le Grand, J. (2006). *Motivation, agency and public policy: Of knights and knaves, pawns and queens.* (Rev. paperback ed.). Oxford: Oxford University Press.

Maimonides, Moses. *Mishneh Torah* 1, Character traits, 1.4.

Maimonides, Moses (1952). *Talmud Bavli,* Introduction to Massechet Avot, chap. 4 p. 4. Vilnus: Vilnus Press.

Minkoff, D. C., & Powell, W. W. (2006). Nonprofit mission: Constancy, responsiveness, or deflection? In R. Steinberg & W. W. Powell (Eds.), *The nonprofit sector: A research handbook,* 2nd ed. (pp. 591-611). New Haven, London: Yale University Press.

Newhouse, J. (1970). Toward a theory of non-profit institutions: An economic model of a hospital. *American Economic Review, 60*(1):64-74.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge, U. K.: Cambridge University Press.

Ostrower, F. & Stone, M. M. (2006). Governance: Research trends, gaps, and future prospects. In R. Steinberg & W. W. Powell (Eds.), *The nonprofit sector: A research handbook,* 2nd ed. (pp. 612-628). New Haven, London: Yale University Press.

Pauly, M. V., & Redisch, M. (1973). The non-profit hospital as a physicans' cooperative. *American Economic Review, 63*(1):87-99.

Saltman, R. B. (2003). Melting public – private boundaries in European health systems. *European Journal of Public health, 13*(1):24-29.

Schlesinger, M. & Grey, B. H. (2006). Nonprofit organizations and health care: Some paradoxes of persistent scrutiny. In R. Steinberg & W. W. Powell (Eds.), *The nonprofit sector: A research handbook,* 2nd ed. (pp. 378-414). New Haven, London: Yale University Press.

Shleifer, A. (1998). State versus private ownership. *Journal of Economic Perspective, 12*(4):133-150.

Sloan, F. A. (2000). Not-for-profit ownership and hospital behavior. In A. J. Culyer & J. P. Newhouse (Eds.), *Handbook of Health Economics* (pp. 1141-1174). Amsterdam: Elsevir.

Sloan, F. A. (1998). Commercialism in nonprofit hospitals. In B. A. Weisbrod (Ed.), *To profit or not to profit: The commercial transformation of the nonprofit sector.* Cambridge, U. K.: Cambridge University Press.

Smith, S. R., & Gronbjerg, K. A. (2006). Scope and theory of government-nonprofit relations. In R. Steinberg & W. W. Powell (Eds.), *The nonprofit sector: A research handbook,* 2nd ed. (pp. 221-241). New Haven, London: Yale University Press.

Steinberg, R. & Powell, W. W. (Eds.). (2006). *The nonprofit sector: A research handbook,* 2nd ed. New Haven, London: Yale University Press.

Steinberg, R. & Powell, W. W.(2006). Introduction. In Steinberg & Powell (Eds.), *The nonprofit sector: A research handbook,* 2nd ed. (pp. 1-10). New Haven, London: Yale University Press.

Steinberg, R. (2006). Economic theories of nonprofit organizations. In Steinberg & Powell (Eds.), *The nonprofit sector: A research handbook,* 2nd ed. (pp. 117-135). New Haven, London: Yale University Press.

Weisbrod, B. A. (1988). *The nonprofit economy.* Cambridge, MA., London: Harvard University Press.

Weisbrod, B. A. (1998). The nonprofit mission and its financing: Growing links between nonprofits and the rest of the Economy. In B. A. Weisbrod (Ed.), *To profit or not to profit: The commercial transformation of the nonprofit sector* (pp. 1-24). Cambridge, U. K.: Cambridge University Press.

Weisbrod, B. A. (1998a). Conclusions and public-policy issues. In B. A. Weisbrod (Ed.), *To profit or not to profit: The commercial transformation of the nonprofit sector* (pp. 287-305). Cambridge, U. K.: Cambridge University Press.

An Assessment of Developments in U.S. Hospital Quality Measurement and Reporting and the Potential Application of Pay for Performance*

Charles N. Kahn III, Richard Coorsh,
Howard Isenstein, and Susan Van Gelder
Federation of American Hospitals

PURPOSE

This paper examines U.S. hospitals based upon quality performance measures for U.S. hospitals in calendar years 2004 and 2005, including improvement by type of hospital and by comparing them with the smaller cohort of Premier hospitals. It also examines potential hospital financial performance under two pay-for-performance approaches: one similar to the Premier demonstration model, and one alternative that incorporates both the attainment benchmarks of Premier and an improvement component, the methodology of which is explained on page 13 of this paper. This paper updates earlier work published by the authors (Kahn, Ault, Isenstein, Potetz, & Van Gelder, 2006).

---

* The authors wish to acknowledge the considerable assistance of Tom Ault and Lisa Potetz of Health Policy Alternatives and Chris Hogan of Direct Research for his invaluable data assistance.

INTRODUCTION

In an effort to reduce overlap and administrative burden as well as to further efforts to achieve the Institute of Medicine's (IOM's) aims of creating a safer, higher quality healthcare system, in 2002 key stakeholders in U.S. healthcare launched what now is known as the Hospital Quality Alliance (HQA) (Federation of American Hospitals, 2002). As the primary vehicle for hospital quality measurement reporting, and in an effort to improve clinical care, this landmark private-public sector collaborative makes accessible to providers and the public important information about the performance of hospitals on a variety of quality measures.

HQA membership includes three of the nation's top hospital trade associations (the Federation of American Hospitals, the American Hospital Association, and the Association of American Medical Colleges), along with other provider trade associations; the federal Centers for Medicare & Medicare Services (CMS) and the Agency for Healthcare Quality and Research (AHRQ), both of which are agencies within the federal Department of Health and Human Services (HHS); private health plans; and representatives of private accrediting organizations, consumer groups, business, and organized labor. In 2003, based upon quality performance measures endorsed by the National Quality Forum (NQF), several hundred hospitals reported to a CMS website (National Voluntary Hospital Reporting Initiative, 2003) their performance on 10 quality measures among three different conditions, heart attack, heart failure, and pneumonia (currently, 20 measures are reported publicly).

The HQA selects quality measures for hospitals to report that have been endorsed as national standards by NQF. NQF is a non-profit national standards-setting organization that employs a well-specified consensus process to review and endorse measures. The HQA, through a deliberative consensus-seeking process, chooses among NQF-endorsed measures and approves, for reporting, those measures that balance the ability of hospitals to collect and report the data against those measures that provide opportunities to guide the improvement of care and help consumers make more informed assessments of hospital quality. Once hospitals collect data for the HQA measures, most hospitals employ data processing vendors to process the data and send it to CMS, which, as part of its participation in HQA, in turn posts them on its Hospital Compare website:

http://www.hospitalcompare.hhs.gov.

As the largest payer for medical services in the U.S., the federal government clearly has a stake in improving quality and getting better value for its healthcare spending. Congress clearly signaled as much when in December 2003, it approved the Medicare Modernization Act of 2003 (MMA), which includes a provision that leveraged hospital payment to encourage hospitals to report performance metrics. Before MMA was signed into law, the HQA asked hospitals to voluntarily report an initial set of 10 clinical performance measures that it had approved. With MMA's enactment, hospital participation remained voluntary, but those choosing not to report the measures would experience a 0.4 percentage point reduction in their annual inflation adjustment.

The Deficit Reduction Act of 2005 (DRA), signed by President Bush in February 2006, gives CMS the authority to increase the number of measures hospitals are required to report in order to receive their full annual inflation update. As of October 1, 2006, hospitals must report 21 quality measures. These 21 measures, along with seven new measures required to be reported as of October 1, 2007 (FY 08), are displayed in Figure 1.

Figure 1: Hospital Quality Alliance Measures

Acute Myocardial Infarction (AMI)	Avg.2005 score for all hospitals
Aspirin at arrival [1, 2]	95.2%
Aspirin prescribed at discharge [1, 2]	95.5%
ACE inhibitor (ACE-I) or Angiotensin Receptor Blocker (ARBs) For left ventricular systolic dysfunction [1, 2]	83.4%
Beta blocker at arrival [1, 2]	91.8%
Beta blocker prescribed at discharge [1, 2]	94.6%
Thrombolytic agent received within 30 minutes of hospital arrival [2]	38.1%
Percutaneous Coronary Intervention (PCI) received within 120 minutes of hospital arrival [2]	68.9%
Adult smoking cessation advice/counseling [2]	92.1%
Heart Failure 30-day mortality [3]	
Heart Failure (HF)	
Left ventricular function assessment [1, 2]	89.9%
ACE Inhibitor (ACE-I) or Angiotensin Receptor Blocker (ARBs) for left ventricular systolic dysfunction [1, 2]	82.7%
Discharge instructions [2]	58.3%
Adult smoking cessation advice/counseling [2]	83.1%
Heart Failure 30-day mortality [3]	
Pneumonia (PNE)	
Initial antibiotic received within 4 hours of hospital arrival [1, 2]	75.3%
Oxygenation assessment [1, 2]	99.3%
Pneumococcal vaccination status [1, 2]	61.5%
Blood culture performed before first antibiotic received in hospital [2]	83.1%
Adult smoking cessation advice/counseling [2]	78.8%
Appropriate initial antibiotic selection [2]	80.3%
Influenza vaccination (Collected but not reported earlier due to vaccine shortage 2004)	
Pneumonia 30-day mortality [3]	
Surgical Infection Prevention (SIP)	

Prophylactic antibiotic received within 1 hour prior to surgical incision	
Prophylactic antibiotics discontinued within 24 hours after surgery end time	
Prophylactic antibiotics consistent with current recommendations (SIP2) [3]	
Surgery patients with recommended thromboembolism prophylaxis ordered (SCIP VTE-1) [3]	
Surgery patients with recommended prophylaxis received 24 hours pre/post survey (SCIP VTE-1) [3]	
Hospital-CAHPS (HCAHPS) [3]	

[1] Part of initial set of 10 measures
[2] Part of 18 measures in analysis
[3] Required beginning Oct. 1, 2007

In addition, DRA provides that any hospital failing to report both the original measures and additional required measures in fiscal years 2007 and 2008 will experience a two percentage point reduction in its annual inflation adjustment, a penalty that will reduce the value of their annual update by roughly two-thirds. DRA also requires the Bush Administration to develop a plan for implementing a value-based purchasing program (i.e., pay for performance or P4P) for Medicare hospital care in fiscal year 2009. To implement such a program, additional Congressional action is necessary.

At the same time, physicians are undertaking their own major quality reporting effort through a public-private stakeholder group known as the AQA Alliance. In November 2006, the AQA adopted 31 quality measures in 25 surgical and medical specialties, bringing to 80 the total number of AQA-adopted measures that are being incorporated in health plan contracts with physicians and implemented in medical practices (AQA, 2006). The sets of newly adopted measures build on those previously adopted for primary care, cardiology, and cardiac surgery.

As hospital pay-for-reporting was implemented nationally for the country's hospitals under MMA and DRA, HHS also sponsored the Premier Hospital Quality Incentive Demonstration, which includes 274 hospitals that are members of Premier Inc., an alliance of private nonprofit hospitals (HHS, 2003). The three-year, $ 21 million demonstration is designed to examine the effect of financial rewards and penalties when linked to quality performance on a set of common medical conditions, commonly referred to as pay-for-performance (P4P).

Under this demonstration, which spends new monies on the experiment and is not budget neutral to otherwise anticipated payments, the highest performing hospitals may receive bonuses, while the lowest-performing hospitals may be subject to penalties based on their performance on certain evidence-based quality measures for inpatients with heart attack, heart failure, pneumonia, coronary artery bypass graft, and hip and knee replacements. Participation in the demonstration is voluntary and began in 2003.

Private payers, for their part, also are experimenting with P4P programs. A study appearing in the November 2, 2006 edition of The New England Journal of Medicine indicates that more than half (52 percent) of 252 health maintenance organizations (HMOs) operating in regions of the U.S. with at least 100,000 people have put in place P4P programs, primarily for physician care (Rosenthal, Landon, Normand, Frank, & Epstein, 2006).

DATA AND METHODS

The primary sources of data are public use files released by CMS for 2004 and 2005. We examined three conditions – heart attack, heart failure and pneumonia – using a total of 18 measures reported through 2005 (see Figure 1). The quality of care provided to patients treated for heart attack, pneumonia and heart failure clearly is particularly significant since these conditions account for 16 percent of Medicare discharges from acute care hospitals as well as 16 percent of inpatient Medicare hospital payments. The data used in the analysis include all types of patients, not just those seniors and disabled Americans enrolled in the Medicare program[1].

The 18 measures were selected because they are common to the quality measurements used by both the HQA and the Premier demonstration. A total of 3,192 hospitals reported data sufficient to determine a condition

---

[1] Analysis of the FY 2005 Medicare Provider Analysis and Review File (MEDPAR)

score for at least one condition (see Figure 1). To examine performance by type of hospital, we used hospitals' demographic data contained in the FY 2007 Final Rule Impact File for Medicare's hospital inpatient prospective payment system (Centers for Medicare and Medicaid Services, 2006). Data about the number of patients discharged and the level of Medicare payments for each of the three conditions come from the FY 2005 Medicare Provider Analysis and Review File (MEDPAR).

We calculated composite scores from the measure set included for each of the three conditions. To the extent possible, the calculation methodology adheres to the specifications of the Premier demonstration, which in turn follows the detailed definitions and rules established by CMS and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) to precisely define each quality measure[2]. For example, the measure "aspirin at arrival" in the heart attack condition applies to all patients in ten ICD-9-CM principal diagnosis codes[3] who are not contraindicated for aspirin and who are not described by any one of several exclusion criteria[4]. A hospital's score on a measure equals the percentage of patients subject to the measure for which the hospital fulfilled the indicated action: i.e., administered aspirin on arrival.

JCAHO and CMS also specify how scores on the individual measures are converted into composite scores for the three conditions. Because the individual quality measures currently are given equal weight in determining the composite score, the score simply is the percentage of instances in

---

[2] The JCAHO is an independent, non-commercial private organization that accredits nearly 15,000 health care organizations and programs in the U.S., including the lion's share of the hospitals.

[3] The ten principal diagnoses are: 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, and 410.91.

[4] The exclusion criteria are patients: less than 18 years of age; transferred to another acute care hospital or federal hospital on day of arrival; received in transfer from another hospital, including another emergency department; discharged on day of arrival; expired on day of arrival; left against medical advice (AMA) on day of arrival; or have documentation in the medical record of one or more several listed reasons for not prescribing aspirin. The listed reasons for not prescribing aspirin are: active bleeding on arrival or within 24 hours after arrival; aspirin allergy; Warfarin/Coumadin as pre-arrival medication; or other reasons documented by physician, nurse practitioner, or physician assistant for not giving aspirin within 24 hours before or after hospital arrival.

which the hospital performed the required action (i.e., gave aspirin on arrival or communicated discharge instructions) compared to the cumulative number of patient actions that should have been performed. For example, a composite heart attack score of 90 percent means that a hospital failed to perform 10 percent of the actions that should have been performed for all heart attack patients, assuming that all actions that were performed were recorded. As in the Premier demonstration, composite scores were not calculated for a hospital that did not have at least 30 patients for at least one of the measures included in the condition[5].

After calculating condition scores, there were 2,379 hospitals with a heart attack score, 3,093 with a heart failure score, and 3,141 hospitals for a pneumonia score. To examine hospital performance, we determined the distribution of composite scores for each condition by decile, and compared how different types of hospitals performed compared to the national performance levels.

We also looked at how hospitals would fare under two different pay-for-performance scenarios. Under Premier's three-year demonstration, the best performing hospitals are eligible for bonus payments in all three years of the project: the top 10 percent performing hospitals receive a bonus equal to two percent of federal Diagnosis-Related Group (DRG) payments made for discharges of patients with the relevant condition, and those hospitals performing between the 80th and 90th percentiles receive a one percent bonus. (The DRG system, in use since 1983 to determine federal Medicare payments to hospitals, currently classifies hospital episodes of care into approximately 538 categories which are determined by ICD-9 principal

---

[5] For example, consider the four quality measures summarized by the heart failure composite score. If a hospital reported data on 12 patients for the assessment of left ventricular function (LVF), 21 patients for the administration of ACE inhibitor for left ventricular systolic dysfunction (LVSD), 17 patients for smoking cessation counseling, and 30 patients for provision of discharge instructions, then the hospital would receive a composite score for heart failure. This is so because at least one of the measures (i.e., discharge instructions) included at least 30 patients. Given that a total of 80 patient observations are involved over the four measures, the 30 observations for smoking cessation would account for 37.5% of the composite score (30 divided by 80); and similarly for the other measures. If the discharge instruction measure had observations for only 29 patients, the hospital would not be given a composite score for heart failure.

diagnoses, major surgical procedures, comorbidities or complications, and other factors).

Under the Premier demonstration, penalties – two percent for hospitals in the bottom 10th percentile and one percent for hospitals above that but below the 20th percentile – are assessed only in the third year. The penalty thresholds are established by the composite scores that define the bottom percentiles in the first year of the demonstration project and remain fixed. In effect, hospitals have two years to surpass this level and avoid a penalty in the third year based solely on their ability to improve their score above this fixed threshold, regardless of how well or poorly they do compared to their peers in the third year. As modeled for this paper, however, because data is available for only two years, the penalty thresholds were based on percentiles in the 2004 data and penalties were assessed based on performance in 2005 after only one year of improvement.

Bonus payments, on the other hand, are determined annually; i.e., the thresholds are moving targets, both in the Premier demonstration and as modeled here. To be eligible for a bonus payment, a hospital must be in the top 10 percent or 20 percent of hospitals' composite scores during the concurrent year. Bonuses and penalties are applied only to base DRG payments in the applicable ICD-9 codes for each condition[6]. We adjusted DRG payments to ensure budget neutrality due to the fact that payment enhancements related to performance likely are to be taken from funds that otherwise would have been paid for such services since there is an ongoing budgetary concern about increasing Medicare spending.

The alternative attainment and improvement model presented here assumes that payments in the affected ICD-9 codes concerning heart failure, heart attack and pneumonia are reduced, across-the-board, by one percent to establish a bonus pool. Hospitals are eligible to earn bonuses in two ways: how well they perform compared to other hospitals (for purposes here an attainment bonus); and how much their performance improves year to year (for purposes here an improvement bonus). Half of the bonus pool is reserved for attainment, and half for improvement.

---

6. As noted earlier, payment data are from the FY 2005 MEDPAR file. The paper also follows the Premier demonstration's policy to apply the bonuses and penalties to the base DRG payments after wage index adjustment but not including indirect teaching, disproportionate share or outlier payments.

Bonuses for attainment are awarded to those hospitals in the 80th and 90th percentiles for each condition score. Bonuses for improvement are awarded to those hospitals in the 80th and 90th percentiles for rate of improvement in performance metrics from 2004 to 2005. For both attainment and improvement bonuses, hospitals in the top group (above 90th percentile) get a percent bonus that is twice the percent bonus given to the lower (80th percentile) group.

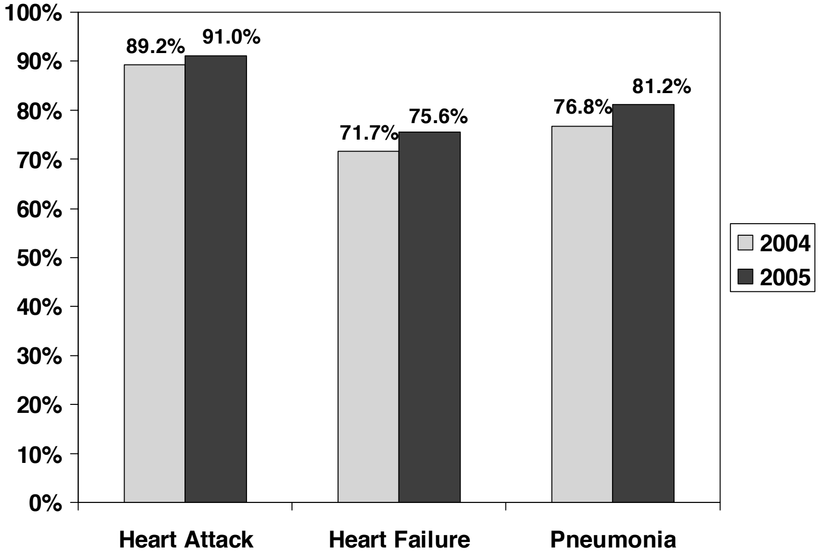
Under this approach, there is no explicit penalty. However, a hospital can lose money because it may not earn back in bonuses the one percent of payments that it contributed to fund the bonus pool. On the other hand, top-performing hospitals can benefit by earning bonuses that exceed the upfront contribution.

While in both cases only top-performing hospitals are rewarded, different incentives are provided. The Premier approach rewards solely on the basis of attainment relative to other hospitals; while the second approach rewards on the basis of attainment and improvement. As a result, hospitals with the lowest scores have a greater incentive to improve under the latter approach. For this reason, the second approach is significantly more politically palatable to hospitals as it provides all hospitals an opportunity for reward– those with scores at the top, middle and bottom.

RESULTS

As noted in figure 2, in general, comparing 2004 and 2005 performance metrics, U.S. hospitals improved their overall performance for all three conditions.

Figure 2: National Mean Scores by Condition, 2004 and 2005



Analysis conducted by Health Policy Alternatives & Direct Research LLC, October 2006

Moreover, for all three conditions, the gap between the best performing and worst performing hospitals narrowed in 2005 when compared with 2004 (Figure 3). Specifically, for heart attack, the difference in the mean condition score between the top 20 percent of hospitals and the bottom 20 percent narrowed by 2.3 percentage points; and for heart failure, that gap between the best and worst performing hospitals narrowed by 1.2 percentage points. For pneumonia measures, the gap narrowed by 1.7 percentage points.

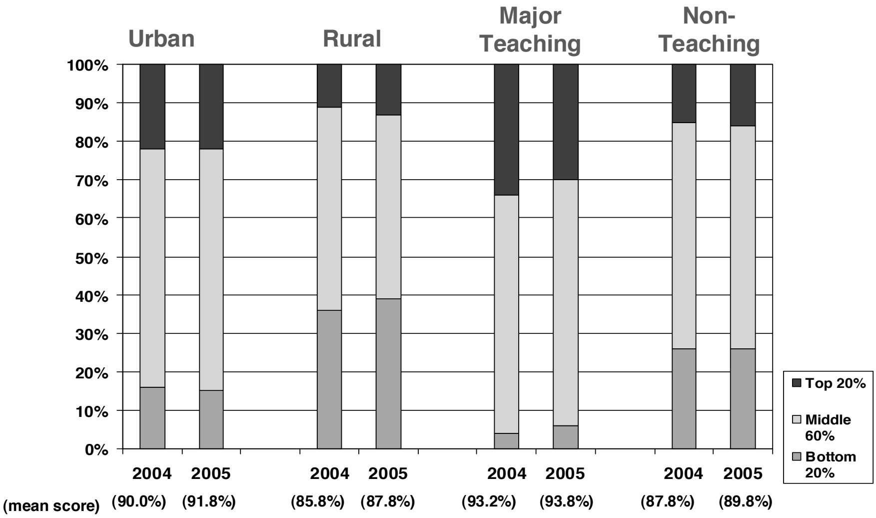
Figure 3: How Much Did Hospital Performance Improve From 2004 to 2005?
Gap Between the Worst and Best Levels

Condition	2004			2005			**Change in Gap 2004-2005**
	Percentile		**Gap**	**Percentile**		**Gap**	
	20th	**80th**		**20th**	**80th**		
Heart Attack	84.0%	95.3%	11.3	87.0%	96.0%	9.0	2.3
Heart Failure	59.3%	85.3%	26.0	63.3%	88.1%	24.8	1.2
Pneumonia	70.6%	84.0%	13.4	75.7%	87.3%	11.7	1.7

Analysis conducted by Health Policy Alternatives & Direct Research LLC, October 2006

We also found that among all three conditions, hospitals of all types improved their mean scores. As shown in Figure 4, between 2004 and 2005 mean scores improved for most types of hospitals for heart attack care, with urban and non-teaching hospitals (for the purposes of this paper, non-teaching includes hospitals that have a minor teaching component) making the most gains. Though major teaching hospitals continued to have higher absolute mean scores in 2005, their representation in the top two deciles for heart attack declined because the mean scores for non-teaching hospitals increased at a faster rate.

Figure 4: Heart Attack – 2004/2005

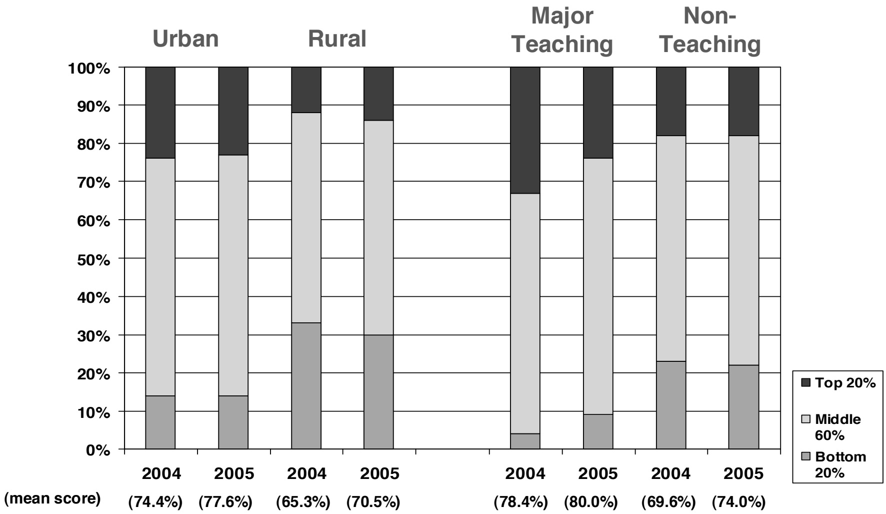


Analysis conducted by Health Policy Alternatives & Direct Research LLC, October 2006

Rural hospitals were more likely to be among the lowest performers for treating patients with heart attacks, with nearly 40 percent in the bottom two deciles. At 87.8 percent, however, the mean heart attack score for rural hospitals was only slightly below the 91.8 percent average of urban hospitals.

Results for the heart failure condition show a similar pattern to heart attack, as seen in Figure 5. Major teaching and urban hospitals stand out among top performers, while non-teaching and rural hospitals were more likely to be among the bottom 20 percent of scorers. Though major teaching hospitals continued to have absolute higher scores, in 2005 they declined as a percentage of the top two deciles for heart failure.

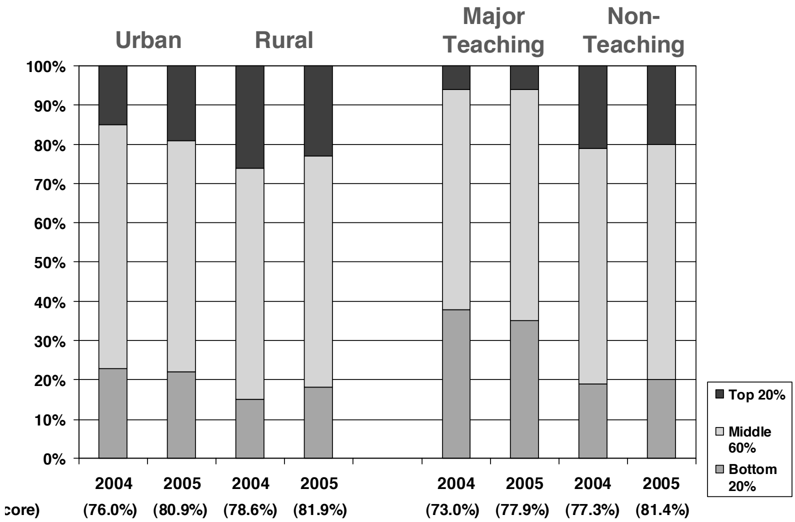
Figure 5: Heart Failure – 2004/2005



Analysis conducted by Health Policy Alternatives & Direct Research LLC, October 2006

Pneumonia care represents a different story for urban hospitals, however, as shown in Figure 6. In this case, rural hospitals in 2005 continued to have a higher mean score for pneumonia patients compared to urban hospitals. For this condition, major teaching hospitals, usually located in urban areas, also were more likely to score poorly: about 35 percent had scores among the bottom 20 percent while only about five percent of major teaching hospitals had pneumonia scores among the top 20 percent.

Figure 6: Pneumonia – 2004/2005

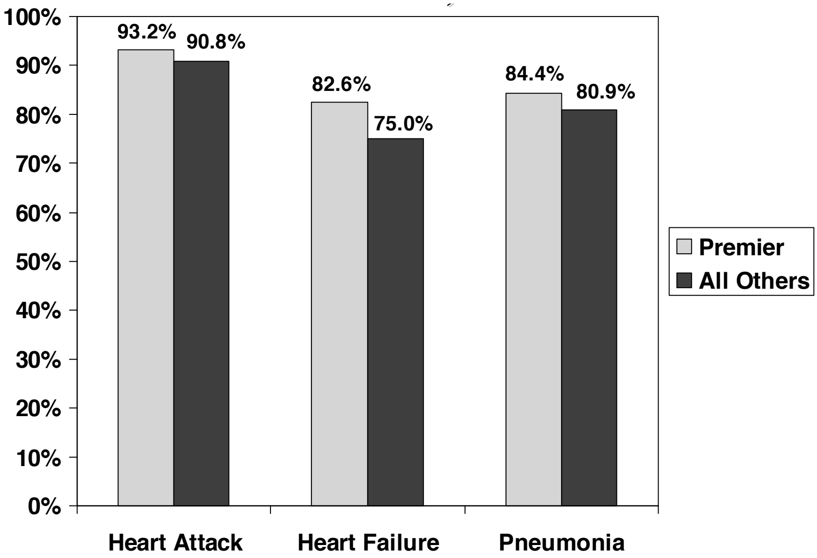


Analysis conducted by Health Policy Alternatives & Direct Research LLC, October 2006

The rate of improvement varied by type of hospital and condition. As noted above, on average, non-teaching hospitals showed more improvement in their performance in the area of heart attack than did teaching hospitals. Likewise, the mean urban hospital condition score for pneumonia improved more than that for rural hospitals (4.9 percentage point gain vs. 3.3 percentage point gain, respectively). However, without further analysis, it is difficult to attribute hospital type and performance. Still, as explained below, groups of hospitals may experience significant, collective financial consequences depending upon how P4P programs are designed.

Hospitals participating in the Premier payment demonstration, for their part, clearly had superior performance on all three conditions compared to hospitals that reported measures to Hospital Compare, as seen in Figure 7.

Figure 7: Mean Condition Scores for Premier Hospitals and All Others, 2005



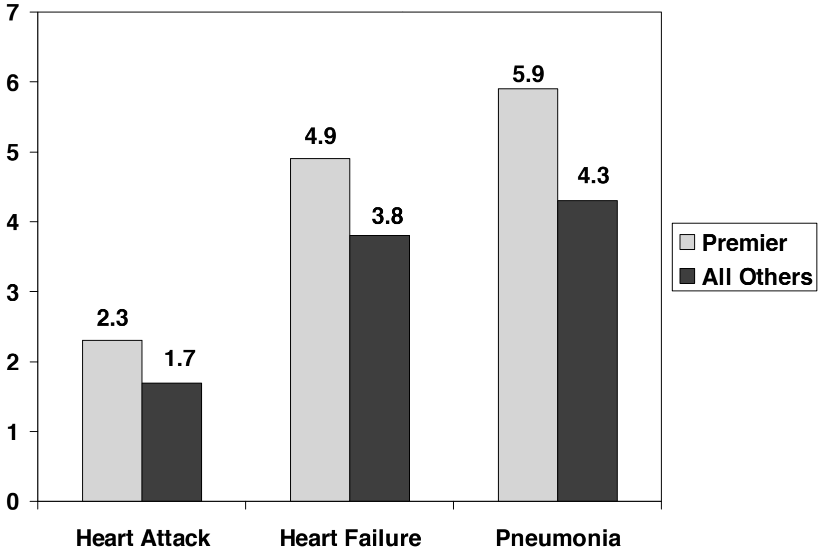
Analysis conducted by Health Policy Alternatives & Direct Research LLC, October 2006

Between 2004 and 2005, Premier hospitals also improved more than other hospitals, particularly on pneumonia and heart failure, as seen in Figure 8.

These results are not entirely unexpected given that the Premier hospitals have an additional year's experience in reporting on these quality measures, though it should be noted that all of the nation's hospitals experienced improvement in their performance scores and have no explicit financial incentive to improve.

The differences between the Premier hospitals and others are consistent and meaningful. The relatively small absolute difference for the heart attack condition reflects the tighter distribution of the scores for this condition, which had a median score of 92.6 percent. (Median scores for heart failure and pneumonia were 77.7 percent and 81.8 percent, respectively.)

Figure 8: Percentage Point Improvement in Mean Condition Scores for Premier Hospitals and All Others, 2004-2005



Scores for specific measures within the composite scores, summarized in Figure 9, offer some insight into the source of differences among top and bottom performing hospitals[7]. Because not all measures apply to all patients within a condition, the measures that have the greatest influence on variation in the condition score are those that also involve a relatively large proportion of patients.

---

7. Discussion of these measures and additional analysis of variation in scores among hospitals was recently published. See A. Jha et al., "Care in U.S. Hospitals—The Hospital Quality Alliance Program," N Engl J Med 355, no. 3 (2005): 265-274.

Figure 9: Measures Driving Condition Scores and Payments

	Mean Condition Score		
	Top 20%	Bottom 20%	Gap
Heart Failure			
Discharge Instructions	88.0%	23.1%	64.9%
Adult Smoking Cessation	95.2%	61.3%	33.9%
Pneumonia			
Pneumococcal Vaccination	85.2%	30.2%	55.0%
Adult Smoking Cessation	91.0%	61.0%	30.0%
Heart Attack			
Adult Smoking Cessation	97.1%	76.0%	21.1%
ACEI or ARB for LVSD	92.5%	68.0%	24.5%

For example, the pneumococcal vaccine and adult smoking cessation measures contribute the most to the variation in condition scores for pneumonia. Scores for the pneumococcal vaccination measure varied considerably, with a difference of 55 percent between average scores for top and bottom performing hospitals.

For heart failure, variation in condition scores was caused mostly by the discharge instructions and adult smoking cessation measures. Hospitals with heart failure scores in the bottom 20 percent averaged only 23.1 percent on this measure, compared with 88 percent for hospitals with heart failure scores in the top 20 percent.

For heart attack, performance on individual measures was better and varied less than for the other conditions. The adult smoking cessation and ACE or ARB inhibitor for left ventricular systolic dysfunction (LVSD) were the most important measures accounting for variation in the heart attack score. Scores were lowest and differed most on ACE or ARB inhibitor for LVSD, but this measure involved fewer patients. Poor performance on this measure may be due partially to clinical controversy over the appropriateness of the ACE inhibitor intervention for these patients and the subsequent January 1, 2005 change in this measure allowing either

ACEI or ARB. Changes in a measure's specifications can cause confusion and additional time to retrain clinical personnel as well as abstractors, so that scores may vary more due to what is reported and abstracted rather than by the care that actually was provided[8].

In terms of P4P modeling, applying the Premier P4P methodology to all hospitals with sufficient cases yielded total bonus payments of $ 53.4 million in 2005, as seen in Figure 10. For rural hospitals, bonuses and penalties in aggregate nearly offset each other but after considering the adjustment for budget neutrality, their payments decreased. Urban hospitals gained in the aggregate with relatively little difference between major teaching and other hospitals.

Figure 10: Budget-Neutral Premier (millions)

	2005			
	Bonus	Penalty	Pool Contribution	Net Financial impact
National total*	**$53.4**	**$28.6**	**$24.8**	**$0.0**
Urban	$47.6	$23.2	$21.8	$2.7
Rural	$5.8	$5.4	$3.0	$-2.6
Major Teaching	$10.2	$4.9	$5.3	$-0.1
Non-Teaching	$43.2	$23.7	$19.5	$0.1

*National totals comprise two hospital categories: urban/rural and major teaching/minor teaching & non- teaching; each category sums to the national total Analysis conducted by Health Policy Alternatives & Direct Research LLC, October 2006

---

[8] Controversy among physicians regarding the appropriate use of Angiotensin Converting Enzyme Inhibitors (ACEI) versus ARBs (Angiotensin Receptor Blockers) led to a change in this measure. Beginning in January 2005 the use of either treatment is permitted. At the time these data was collected, many medical staffs were resisting use of ACEI.

Under the alternative attainment and improvement scenario, as seen in Figure 11, the total contribution of teaching hospitals to the 1 percent pool—$ 36.6 million—is greater than the bonuses they receive, resulting in a net loss of $ 3.7 million. Non-teaching hospitals, by contrast, have a net financial gain of $ 3.7 million.

Figure 11: Budget-Neutral Attainment and Improvement (millions)

	2005			
	Attainment Bonus	Improvement Bonus	Pool Contribution	Net Financial impact
National total*	**$84.9**	**$84.9**	**$169.9**	**$0.0**
Urban	$76.3	$72.1	$149.0	$-0.6
Rural	$8.6	$12.8	$20.8	$0.7
Major Teaching	$19.0	$13.9	$36.6	$-3.7
Non-Teaching	$65.9	$71.0	$133.3	$3.7

*National totals comprise two hospital categories: urban/rural and major teaching/minor teaching & non- teaching; each category sums to the national total
Analysis conducted by Health Policy Alternatives & Direct Research LLC, October 2006

Our comparison of the potential impact of the budget-neutral Premier approach versus the attainment and improvement approach shows that the latter has a much greater dollar impact. The primary reason for this is the relatively large pool of funds created by a one percent set-aside—$ 169.8 million in 2005 ($ 84.9 million for attainment and $ 84.9 million for improvement)—together more than three times the total $ 53.4 million bonus under the Premier approach.

The attainment and improvement approach redistributes a set amount of funds collected from all hospitals and paid back as bonuses to the better performers. The Premier approach, however, pays bonuses and imposes penalties, and the aggregate effect depends on the level of payments made to the "winning" and "losing" hospitals. In addition, under the Premier approach, hospitals are given a period of time to improve performance to a known threshold and thereby avoid penalties.

Despite relying on the same quality measures, the two approaches vary in their effects by hospital type. Based upon the two options as modeled, rural hospitals would fare better under the attainment and improvement approach, while urban hospitals would fare better under the Premier budget neutral approach. Under the attainment and improvement approach, urban hospitals, which would contribute the vast majority to the pool, do not earn enough in bonus payments to make up these contributions for two reasons. First, although they receive bonus payments for their strong performance on the heart attack and heart failure measures, their poor performance on the pneumonia measure results in a slight net loss of $ 600,000. Second, major teaching hospitals experienced relatively small improvement between 2004 and 2005 compared to other types of hospitals, notwithstanding their overall superior performance.

LIMITATIONS OF ANALYSIS AND FUTURE RESEARCH

Given that quality data were available for only two years and that reporting such data is new to hospitals, this analysis is inherently preliminary and implications should be considered with caution.

Future analysis of quality measures will benefit from additional data and more hospital experience with the measures. Multivariate analysis also would further our understanding of which hospital characteristics contribute most to variation in hospital performance. In particular, in this univariate analysis, variation by region is difficult to interpret or to distinguish from differences by bed size or teaching status. Finally, examination of variation in patient mix and clinical practices may shed light upon the strong performance of rural hospitals in caring for pneumonia patients relative to other hospitals and other conditions.

Despite current interest in using payment-based incentives to improve the quality of care, considerable additional research and further demonstrations could enhance their effectiveness. A demonstration, for example, might study quality improvement over several years using payment-based incentives compared to reporting-only payment incentives or management-improvement only approaches.

In the future, we will have additional data from the Hospital Consumer Assessment of Health Plan Survey (HCAHPS) measuring patient experience of their hospital care, as well as outcomes data measuring mortality and infection prevention. With the mortality data, we can determine the extent to which there are correlations with the process measures studied in this paper. We can also observe the extent to which financial incentives given to Premier hospitals affected performance on these outcome and patient safety measures.

CONCLUSIONS AND IMPLICATIONS

It is hard to overstate the dramatic efforts that have been undertaken in the United States toward quality improvement in the past few years. Virtually all hospitals in the United States not only are reporting their scores on a common set of quality performance measures, but on average, they also are improving their scores. Considering that only five years ago there was no national mechanism for hospitals to report measures, these actions represent significant progress.

The assumption that public disclosure of hospital performance, based on objective and empirical measures, will increase hospital accountability and thereby improve quality, appears to be supported by an analysis of the two available years of data from Hospital Compare. Hospitals are committed to publicly reporting quality performance measures. Our research, however, does not examine the causal factors of these improved hospital performance scores. For example, did collecting and reporting the measures lead healthcare professionals to change policies, procedures and their culture to improve? What was the extent to which hospitals made improvements out of concern that their reputations would be hurt if they were to fall in the bottom deciles? To what extent did more experience in simply collecting the data play a role? To what extent were improved scores the result of hospitals driven by the desire for full payment under Medicare and/or the threat of linking more measures to reporting or payment in the future? While all of these factors probably played some role, we cannot speculate as to which were the most important factors.

It probably is the case that hospitals should have real or near-real time information about performance to most efficiently and effectively improve care. Unfortunately, it takes approximately nine months from the time data are submitted before hospitals can view published scores – their own and those of all hospitals – on Hospital Compare. Clearly, if the process for submitting, collating and receiving individual hospital and comparative data could be accelerated, hospitals could move more quickly to implement policies and procedures to bolster their performance.

Another reporting challenge concerns the number of performance measures coming into the reporting pipeline, not just from federal requirements, but from others as well, such as states and private payers. As seen in Figure 1, the number of measures hospitals are required to report under federal mandates has more than doubled in three years. At some point, as the number of measures continues to increase, hospitals' attempts to make meaningful gains in quality and safety will be hampered by the burden of collecting and reporting measures. Clearly a review of measures, and the possible retirement of some of them, should be a major consideration of policymakers and quality experts. Policymakers should also focus on ways to make the current reporting process more efficient. Lastly, policymakers and quality experts need to create more understandable, composite measures to help consumers make easier and more meaningful decisions.

The Premier Demonstration working assumption—that financial incentives may result in improved quality scores, not just whether they report scores—appears to be supported based on the limited data to date. Premier hospitals had higher absolute scores across all three conditions compared to all hospitals nationally, and they improved these scores at a higher rate between 2004 and 2005. However, it also is noteworthy that the nation's other hospitals also improved their quality scores between 2004 and 2005 based on the reporting requirement alone. Our analysis does not enable us to determine whether, and to what extent pay for performance, longer experience, self-selection, or other factors may have contributed to better performance by Premier hospitals.

Any pay-for-performance program inherently involves a number of policy choices and judgments. While the quality measures are evidence-based and supported by clinical science, collapsing the measures into composite scores and specifying bonus and penalty formulas is, while well-intentioned, ultimately an arbitrary and subjective process that is not yet grounded in a clear, well-established scientific foundation. Indeed such an approach may even result in illogical and unintended consequences that could undermine, rather than advance, improvements in quality care across *all* clinical services.

Many questions arise: Should the measures be equally weighted in calculating the composite scores? What is the relative role of outcome and process measures, and how should the outcome measures be risk-adjusted? How will the bonus payments or penalties be determined? As our two simple simulations show, these are not trivial questions because their answers will determine how payments are redistributed and who wins and loses. Our modeling approaches found that very small differences in hospitals scores can determine whether a hospital received a bonus, and that some high performing hospitals did not receive bonuses for percentage improvement because the rate of improvement declines as condition scores near 100 percent. We also found that performance on a number of measures (not conditions) were all above 90 percent. Should hospitals be rewarded on measures when virtually everyone is performing very well?

Ultimately, there is the potential that any pay-for-performance program could be seen as arbitrary and not directly linked to, or predictive of, high quality care. More troubling, rather than creating a culture of quality, pay-for-performance could lead to distortions in reporting or misplaced quality improvement efforts driven primarily by bonus payments. Such developments could lead to the unintended consequence of narrowly focused interventions at the expense of broadly improving care.

Consequently, policymakers should be extremely careful in designing P4P programs to encourage attainment and improvement while attempting to minimize seemingly arbitrary demarcations separating hospitals with marginal differences in their reporting scores (a hospital in the 79th percentile vs. the 80th percentile, for example). In selecting from the panoply of P4P approaches, policymakers should also take into account that there are and will be significant re-distributional effects.

Regardless of the initial P4P approach taken, if it is to serve as a long-range model, it must be flexible and able to respond nimbly to the above challenges. For example, if most hospitals achieve 99 percent compliance in a given measure, policymakers may consider requiring hospitals to report it but not make it part of a P4P scheme. In other words, P4P may encourage hospitals to accelerate performance but once hospitals achieve and maintain a high level, policymakers should be prepared to consider new measures to take the place of old ones, and new approaches to achieving the goal we all share-value-based purchasing.

REFERENCES

AQA (2006). "AQA Adopts Additional Standard Quality Measures For Practitioners in 25 Surgical and Medical Specialties," press release, November 15, 2006.

Centers for Medicare and Medicaid Services (2006). *FY 2005 Final Rule Impact File.* Retrieved October 1, 2006, from http://www.cms.hhs.gov/providers/hipps/ippspufs.asp

Federation of American Hospitals/American Hospital Association/Association of American Medical Colleges (2002). *Hospitals and Quality Measurement: A Time for Leadership*. Quality Advisory, December 12, 2002.

HHS (2003). "HHS To Launch Medicare Demonstration To Promote High Quality Care In Hospitals," press release, July 10, 2003.

Kahn, C., Ault, T., Isenstein, H., Potetz, L., & Van Gelder, S. (2006). Snapshot of hospital quality reporting and pay-for-performance under medicare. *Health Affairs* 25(1), 148-162.

National Voluntary Hospital Reporting Initiative (2003). Hospital Reporting Fact Sheet, October 9, 2003.

Rosenthal, M. B., Landon, B. E., Normand, S.-L. T., Frank, R. G., & Epstein, A. M. (2006). Pay for performance in commercial HMOs. New England Journal of Medicine, 355, 1895-1902.

Israeli Health Care at Middle Age: A Tale of Stagnation or Dynamism?

> Bruce Rosen
Smokler Center for Health Policy Research,
The Myers-JDC-Brookdale Institute

INTRODUCTION

In their book "European Health Care Reform," Richard Saltman and Josep Figueras distinguish between normal evolutionary system change and fundamental structural reforms (Saltman & Figueras, 1996). They define reform as "a process that involves sustained and profound institutional and structural change, led by government and seeking to attain a series of explicit policy objectives." Saltman and Figueras acknowledge that "important and significant structural shifts can take place without any deliberate intervention by governments," but like many other health policy analysts they nonetheless focus their attention on government-driven reforms.

This paper seeks to raise questions about health policy analysts' intense focus on government-driven reforms in their efforts to document and understand health system change. The paper does so through a consideration of the extent to which the Israeli health system has changed (and the extent to which it has remained static) in the period since the introduction of National Health Insurance (NHI) in 1995, with special attention to the period between 1998 and 2005.

Note that the NHI law, which provided for universal access to a benefits package prescribed by law, was considered one of the most significant and far-reaching pieces of social legislation in Israel in recent decades. It provided for managed competition, greatly expanded the role of government in health care financing, introduced capitation financing to reduce incentives for cream skimming, and more (Rosen, 2003).

Clearly, this was a hard act to follow. After such a fundamental change in health system financing and organization, it would be hard for any change, whether governmental or non-governmental in origin, to be perceived as anything more than incremental, derivative, and perhaps even marginal.

Moreover, since 1990 public discourse on the nation's health policy agenda has been largely shaped by the recommendations of the Netanyahu Commission, a highly distinguished panel appointed by the cabinet (State Commission, 1990). Several "larger-than-life" health system leaders who participated in that commission and/or in a variety of related implementation efforts, have articulated a compelling vision of what further changes are needed in the Israeli health system, and what types of changes would be viewed as important. These leading figures in Israeli health care also succeeded in inculcating a conceptual frame through which many health care leaders and analysts have viewed subsequent health system developments.

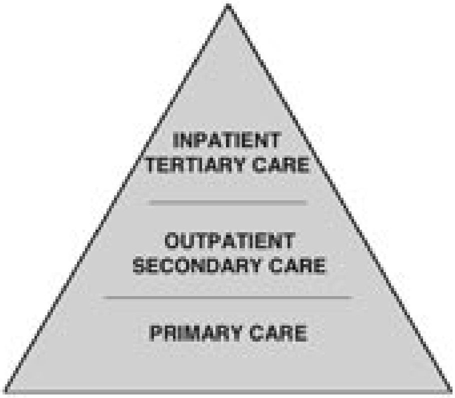
Our own story begins in 1998, a traumatic year for Israeli health care. This was the year in which, according to most health care professionals, new legislation offset many of the gains achieved by the NHI law (Rosen, 2003). Compounding the trauma, 1998 was also the year in which Israeli health care, along with the rest of the country, reached age 50 – the State of Israel having been established in 1948. Middle age raised the specter of impending stagnation.

Several analysts have suggested that, during the period from 1998 to the present, Israeli health care has been characterized largely by stagnation. They note that several major reforms considered essential by the 1990 Netanyahu Commission and by the 1995 NHI law have not materialized. Furthermore, they contend that growing government regulation has stifled creativity and dynamism on the part of health plans, hospitals and other key providers. In short, they tell a narrative of stagnation.

This paper presents a more complex story regarding the past decade, incorporating elements of both stagnation and dynamism. Like the stagnation narrative, it acknowledges that not all the dreams have come true, that not all the problems have been solved, and even that, in some ways, things may be getting worse. Yet, our presentation includes a complementary narrative of dynamism. It highlights important positive changes in government policy, and, even more so, in the way health care is being managed and delivered by non-governmental providers. Moreover, it identifies important links between these macro - and micro-level changes. In doing so, the paper explores the implications of the two narratives for government regulatory policy and for executive compensation levels. Finally, the paper raises questions (whose ramifications go far beyond Israel) about the relative contributions to health system performance of structural as opposed to evolutionary change and of governmental as opposed to non-governmental action.

The classical health care pyramid is displayed in *Figure 1*. It makes the point that most patient contact with the health system is with primary care providers. This point is important to make because most media and public attention tends to focus on high-tech and life-saving tertiary care, despite the fact that such care constitutes only a small part of the population's interaction with the health system. Moreover, the pyramid suggests that, because primary care touches so many people, it may actually have a greater impact on population health than does tertiary care (Saltman et al. 2006).

Figure 1: The Care Pyramid



Myers-JDC-Brookdale Institute, Smokler Center for Health Policy Research

Figure 2 – "The Health System Change Pyramid" – seeks to make several analogous points. It suggests that while public attention is often focused on changes originating at the policy level, more changes actually originate at the management and clinical levels. Moreover, it may be that those latter

changes actually have more of an impact on the overall functioning of the health system, and on population health, than do changes at the policy level.

Figure 2: The Health System Change Pyramid

Myers-JDC-Brookdale Institute, Smokler Center for Health Policy Research

However, if that is the case, why is it that so much of the attention of health system experts is focused on policy changes? Several explanations are possible. In part, policy changes attract attention because they are indeed of critical importance for the functioning of the system. It really does matter who owns and operates various services, what financial incentives they face, etc. Moreover, as policy decisions are made by popularly elected governments which are expected, at least in some sense, to reflect the will of the people, it is only natural that public interest, public policy and democratic processes should focus on the policy decisions. Clearly, the public expects to have more of a say in these decisions than in the managerial decisions of particular hospitals or health plans.

However, along with these substantive considerations, there may be additional factors that contribute to the experts' focus on changes emanating from the policy level. It may be that policy changes attract more attention because they are more conflictual, and hence more interesting. It may also be that, in comparison with changes at the operational level, the study of policy changes is more suited to the skills of analysts trained in economics and political science. Finally, it may simply be easier for outsiders to study policy changes than operational changes.

In assessing the extent to which important changes in the system are driven by government, it is useful to consider separately the various objectives and levers of system change. As indicated in *Figure 3*, decisions about entitlements and funding levels are almost exclusively the domain of government. In contrast, both the government and the health plans make a variety of decisions related to prioritization, equity and access. Finally, when it comes to the quality of care, responsiveness to consumers, efficiency and cost containment, the health plans (at least in Israel) probably have even more influence than government. Some of the focus on government-initiated reforms may have originated with analysts whose primary policy interests related to entitlements and funding levels. In contrast, if we are interested as well in such outcomes as quality of care and responsiveness, we must also consider changes driven by non-governmental actors.

Figure 3: Who Can Play a Major Role in Addressing Concerns?

CONCERN	GOVERNMENT	HEALTH PLANS
ENTITLEMENTS	+	
FUNDING LEVELS	+	
PRIORITIZATION	+	+
EQUITY / ACCESS	+	+
EFFICIENCY & COST CONTAINMENT	+	++
QUALITY AND RESPONSIVENESS	+	++

Myers- JDC-Brookdale institute Smokler Center for Health Policy Research

THE STAGNATION NARRATIVE

In articulating a stagnation narrative, I have drawn from the written and oral comments of several Israeli health care experts, including Arie Shirom, Rachel Kaye and Tuvia Horev (Shirom, 2006; Kaye & Roter, 2001; Horev & Badad, 2005). However, it would be inaccurate and unfair to attribute the narrative as a whole to any one commentator. Indeed, included in this narrative are several components that I cannot attribute to any particular person; my sense is that they are already part of the public discourse, but in fact, some might be creations of my own.

The stagnation narrative has four major components: unfulfilled dreams, increased regulation and "nationalization," backtracking on "the vision" and the observation that the Israeli health system continues to be beset by many significant problems. Each of these will be considered in turn.

1. Unfulfilled dreams

The 1995 NHI law called for the transfer of three key services from the government to the health plans - mental health, inpatient geriatric care, and mother and child preventive services. However, instead of enacting the transfer immediately, the legislature gave the health plans three years to prepare for the change. Subsequent legislatures have repeatedly delayed the transfers (Rosen, 2003) and, as of this writing in 2007, all three of the services are still being provided by the government.

Another unfulfilled dream had its roots in the Netanyahu Commission. The Commission had called for spinning off the government hospitals and reconstituting them as independent, non-profit, institutions. Despite a major attempt to implement this change in the early 1990s, and several lesser attempts since, the government hospitals remain squarely within the jurisdiction of the MOH (Shirom, 2006).

2. Increased nationalization and regulation

In the 1998-2005 period, the government limited the freedom of action of the health plans in several key areas (Horev & Badad, 2005), including:

- The size of their marketing and development budgets
- The content, pricing and limitations of their supplemental insurance policies

- The levels of their co-payments
- Their constitutions and governance systems

According to some analysts, these regulations have been so pervasive as to turn health plan executives into mere administrators rather than managers with the capacity to make any real differences in health care quality or costs. This claim, by the way, raises questions about the appropriateness of paying high salaries to health plan executives. High executive salaries are usually associated only with leadership roles in those organizations in which the top jobs bring with them the ability to innovate and the responsibility to do so.

3. Backtracking on "The Vision"

Many health care analysts have argued that one of the main objectives of NHI was to advance health system equity. However, they argue, since 1998 various changes have been made which erode the equity gains associated with the original legislation (Epstein, Goldwag, Ismail, Greenstein, & Rosen, 2006). These changes include the introduction of co-payments for visits to specialists, the increase in the level of co-payments for pharmaceuticals, and the reduction in the government's role in health system financing. Some analysts also cite the cancellation of the employer health tax in 1996. While that revenue source was replaced by an increase in the allocation of general revenues to health, they argue that this move from earmarked to non-earmarked funds has increased the capacity of the Finance Ministry to erode public funding of health care (Bin Nun, Berlovitz, & Shani, 2005).

4. The system has many problems

Analysts who try to make the case that the Israeli health system is stuck, often cite a series of longstanding, serious problems facing the health system. These include an overall shortage of funds, the lack of entitlement to dental care, and widespread inequalities in health and health care (Horev & Badad, 2005; Shirom, 2006).

Of course, the persistence of problems is not a proof of stagnation. After all, even the most dynamic health systems have not achieved full equality or funding surpluses. Still, the lack of progress on these mega-issues, and perhaps even more so, the pervasive sense that little progress is likely in the foreseeable future, does suggest that a certain malaise has set in.

Chapter summary

The persistence of problems thus reinforces the despair engendered by unfulfilled dreams, the growth in regulation, and the backtracking on the vision articulated by the Netanyahu Commission. Together, they form a powerful narrative of stagnation.

THE DYNAMISM NARRATIVE

Yet, that is far from the whole story. Indeed, one can tell the story of Israeli health care since 1998 in a very different way, via a narrative that emphasizes the system's dynamism. The dynamism narrative highlights changes driven by the health plans, but also cites important changes led by government and other key actors. It talks about how the health system has responded to new challenges originating from outside the system and about the rumblings of possible future changes emanating from within the system. In this telling of the tale, I will focus on the role of health plans, but it is likely that many parallel points could be made about the hospitals.

1. Health-plan driven change

In the period since 1998, the health plans have made major programmatic and organizational changes that have far-reaching consequences for quality of care, efficiency levels, population health, and equity. Some of these changes have been common to all four health plans, while others have characterized only one or two of the plans. Taken together, they help explain why leadership roles in health plans constitute challenging work, worthy of the high compensation levels that distinguish these posts.

Some of the major programmatic changes include:

- The shifting of a large portion of specialty care from hospitals to the community (Rosen et al, 2003b)
- Strengthening the role of primary care physicians as coordinators of care and as the patients' personal resource (Tabenkin, Gross, Bramli-Greenberg, Steinmetz, & Elhayany, 2001)
- The targeting of special care programs to address the needs of various vulnerable, and often expensive, groups of patients (such as those suffering from diabetes)

- A major growth in health promotion and disease prevention activities (Epel-Baron & Heymann, 2006)
- Expansion of activities in the area of complementary health care

No less important has been a wide range of organizational and infrastructural changes, including:

- The expansion of management information systems, including innovations in the use of electronic health records which have made Israel a world leader in the field
- Decentralization of management responsibility in a way that has emphasized structured business plans, results measurement, and accountability (Elhayany, 2006)
- Improved utilization control and financial control
- A growing emphasis on health care quality in operational and strategic management
- The introduction of a wide range of new medical technologies, including some which had not yet been approved for government funding
- The development of new supplemental insurance options (Brammli-Greenberg, Gross, & Matzliach, 2007)

It is important to note that some of these developments within the health plans have been encouraged by various government policies, some of which were enacted prior to 1998 and others since then. For example, the introduction by the government of a mini-DRG system for hospital reimbursement has encouraged the health plans to exercise a more refined system of utilization control with regard to hospital admissions. Similarly, the 1998 limitations on marketing activities and advertising expenditures may have encouraged the health plans to focus more of their energies on their core mission: providing high quality health care within a budget constraint. Intelligent regulation can spur certain types of innovation, even as it dampens other types.

2. Government driven change

While the health plans have been the major engine of change in the post 1998 era, government has also been an important source of dynamism. Key changes introduced by government include:

- Reforming the mental health system through the development of community-based rehabilitation services and substantially downsizing the psychiatric hospital system (Aviram & Rosenne, 1998)
- Promoting the expansion of the institutional long-term care system and improving the quality of care in institutions, to better meet the needs of an aging population
- Introducing major changes in the hospital reimbursement system, with the objectives of enhancing efficiency and cost control (Shmueli, Intrator, & Israeli, 2002)
- Introducing an innovative and structured process for prioritizing new technologies (Shani et al, 2000)
- Improving the reporting and regulatory mechanisms for health plans and hospitals
- Creating over 20 national medical advisory councils, through which many of Israel's leading professionals provide input into government policy
- Introducing greater competition into the retail pharmaceutical market (Rosen, 2003)
- Legislating restrictions on smoking in public places and taking other significant steps to improve public health

3. Changes led by other actors

Other important changes are being led by a variety of non-profit organizations, including universities and research centers. These include:

- The development of national information systems on health care quality and health status
- The Israel Medical Association's growing involvement in the development of health policy
- A multi-faceted effort to reduce child injury rates
- The development of the Israel National Institute for Health Policy and Health Services Research, which has fostered the growth of the nation's health policy and health care research communities
- The mushrooming of schools of public health and health management programs

- The creation of "Health Parliaments" as a mechanism for securing the input of the general public on complex health policy issues, in a manner that is both informed and democratic

Some of these developments in academia and elsewhere have contributed much to the above listed changes led by the health plans and government. For example, the development of a system of quality indicators by a group of researchers at Ben-Gurion University has contributed greatly to the efforts of government and health plans to improve quality of care.

4. Responding to challenges and opportunities from outside the Israeli health system

Even if a health system does not initiate changes, it will be forced to make them in response to new challenges and threats. In the period under consideration, the Israeli health system, like other health systems around the world, had to mobilize to respond to the growing HIV/AIDS epidemic and to prepare for possible flu pandemics. In addition, the Israeli system faced a unique challenge – the effective delivery of health care during the Hezbollah missile attacks on northern Israel during the summer of 2006. Substantial resources and creativity went into the health system's responses to all three of these challenges.

Developments outside the health system pose not only threats, but also opportunities. Perhaps the most significant in the period under examination has been the progress in telecommunications and computing. As noted above, the Israeli health system has responded to that opportunity by becoming a world leader in electronic health records.

5. Rumblings of future change

Until this point, I have focused on changes in policy and service delivery that have already taken place. As a dynamic system, Israeli health care is also preparing for future changes, including:

- The transfer of responsibility for mental health services from government to the health plans
- The development of national health targets and strategies for achieving them
- Public dissemination of comparative data on health care quality
- The establishment of a national electronic health record system,

which will provide for the appropriate flow of patient-level information among all the health plans and hospitals

- The expansion of community-based health care services for the elderly, including a variety of innovative models.

Chapter summary

In this chapter, we have presented several long lists of important health system changes, which taken together portray a highly dynamic health care system. The lists illustrate that some of the changes have been initiated by the health plans, while others were initiated by government or academia. Further, they highlight the fact that while many changes have already taken place, there are additional changes that are in advanced stages of planning. Clearly, in light of these lists, it is difficult to argue that post-1998 Israeli health care has been completely stagnant.

DISCUSSION

Why, then, has the public discourse been dominated by a sense of malaise? I would like to suggest several reasons for this.

First, and perhaps foremost, while many important changes have been taking place in Israeli health care, the stagnation narrative contains many elements of truth. Several potentially important macro-level changes that were recommended by visionary leaders have not been implemented. Serious health and budgetary problems remain. On some issues, the system appears to be moving backward and important gains have been eroded.

Second, our sense of malaise may be due to a focus on the areas of financing and entitlements, which have indeed been less dynamic than the areas of quality of care, responsiveness to consumers and efficiency.

Third, our sense of which changes are important may have been inordinately influenced by the visions articulated by the leading figures who served on the Netanyahu Commission and who led the NHI reform. Overwhelmed by the richness of their compelling vision, it has taken many of us time to see the importance of complementary visions. This tendency to allow the vision and actions of "founding fathers" to overshadow the work of later generations may be part of a broader Israeli tendency in this regard (Elon, 1983).

Finally, we may not have been paying enough attention to changes being led by the health plans, academia and other non-profits. Taken together, numerous moderate sized changes led by non-governmental actors can be as important for quality and equity as a limited number of major government policy changes.

The insufficient attention to system changes emanating from outside the government may be due in part to our tendency, in Israel, to be unduly influenced by writings from abroad. It may be that we have not been paying sufficient attention to some of the unique features of Israeli health care. Unlike most health systems, Israel's is based on health plans with full service responsibility and budget holding roles. These health plans are all non-profits. There are only four of them, and each is a huge organization serving over half a million people. All these features increase the potential for non-governmental actors to contribute to wide-scale innovation and leadership.

REFERENCES

Aviram, U., & Rosenne, H. (1998). Mental health policy and services in Israel – The planned reform following enactment of the National Health Insurance Law. *Society and Welfare, 18*(1), 161-189. (Hebrew)

Bin Nun, G., Berlovitz, Y., & Shani M. (2005). *The health system in Israel*. Ministry of Defense publishing.

Brammli-Greenberg, S., Gross, R., & Matzliach, R. (forthcoming). Supplemental insurance plans offered by the health plans: Analysis and comparison of baskets of services in 2006. Jerusalem: Myers-JDC-Brookdale Institute, RR-xx-07.

Elhayany, A. (2006). The use of medical quality indices as a performance enhancement tool for community clinics. In A. Porat & B. Rosen (Eds.), *Quality forum: Strategies for promoting quality of care in Israel*. Jerusalem: Myers-JDC-Brookdale Institute, 31-40. (Hebrew)

Elon, A. (1983). *The Israelis: Founders and sons*. London: Penguin books.

Epel-Baron, O., & Heymann, A. (2006). The responsibilities of the health system. *The Seventh Dead Sea Convention – Health Behavior as a National Goal*. The Israel National Institute for Health Policy and Health Services Research, 85-116. (Hebrew)

Epstein, L., Goldwag, R., Ismail, S., Greenstein, M., & Rosen, B. (2006). *Reducing health inequality and health inequity in Israel: Towards a national policy and action program.* Jerusalem: Myers-JDC-Brookdale Institute.

Horev, T., & Babad, Y. M. (2005). Healthcare reform implementation: Stakeholders and their roles – the Israeli experience. *Health Policy, 71*, 1-21.

Kaye, R., & Roter, R. (2001). *Complementary health insurance in Europe and the west: Dilemmas and directions.* Jerusalem: JDC- Brookdale Institute, RR-366-01. (Hebrew).

Rosen, B. (2003). In S. Thomson & E. Mossialos (Eds.), *Health care systems in transition: Israel.* Copenhagen: European Observatory on Health Care Systems, 5(1).

Horev, T. & Babad, Y. M. (2005). Healthcare reform implementation: Stakeholders and their roles – the Israeli experience. *Health Policy, 71*, 1-21

Rosen, B., Haklai, Z., Mohilever, M., Nevo, Y., Goldwag, R., Schoenberg, R., et al. (2003b). *Hospital utilization and expenditure by Israeli health plans in an era of health care reform – Second year report.* Jerusalem: JDC-Brookdale Institute, RR-400-03.

Saltman, R., & Figueras, J. (Eds.) (1996). *European health care reform: Analysis of current strategies.* World Health Organization, Regional office for Europe.

Saltman, R., Rico, A.; & Boerma, W. (2006). *Primary care in the driver's seat?: Organizational reform in European primary care.* European Observatory on Health Systems and Policies.

Shani, S., Siebzehner, M., Luxenburg, O., & Shemer, J. (2000). Setting priorities for the adoption of health technologies on a national level – The Israeli experience, *Health Policy, 7*(4).

Shirom, A. (2006). *The NHI law and three failures.* Tel Aviv University, unpublished power point presentation.

Shmueli, A., Intrator, O., & Israeli, A. (2002). The effects of introducing prospective payments to general hospitals on length of stay, quality of care, and hospitals' income: The early experience of Israel. *Social Science and Medicine, 55,* 981-989.

State Commission of Inquiry into the Functioning and Efficiency of the Israeli Health care system (1990). *Part 1: Majority Report.* Jerusalem: Government Printing Office. (Hebrew)

Tabenkin, H., Gross, R., Bramli-Greenberg, S., Steinmetz, D., & Elhayany, A. (2001). Primary care physicians in Israel: Self-perception of their role in the healthcare system and policy makers' and patients' perception of them as gatekeepers. *Israel Medical Association Journal, 3*, 893-897.

Healthy Israel 2020: Visionary Health Promotion & Disease Prevention Policy for the 21^{st} Century

> Boaz Lev
Ministry of Health, Israel

At this conference, we have juggled all the words that, if mixed in the right proportion, will create optimal health systems. We had competition and choice. We scaled equality versus autonomy. We had markets and baskets. We allocated, we centralized, we DALY'ed and QALY'ed and paid tribute to efficiency and quality.

Actually, all we need now is the recipe – the prescription, the formula that is like a fata morgana: the closer you get, the further it escapes.

A. A. Milne in his poem, "The Dormouse and the Doctor," says:

"The doctor stood frowning and shaking his head
And he took up his shiny silk hat and said:
What the patient requires is a change
And he went to see some chrysanthemum people in Kent"

I will make a guess that when we convene in twenty years this perpetum mobile of reform and re-reform will still be around.

Isn't that the name of the game?

I received a unique opportunity to share with you a vision or rather my hallucinations. I refrained from taking my medication today so my psychosis will not interfere.

I decentralized my thoughts so I don't have much control over them.

I am taking the liberty to speak to you on the basis of acquired intuition (for which you gain no academic credits whatsoever) and without any evidence. I have no figures and even fewer power point slides.

I will say things that have no validity. Some of them are creatures of my mind and I have utterly no proof that any of the things that I state are either evidence-based or have any other basis.

I am going to break a few laws of thermodynamics and create chaos and entropy and set a terrible example to be remembered of how not to make a case and how not to prove anything.

As you have already realized my orientation in time and place is not really intact, so I hope you will be gracious and forgive me.

For the sake of disorientation, the date is 13 of December 2022 and we are convened in the new convention center in Damascus.

It is the seventh regional health policy meeting and the second time that it is held in Damascus and dedicated to reforms in retrospect.

I was asked to give a brief overview concerning the whereabouts of the Israeli medical system in the last 40 years.

I am using an ancient tool called the retrospectoscope and I will try to reflect on our thoughts and visions in the beginning of the third millennium.

Long-term thinking was not a stronghold of government work.

In fact, some think that the association of government and thinking is a contradiction in terms. Anyway, deficits, money and politics created the first and biggest healthcare reform resulting in the national health insurance law.

The vision of the law was that ultimately all services from cradle to grave would be provided by the sickness funds. The law was an earthquake - in the good sense, and it created a few aftershocks.

The most significant one was the mental health reform. The reform included community mental rehabilitation legislation, a shift from hospital to community reform, and the inclusion of mental health services provision via the mainstream of healthcare - the health plans - thus reuniting the ever separated body and soul within a single provider.

By the year 2008, this three-tiered reform was at full capacity.

Care for the elderly, disabled, and hospitals for chronic care were the targets of the next major move towards the fulfillment of the vision.

It was in 2017 that the sickness funds gained full responsibility. The care for the elderly made a major leap in quality and continuity of care, motivating the health plans to invest in prevention and health promotion for the elderly.

The question of prevention and health promotion was more complex. A long tradition of excellence in mother and child services provided mainly by the government made it difficult to complete the cradle to grave concept.

Anyway, our health system was mainly invested in curing illness and alleviating suffering.

Investment in prevention and preservation of health was practically nil.

As in many countries, the political appeal of prevention and health promotion was low and was regarded in many ways as a stepchild to healthcare.

Since it is common knowledge, taught from kindergarten onward, that as a general rule it is better to prevent than to treat, lip service was the major currency invested in education and promotion.

Support and promotion of population health was considered politically correct but like the weather – nobody did much about it.

The market was in curative care. Technologies, health baskets, dramas in the Knesset, annual growing budgetary allocations, health index, hospitals – all received ongoing attention of politicians, media and the public.

On the other hand - prevention and promotion were choking under budgetary constraints. There was heavy, unrelenting pressure to make these health areas more cost efficient, if possible to privatize them, and preferably, give them a severe case of anorexia.

The lean body mass of school health, health promotion, and occupational health were reduced almost to oblivion.

Between government bureaucracy and growing constraints, we could hear the services gasping for air. And the air was scarce and polluted.

The turnaround happened in the second decade of the third millennium.

It was in 2011 when the government and then the Knesset adopted the Healthy Israel 2020 plan as a road map and as a guide to our future health targets.

The Healthy Israel 2020 initiative was officially on its way. The program received the status of a formal Knesset declaration and a committee was assigned to monitor the implementation of the program. It included targets and evidence-based plans to achieve them.

We felt very proud that a two-year public debate had its fingerprints on the program. The voice of the public was heard and their values were elicited; this had a significant impact on the plan.

It was the culmination of an initiative that started in 1987 resulting in the first long term vision of Israeli health - Healthy Israel 2000, followed by the 2020 task force.

By that time WHO had in place "Health 21" and the US was following more than 400 targets in its 2010 Healthy People initiative.

The main focus of the program was to set targets in the areas of prevention and health promotion.

By the end of 2014, things definitely looked different.

The turning point happened when public health became a political issue.

We always felt that political will is critical but we failed in harnessing politics to the cause in a real way.

Major changes in public policy occur, more often than not, after a catastrophe. We could rely on that because bad things always happen - they are abundant.

It was the non-declining toll of disease and death from smoking that was alerting the public. Trends showing increasing smoking rates in young females indicated that the message was not coming across. It was clear that we needed money, a lot of money to curb this epidemic but taxes from cigarettes served almost any purpose, except, of course, fighting smoking. The lower socioeconomic classes smoked more.

The second major impact on public health was the rapid proliferation of obesity and terrifying rates of diabetes. It became clear that we were dealing with addictions - food, nicotine, drugs.

Without dealing with lifestyle as a habit-forming disease, we would not be able to reduce the horrible consequences.

Frightening figures literally appeared on our screens coming from the US. The face of hunger and poverty was changing and empty calories replaced the skin and bones that dominated the famine scene.

Health foods and meaningful calories were there for the health of all.

Calories, smoke, drugs and entertainment were the modern version of the Roman panen et circances or bread and circuses to satisfy the mob.

On the other side, affluent societies became preoccupied with food and diets to the point of obsession — almost a religion.

Waistlines, economy of scales and BMI's became the buzz words of this subculture.

Social status was in close proximity to waist circumference and some people started to add the BMI as part of their CV's in job applications.

It was obvious that we were not making many advances in breaking the inner codes of addiction to calories and smoke.

But the worst was yet to come.

2009 was a year that will stay forever in the minds of everybody. The influenza pandemic that looked in the beginning just like another flu season soon became a monstrous and disastrous cosmic happening that started in February and after two epidemic waves ended in December.

Death was everywhere but when the terrifying data were analyzed, it turned out that those who received more than three flu vaccinations in the past had a 50% better chance of surviving. It was not surprising that those who exercised and did not smoke had a 40% edge on their peers in surviving.

This was a turning point.

Sometimes it takes a disaster to make things happen.

The need to reach maximum immunization rates became once again obvious and all those opposing vaccinations practically faded away.

Preparing battalions of public health professionals in advance turned out to be critical when they were needed to support health care and disease containment.

You were probably wondering what a retired Israeli health official is doing in Damascus. Well, as I told you at the start of this paper - I was allowed to dream and hallucinate.

During the pandemic there was a need for coordinated activities on a regional basis. One thing led to the other – it started with low level professional communication followed by understandings; then the borders opened and full scale peace ensued.

The aging epidemic that started in the developed countries was catching on in the third world and it became obvious that if health did not move to the forefront, society would have to deal with age and disease in a way that would crush all social support systems.

These events and demographic changes had a major effect on decision makers, who had been blamed for not allocating enough funding for prevention and for choking the public health infrastructure.

The years 2010 to 2014 were characterized by a paradigm shift when the center of gravity was moved from therapy to prevention and promotion.

Once the budget allocation for prevention was tripled and an annual indexing coefficient was set, there was a surge in the awareness of governmental agencies concerning their role in prevention.

But I am running ahead of myself.

I was recently assigned as an observer to the taskforce called Health Israel 2030 that is trying to define, forecast and influence our future health targets.

We realize that planning ahead more than 10 years takes us to a planet that has so many uncertainties and so much vagueness that prediction and planning become practically impossible. Technologies improving on a daily basis, the tailored pharmaceuticals era that came together with the sequencing of the genome, transplantation and stem cell technology, communication, data processing and imaging changed the practice of medicine. Technologies outside the health arena changed life itself and created a new social fabric that is still reforming itself.

I am carried away again.

Money, or rather its scarcity, was always on the agenda. As a matter of fact, the problem was not the amount. It was just not distributed correctly. The US was notorious in socioeconomic inequalities and Israel was lagging not far behind.

The resulting health gaps had to be addressed. Poverty and education were always key determinants but health education and promotion was our tool.

The externalities of the medical and health arena came into the forefront of social and economic thinking.

Integration was always the role of government and therefore failed so often. The in-betweens of authorities – government departments, third sector, private for profit and non- profit organizations – this salad needed seasoning but the taste remains bitter still.

I remember the relentless struggle to make distinctions between public and private and to be able to let people choose caregivers without damaging too much the principles of equality.

We have foreseen the growing health gaps and many efforts have been directed to avert this outcome. Unfortunately, all health systems have failed so far to prevent this further descent into the abyss.

It became imperative for government departments such as education, environment, commerce and industry to become involved in the health agenda. Their involvement seems so obvious now; at the time, health issues were only rudimentary in the targets of these organizations.

Education was the first to come aboard. Legislation altogether prohibiting smoking in schools and banning the sale of sugar-containing beverages, as well as providing for the inclusion of three weekly hours of physical education was just a start. The curricula of teachers had a mandatory health education syllabus and this trend had a halo effect on families. Schools became gathering places for health nuts. Walking sessions and health food meetings were held in schools and it was felt that the health pendulum was swinging too much, turning health into religion.

The beginning of the millennium was an exciting time.

Now I am old, with a mild case of Alzheimer's and if I remember correctly, diabetes and a touch of Parkinson's. My uncle had similar ailments and I remember escorting him to the emergency department and the never ending saga of finding his chart and trying to figure out his medications.

What seemed so feasible - to have nationwide accessible medical records at the point of care - became a reality only in 2011. Now whenever I go to the clinic or to the ER it takes a fraction of a second to retrieve all the pertinent data. We had a unique opportunity to be maybe the first nation to have a comprehensive EMR system in place. We were small, with relatively few players in health, and the technology was there. It was an endless fight with privacy zealots to convince them that being treated properly is better than being dead, with medical secrets untouched and unused. There were some breaches of privacy abusing the technology by insurance companies and employers, but courts have made these behaviors history.

The ability to receive online morbidity data and create a real epidemiological map of Israel was a forward leap. It was a critical cornerstone in disease monitoring and surveillance systems that have become as important as those that detect terrorism and unconventional weapons worldwide.

The medical record gave a strong boost to the national quality indicators surveys which started as a small research project in 2001. The willingness to accumulate, analyze and compare data of all four health funds was not a trivial achievement. It took a long period of trust building between the health plans so that the data would serve clinical and public health improvements rather than marketing end points.

There was a long debate concerning the publication of comparative data and whether or not the public could make intelligent choices about health providers using the published data. This debate has not been settled even now.

The inclusion of hospitals and public health services in the quality indicators endeavor was a further step in the transparency trend that changed the health client community to become more choice oriented.

Involvement of the public in health decisions is now commonplace. Ongoing polls and surveys as well as accessible information are second nature for us.

In the beginning of the millennium, the paternalistic approach was still dominant and health parliaments, public juries on health issues, were only budding.

Questions concerning the health basket, the value of saving lives and quality of life (and the cost of these) became a major political issue making it obvious that public values have to be elicited and voiced. Soon enough representatives of the public were more and more involved in decision making and took a growing part in public committees to decide allocations and future trends.

Obscure terms like QALY'es and DALY'es became part of common language.

Despite all of this, and against all odds, the patient and his community fought the way to the center of the arena.

It was not all about money.

The Patient's Rights Law in 1995, The Genetic Privacy Act, The Medical Record Law enforced in 2013 and The Human Experimentation Act in 2009, all these were steps in de–alienating the patient and regaining the touch, the human touch that technology could not provide.

Before I return to my non-psychotic faculties, I would like to say that the exciting beginnings around the turn of the millennium – the national health insurance law, mental health reform, measuring and comparing health with the Israeli health indicator initiative and the introduction of the national electronic medical record created a better chance to look more optimistically in the eyes of the future and to try to shape it using evidence-based tools to invest in chronic and long lasting health.

Ambrose Bierce said this about the future: "It is the period of time in which our affairs prosper, our friends are true and our happiness assured."

Bernard Shaw was quoted saying, "The future belongs to the unreasonable ones, the ones who look forward not backward, who are certain only of uncertainty, and have the ability and confidence to think completely differently."

Thank you.

Stakeholders as an Impediment to Reform: The Example of Mental Healthcare Reform

> Dalia Guy
School of Political Sciences, Faculty of Social Sciences,
Haifa University

The difficulties of putting health system reforms into practice are such that the idea that the era of reforms is over has gained much credence. Research on mental health reform here in Israel sheds interesting light on the stakeholder role in this question.

The Israeli National Health Insurance Law was enacted in December 1994 and came into force on January 1, 1995. It provides for a basket of health services to which each citizen is entitled by registering with one of four healthcare insurance providers.

The law, as enacted, contained a second schedule itemizing the basket of services to be provided by the healthcare providers and a third schedule listing those services that would remain the responsibility of the State. These were the psychiatric, geriatric, public health and rehabilitation equipments services. When the then Minister of Health, Dr. Ephraim Sneh, presented the law on December 20, 1994, this separation between the treatment of physical and mental healthcare met with strong objections from an influential body of Knesset members. It was very effectively argued that the situation whereby healthcare insurance providers would look after physical health while mental care would remain the responsibility of the Ministry of Health, that is of the State, was not viable. As a result, Dr. Sneh promised the Knesset that psychiatric treatment would be transferred to the healthcare insurance providers' basket of services with, quote, "a slight delay" and the law's provision of a three year period of grace for healthcare insurances to bring their basket up to standard was understood to apply to the transfer of the State's responsibility for mental health services as well (Knesset, 20.12.1994).

It comes as no surprise that 12 years later the situation is unchanged and that up to now the separation between physical and mental treatment remains – healthcare insurance providers are responsible for physical treatment and the State continues to be responsible for mental healthcare. During these twelve years no less than twelve – 12! – target dates for the transfer to be carried out were set and the thirteenth target date is now January 1, 2007. In all this time there was only one serious attempt to move ahead, when the then Minister of Health Nissim Dahan tried to force implementation (Government, 29.1.2003), but these efforts were scuttled when his party resigned from the coalition government.

The situation is in fact much graver than it sounds. Mental health is in any case a neglected and problematic field. The fact that it has been on the verge of being transferred from the ministry's responsibility to that of the healthcare providers for years on end has meant that neither party was willing to invest time, energy and resources until the transfer materialized. Meanwhile, as long as psychiatric treatment remains the responsibility of the State it undergoes both overall budgetary cutbacks mandated by the Ministry of Finance and minimal incremental budgetary supplements. On the other hand, healthcare providers' budgets are increased in accordance with predetermined indexes incorporated in the National Health Insurance Law. In addition, healthcare providers must comply with the law's stipulations for accessibility and availability and can be sued in court for non-compliance. The State has no such constraints. Its services are limited by budgetary requirements rather than objective and legally binding criteria.

The purpose of the research on mental health reform in Israel and the attempts at its implementation was to find out the reason why the reform was not implemented despite the widespread agreement on its importance. The first recommendation out of the ten proposed by the WHO in its report on mental health of 2001 is the integration of physical and mental health services (WHO, 2001). The research looks for the reason why even twelve years after the law's enactment, physical and mental healthcare services have not been integrated. It asks questions with regard to the reform's planning processes, distinguishes the impeding and encouraging factors and focuses heavily on stakeholder influence. It uses case study and stakeholder analysis and includes about fifty in-depth interviews held in the years 2001 to 2004 as well as a variety of documents from multiple sources (Denzin & Lincoln, 1994; Denzin & Lincoln, 2000).

The findings point to the fact that the main impediment to the legislature's requirements was stakeholder resistance. There were three main stakeholder bodies influencing the process of reform – the Ministry of Health, the Ministry of Finance and the healthcare insurance providers. Of these, the Ministry of Health contained several ambivalent vested interest groups (Guy, 2004), so that while its official stance was pro-reform, resistance arose from the fact that the transfer of responsibility for mental health to the healthcare insurances would further reduce the sum total of ministry resources and power; these had already been greatly diminished when parts of the ministry's budgets were transferred to the healthcare providers as a result of the passage of the National Health Insurance Law (National Health Insurance Law, 1994). Within the Ministry of Health a major group opposing reform were the hospital directors because they feared closure of departments and reduced budgetary provisions (Guy, 2004). But it must be emphasized that individuals vacillated and in any case pro-reform lip service was always paid.

The Ministry of Finance had its own reservations about the mental health reform (Guy, 2004). Its over-riding theme was expense reduction even if that expense was transferred to the patient. It mattered little to its officials that there was a minimum standard of services that had to be provided. Thus it was unwilling to make budgetary provisions for elements of the reform that until then had been partially funded by the patients themselves. Such attitudes exacerbated the fears of the healthcare providers that they would be under funded, especially if demand for mental health services would increase as a result of the reform (Sykes, 2003). The ministry's attitude also worked to undermine chronic patients' family cooperation with the reform because of fears that the reform would be used the ministry to curtail existing services or to transfer their cost onto the patients (Eldar, 9.12.2006).

The health insurance providers had concerns over the high number of hospital beds required and the expense involved. Another problem was their lack of experience in rehabilitation. A third problem was that the health insurance providers feared that once in their care, the stigma of mental disability would be reduced, thus flooding them with an enlarged patient population and increased expenditure. All these questions entailed ongoing disputes with the Ministry of Health and Ministry of Finance over the level of funding of the new services (Aviram, Guy, & Sykes, 2006).

Psychiatric hospital directors formed another group of influential stakeholders and were concerned over reductions in health insurance providers' use of their services and thus a reduction in the resources at their disposal (Aviram, Guy, & Sykes, 2006). Meanwhile, psychiatrists and psychologists were worried that the enhanced public services would reduce their private practices. At the same time, other mental healthcare professionals such as social workers and nurses feared redundancies or salary reductions caused by the transfer of mental healthcare services from the hospitals to the community (Aviram, Guy, & Sykes, 2007). Similarly the staff of Ministry of Health clinics feared closure because healthcare providers would make arrangements with private mental health practitioners. Finally, the complex of cross currents and issues at work can be seen from the changes in position taken by the mentally disabled family member groups. Initially family groups of very severe cases opposed the reform for fear that hospital budgets would be channeled to community care. Once the director general of the Ministry of Health, Professor Mordechai Shani met the head of the family groups and understood the family members' distress, and especially once Professor Eli Shamir headed the groups, fears were assuaged and the groups joined the ranks of reform supporters. However, recently these groups have once more voiced their reservations due to Ministry of Finance attempts at budget reductions for rehabilitation within the community and the intended closure of government clinics. The old fears have reawakened, that the reform would serve as a springboard for reduced services and a shift in the financial burden from public funding to the individual patients' pockets (Guy, 2004). The families' demands were and remain the non-curtailment of existing services and prevention of the planned closure of clinics as planned by the Ministry of Finance.

The net result was that on the one hand the reform met diffuse but widespread opposition, while on the other there was no consolidation of a support coalition. This, as well as inadequate planning, the lack of political and public lobbies, lack of leadership and political commitment because of frequent changes of ministers and ministry directors general, all militated against the reform.

These findings are in line with other research pointing out the difficulties inherent in reform such as Kingdon (1995), who emphasizes the necessity of policy change to be in the public eye.

By not including precise provisions for mental health reform, the

National Health Insurance Law of 1994 missed a window of opportunity for such reform. January 1, 2007 and possibly the whole of 2007 are another window of opportunity since the past few years have seen a major planning effort with transparency of data and stakeholder participation that had not been undertaken previously (Knesset Labour and Social Affairs Committee, 2007). At the same time, some problems that disturbed stakeholders have been smoothed over by the passage of the Rehabilitation of the Mentally Disabled in the Community Act in the year 2000 and a corresponding fifty percent reduction in hospital bed requirements (Knesset Labour and Social Affairs Committee, 2007; Rehabilitation of the Mentally Disabled in the Community Act, 2000). The contribution of the research towards this has been in a broad case study description of the activity and conduct of stakeholders involved in the mental health insurance reform over several years (Guy, 2006). The research helped decision makers understand the forces obstructing and promoting reform and the instruments of planning and control that had to be improved (Knesset Labour and Social Affairs Committee, 2007). The research pointed out the covert means used by stakeholders (Guy, 2004). As Knesset Member Yossi Katz, a former head of the Knesset Labour and Social Affairs Committee said during an interview: "There's the committee meeting room and there's the chairman's office. In the first you speak for the minutes, in the other you say what you don't want to go into those minutes". The research casts light on the immense importance of understanding all the facets and outcomes of organizational politics as pertaining to impeding reforms. It was also one further means of drawing public attention to the subject.

REFERENCES

Aviram, U., Guy, D., & Sykes, I. (2006). A missed opportunity in mental health in Israel (1995-1997). *Social Security, 71*, 53-83. (Hebrew).

Aviram, U., Guy, D., & Sykes, I. (2007). Risk avoidance and missed opportunities in mental health reform. *International Journal of Law and Psychiatry 30, 163-181.*

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). *Handbook of Qualitative Research.* Thousand Oaks, CA: Sage.

Denzin, N. K., & Lincoln, Y. S., (2000). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (Second Edition, pp. 1-28). London: Sage.

Eldar, I. (9.12.96). *The Executive Committee of the Families of the Mentally Disabled.* Jerusalem (Hebrew).

Government Secretariat (29.1.2003). *Decision 2905*. Jerusalem. (Hebrew).

Guy, D., (2004). *Research of the mental health reform in Israel and the attempts at its implementation 1995–1998.* Unpublished doctoral dissertation (Hebrew). Haifa University.

Guy, D., (2006). Research of the mental health reform in Israel and the attempts at its implementation. In: *National Institute of Health Policy and Health Services Research, Annual Research Report, 2005-2006*, pp.78-79.

Kingdon, A. (1995). *Agenda, alternatives and public policy*, (2nd ed.). New York: Harper Collins.

Knesset (20.12.94) *Protocol dated 20.12.94*. Jerusalem: The Knesset. (Hebrew).

Knesset Labour and Social Affairs (LSA) Committee Protocol number 330 (11.12.2007). Jerusalem. The Knesset (Hebrew).

National Health Insurance Law (NHI) (1994) Israel *Law Code, 1469.* (Hebrew).

Sykes, I. (2003). *The use of data in the effort to transfer mental health services in Israel from the Ministry of Health to the Healthcare Providers. A Case Study: 1995-1996*. JDC-Brookdale Institute, RR404-03, Jerusalem.

The Rehabilitation of the Mentally Disabled in the Community Act, (2000) Israel *Law Code, 1746.* Jerusalem (Hebrew).

WHO – World Health Organization. (2001). Mental health: New understanding, new hope. *The World Health Report 2001.* Geneva: World Health Organization.

Sticky Structures and Immense Entanglements: Why "Do-able" Reforms Are So Hard to Come By in Almost Every Country

> David Wilsford
George Mason University (USA) and London
School of Economics

There is never a scarcity of theoretically and intellectually attractive ideas for health care reform, regardless, almost, of which country you are in. Health policy analysts are as smart as any other cohort of professionals in the world. The political and bureaucratic actors devoted to health policy are as committed as any others. The 3rd International Jerusalem Conference on Health Policy is another demonstration of these facts.

Yet history—distant and recent—shows that few of these ideas for reform have managed to enable these policy actors to remake their systems into something less suboptimal. We are all frustrated and discontented—continually—at what we regard as the manifest suboptimality of our respective systems.

Comparatively, of course, some systems in the advanced industrial world—just to confine ourselves to these—work "better" than others, according to various criteria of cost, cost effectiveness, access, quality and so forth. Cross-sectionally, any analysis shows that some systems have responded to the tensions of the iron triangle of health care (access + quality + cost) better than others.

Yet, longitudinally, within any one country, we are each dissatisfied—often deeply so—mainly because costs in each system, relative to itself, increase each year and have been increasing for 30 or more years . . . in spite of repeated reform efforts everywhere to reign in the cost corner of the health care triangle.

So, it appears that we define suboptimality as the need to restrain the continual growth in costs, and therefore we are driven by the need for reform. Sometimes, in some systems, other corners of the health care triangle horn in on the attention. For example, sometimes we do feel a need to redress imbalances in access. (Shorten those English queues for hip replacements!) Curiously, these efforts are sometimes most manifest in those systems which, at the macro-level, cost the least. At the same time, of course, severe imbalances in access are central to the story line of health policy in the United States, where 47 million of the legal population go without health insurance coverage of any kind.

So, in the face of so much sharp thinking, so many smart policy actors and such a large number of reform ideas, why does suboptimality reign so pervasively? This suboptimality is most often—although not always—defined as continually rising costs. This definition of suboptimality drives policy actors and associated decision-agents to seek change in order to master this fundamental variable. Yet change, certainly of the "big" order, proves over and over to be so very elusive.

In what follows, I will argue that health care systems are sticky and that there are specific reasons that they are so. The stickiness of health care system structures—largely grounded in different dimensions of path dependency—keeps them from adapting to pressing present imperatives, no matter what point on the time-line you look at longitudinally and no matter which country you are examining cross-sectionally.

But I will also argue that, occasionally, an exceptional conjuncture comes together, providing a rare opening for substantial (non-incremental: big) reform. These conjunctures resemble a perfect storm: many complex variables coming together, fleetingly, into the perfect window to escape the path of previous sticky structures. These exceptional conjunctures do not happen often, but when they do, if policy actors recognize them and are ready for them, then the change that they are looking for can more readily be accomplished.

PATH DEPENDENCY AND STICKY STRUCTURES

There are six reasons for the persistent stickiness of each health care system over broad spans of time. The first fundamental characteristic of health policy in the advanced industrial democracies is that it is **path dependent**. Stickiness and other traits that slow, impede, thwart and confound non-incremental policy reform all grow out of this first fundamental "law" (Wilsford, 1995; Wilsford, Mossialos, & Oliver, 2005).

The concept of path dependency simply means that present and future policy movement is hemmed in by the current policy path, which has been undertaken in any given country from, analytically, a first "moment of conception." Unlike the story of the Baby Jesus, however, first moments of conception in policy histories are rarely immaculate. They are, to the contrary, often messy, confused, even murky, but one thing is clear: the paths set out upon are sensitively dependent upon initial conditions (Tuohy, 1999) and once undertaken, they channel—nearly deterministically—all the macro-movements in policy that can follow.

The following six elements at play in the path-dependent policy dynamic pertain not only to health care policy but are generally applicable across most policy sectors of the advanced industrial democracies. Here I will briefly outline them and mention their relevance to health policy. They set the framework for the problematic unfolding of health policy reform in any system.

1. The **path dependency** of policymaking in each country's system severely constrains politically and structurally feasible options. One needs travel no further than the sad example of the United States to see a hopelessly suboptimal system (highest percentage of GDP covering the smallest comparative proportion of the population with very low overall OECD health status measures) that has been tied stubbornly to its past. Sensible, even very modest, reforms have proven extraordinarily difficult to accomplish.

2. **Sticky structures** in each system make these paths of current policy even harder to deviate or depart from. In health care, the ministries, the sickness funds, the hospitals, the clinics, the pharmaceutical companies all constitute and inhabit structures that become quickly inelastic; vested interests in these structures work to keep them that way, reinforcing inelasticity.

3. **Immense entanglements** of horizontal networks and vertical hierarchies of semi-autonomous decision agents further render the policy environment inelastic (i.e., sticky). In health care, these entanglements occur in the multiple interactions of the medical corps, professional staff, civil servants at national, regional and local levels, and other provider personnel. These interactions spread out horizontally and pile up vertically—all at the

same time.

4. The **rationality** of decision agents in these policy environments is severely bounded. In other words, in most of what they do, all these decision agents face fairly short decision time-horizons, while at the same time being surrounded by an information-short environment. The "rationality circle" encompassing any given decision agent is tightly drawn.

5. The predominant **non-linearity of policy paths** makes linear notions of policy "development" and policy "reform" irrelevant or, worse, misleading. Yet in spite of non-linearity, time is an independent variable that has substantive impact on the flow of the policy dynamic. In health care, providers act in disjointed ways, even if, in many top-down systems (such as the Japanese or the French), payers act much less disjointedly. The heterogeneity of providers (practitioners, support staff, administrative staff, and drug and device manufacturers, for example) multiplies this disjointedness.

6. **Culture** imposes itself as an independent variable in each country's system, rendering many environments inhospitable to otherwise "rational" reforms. In health care, perhaps the broadest cultural divide at the macro-level is that between countries that persist in regarding health care as a private good (such as the United States) and those that regard it as a public good (everyone else). At the micro-level of behavior, treatment and consumption patterns often differ substantially across countries' cultures or across geographic areas of the same country. Culture often impedes policy learning.

Without dwelling unduly on the concept of **path dependency**, which has been thoroughly elaborated elsewhere (Wilsford, 1995; Wilsford et al. 2005), suffice it to say for now that any given policy path begins at a critical moment. The alignment of variables at that moment—such an alignment often occurring randomly (by mere chance)—sets into motion the particular path that subsequently is so hard to break away from. This dynamic is known as sensitive dependence on initial conditions.

A well-known story illustrates this dynamic of future movements being sensitively dependent upon initial conditions, locking in on a path that is very difficult to break out of. It is the justly celebrated story of the QWERTY keyboard, an example of early lock-in of suboptimality, illustrating a number of principles, including that of the importance of being the first arrival.

In this story, the DVORAK keyboard has long been demonstrated to be a more efficient, faster keyboard for typists trained to it, as opposed to those trained to the QWERTY board. (QWERTY is derived from the letters on the first five keys of the third row of what is now the monopoly keyboard in the anglophone world—much as the AZERTY keyboard is the monopoly one in the francophone world.)

Trouble is, the QWERTY had been introduced long before DVORAK and was intentionally designed, for the early manual typewriters, to slow down the ability of fingers to make the punch-keys fly in their striking motions. Too many keys flying too fast always jammed. It was too easy to be a good typist! So, the solution was to slow down the keys by designing a keyboard that, in reverse, slowed down the fingers. Designing intentional inefficiency was the imperative of the early technological stage.

As hardware improved and keys jammed less readily, especially with the later advent of electric typewriters and the IBM Selectric's moving sphere mechanism, the need to slow down the typist's fingers disappeared. But by then, the QWERTY design had achieved an overwhelming monopoly of both hardware and training: Suboptimality had locked in.

This path-dependent environment is in turn characterized by five more elements. The first is the **sticky structures** that result from the path. In policy, these are all about the emergence and consolidation of the institutions and processes that govern the policy universe. The rules and the roles that inhabit these institutions accrete over time, imputing increasing rigidity to the structures of the environment.

"Sticky" indicates institutional structures that are characterized by rigidity, or inelasticity. In other words, they are resistant to change. Sticky structures that grow up quickly in a path dependent environment—and if anything, grow more sticky with time—severely constrain what constitute politically and structurally feasible options that decision-agents may consider as courses of action.

These effects make the paths of current policy even harder to deviate or depart from. These effects also mean that the players (decision-agents) permitted to play in the policy environment remain fairly stable; new entry onto the field is restricted: at the very least, new entry is quite costly. Moreover, the size, dimensions and character of the field are fixed and do not change readily, favoring current players of the established policy environment. The sticky policy environment framed by the path is not porous.

The fluidity and movement within a sticky policy environment are exacerbated by the **immense entanglements** that overlay and cross-cut this environment. Each policy environment is populated by hosts of quasi-autonomous decision-agents. They are "quasi-autonomous" because, while at all levels of hierarchy, they exercise greater or lesser degrees of freedom in their actions at all levels, they are simultaneously dependent—including the hierarchical summits.

Relations of dependency characterize actors' positioning at every moment, both vertically (hierarchies) and horizontally (networks). These hosts of decision-agents are organized into these hierarchies and networks both widely and wildly. By contrast to the macro-environment of the specific policy path, within the path-defined environment, the hierarchies and networks are organized loosely and are often more or less porous. These are indeed fluid, changing all the time, which introduces greater uncertainty into the decision environment for the given agents concerned. Multiple networks and hierarchies cascade throughout the system, rendering collective cohesion and coordination more problematic. Immense entanglements slow things down, sometimes halting them altogether.

The **bounded rationality** of the policy environment also severely restricts space for possible movement. How do actors (decision agents) know? When do they know it? Who knows more and who knows less? This variable applies to the environment's time horizons (short, medium and long terms) and to the conceptual range of knowledge available at any one moment about the contemporaneity of other variables and others' actions. That is, each agent's information horizon, both ahead and on each side, is tightly and differentially bounded. Horizons looking forward tend to be short; horizons looking sideways tend to be narrow. Moreover, what can be perceived ahead or alongside is often severely incomplete—compared to any putative objective reality.

In other words, bounded rationality means that decision agents do not see well, nor do they understand well what they see—into the future or around themselves at the present. Moreover, agents are differentially endowed in their ability to see and understand horizons. The high variability of various dimensions of agents' endowments increases the contingency effects and thus the uncertainty of actors' movements. Greater uncertainty increases the status quo bias effect which permeates every nook and cranny of most policy environments. No wonder change is unlikely!

The immense entanglements of multiple hierarchies and networks and the high variability and bounded rationality of decision agents' understandings make any policy environment **non-linear**, which in turn renders problematic any linear (forward) movement of collective policy decisions such as non-incremental (big) reform. Non-linearity in a policy process simply means that it moves forward in fits and starts, or moves backward, or sideways, back and forth, as time unfolds as an independent variable. Non-linearity of policy is opposed to the traditional implicit conception of the "forward" march of time conferring linearity on any process. Non-linearity of any process, such as health policy among many, confers instead even greater stickiness and entanglement upon the decision-agents and their decision-making.

While the whole image of the policy "path" is one grounded in a certain degree of linearity (even if jagged), the reality of the environment is that it moves forward in the sense of time, but not in the sense of direction. A more faithful image of what a real policy path looks like would more resemble a twisted winding path, with many switchback trails, false starts, dead ends and other funny offshoots leading either nowhere or somewhere unknown.

The only factor at play in a policy environment that can be considered as linear is time. **Time does march forward**, no matter what. In this sense, time may be considered an independent variable, one that operates its effects differentially upon different decision-agents in the environment. There is an "arrow of time" in policy, not unlike the arrow of time in the physical universe. We cannot rewind it as a film reel, just as we cannot refreeze a melted ice cube so as to recapture all of its originally constituted energy, because some of that original energy, dissipated into the universe by its first melting (entropy), is gone—forever. (The inexorable effects of entropy on all matter in the universe emerge from the celebrated Second Law of Thermodynamics.) We cannot play the policy process backwards.

But the arrow of time—time as an independent variable—operates upon different actors differently. Its effects are segmented, chiefly in the flows of information in and across the policy universe. Not all decision-agents experience the effects of the march of time equally or equivalently. The segmented effects of time increase contingency even further.

Finally, in any cross-national analysis, **culture** imposes itself as an independent variable. Therefore, because of cultural variability in perceptions, what seems "rational" (in the street definition sense) in one culture may seem impossible or stupid in another culture, further increasing context-specific contingency.

In all of this, huge contingencies are thereby imbedded throughout the policy system. Indeed they rule any policy process. The immense entanglements of porous networks and hierarchies, the tightly bound rationality limiting actors' views both longitudinally and cross-sectionally, both time and culture as independent variables, all these unfolding and interacting within a sticky environment hemmed in by the policy path . . . Well, it is little wonder that not much gets done and that change is so difficult to come by and successful change even more so.

RARE CONJUNCTURES, PERFECT STORMS

So, what (in despair!) IS possible? Have we reached the limits of reform?

Sadly, yes. Reform ideas, never in short supply, seldom make much difference.

Yet . . . Yet . . . Yet . . . there is in fact a slim thread of hope. For history also shows that occasionally, rarely but indisputably, non-incremental change, that is, something big, can and does occur. But it is rare. When it occurs, it comes about due to a conjuncture of factors that opens a window of opportunity to depart from the well-trod policy path.

Therefore, policy actors concerned with change (and many are not) are better advised to attend to the elements of conjuncture required for large-scale reform than to all the intellectually-attractive, theoretical propositions that usually circulate in the academic and policy universes, the flavor-of-the-month here, there and beyond.

What are these elements of conjuncture?

Resembling a perfect storm, a conjuncture is, by definition, a rare, often fleeting, coming together of a number of elements into a single constellation. In the natural sciences, these are known as punctuated equilibria: long periods of stability characterized by little change suddenly punctuated by a huge upheaval (by definition, non-incremental): great earthquakes, tsunamis, the rapid dying out of numerous species. These brief moments change the trajectory of the given path dramatically.

Some common elements in the complex constellations of policy conjuncture are:

1. exogenous shock
2. a new and compelling idea, compatible with at least some important configuration of interests (as Weber argued: ideas run along the tracks of interests)
3. a realignment of previous dominant interests changing the framework of the reigning discourse
4. "heroic" or charismatic leadership serving as the catalyst for rising above a critical threshold ("tipping point")
5. the internal imperative of the status quo's vulnerability

Do **all five** circumstances need to occur simultaneously for the so-called perfect policy storm to be unleashed? At the very least, the more of these present in a given conjuncture, the more that non-incremental (big) change will be favored.

More to the analytical point, conjunctures, almost by definition, cannot be predicted in advance, as they are, indeed, comings together of diverse factors and forces in a fleeting "one-time" combination. In policy, much as with seismologists and the advanced study of earthquakes, the prediction of policy quake's timing and magnitude is still nearly impossible, but the understanding of the forces at play in conjunction with each other when a quake occurs has greatly advanced in recent decades of seismological science. In this sort of science—physical science or social science—prediction, while proving frustratingly elusive, is not the same as specifying and understanding the necessary critical factors.

Therefore, at the least, policy actors in any country should be attentive to the crystallization of a suitable conjuncture in order to achieve the non-incremental reform that they seek. Better yet, perhaps they can also attend to the cultivation of one or more of these elements in order to hasten that day—at least a little.

The six elements of the path-dependent dynamic, outlined in the first section, provide solid reasons for despair for any policy actor who wishes and strives for non-incremental policy movement. Path dependency and the stickiness that results lead to a nearly overwhelmingly pessimistic policy prognosis in any system.

But the occasional perfect storms are small windows of hope that despairing policymakers may sometimes look to. These are usually focused around rare, but occasional conjunctures: special perfect storms of variables that override the pervasive structural stickiness of a given system.

CONCLUSION: GOOD LUCK!

So the story, overall, is a mixed one, but weighted toward the pessimistic, although the optimistic is not excluded altogether.

On the one hand, sticky structures stick. Accomplishing big (non-incremental) change is therefore usually very, very hard to do—if not impossible.

On the other hand, occasionally the conditions for the perfect storm come together. Those that are vigilant and ready—and patient—for these rare openings can profit immensely from them and accomplish reform that is, indeed, big.

So, while in general, we have indeed reached the limits of reform, every now and then, we are surprised, and something big can, and does, happen.

REFERENCES

Tuohy, C. (1999). *Accidental logics: The dynamics of change in the health care arena in the United States, Britain and Canada.* Oxford: Oxford University Press.

Wilsford, D. (1995). Path dependency, or why history makes it difficult but not impossible to reform health care systems in a big way. *Journal of Public Policy; 14*, 3: 251-283.

Wilsford, D., Mossialos, E., & Oliver, A. (2005). *Legacies and latitude in European health policy*, special issue of *Journal of Health Politics, Policy and Law.*