

Keynote speech to the Association of British Insurers October 2005

By Geoff Mulgan, Director of the Young Foundation

I want to talk today about how health care may change over the next few decades as we enter a period of radical innovation rather than renovation.

Much of the discussion of health at the moment is focused on issues of choice, markets, tariffs, changing structures – all of which are important.

But these may be relatively unimportant compared to some of the larger changes that are happening in tandem, changes that are relevant to all parts of the health field and perhaps in particular to anyone from an insurance background, since they are about how we handle and manage a new pattern of risks.

To explain what I mean let me start with some historical perspective. There are many paradigms of health and many ways of thinking about how health can be improved, and these have repeatedly changed in the past.

In the 19th century the greatest advances to health came in the public realm – from people like Edwin Chadwick transforming how we handled sewage and water and cleanliness – and we now know from economists that more generally health improvements precede growth in markets rather than the other way around.

In the 20th century the greatest improvements came from better understanding of infectious diseases, antibiotics and improved surgery and drove astonishing progress in life expectancy

However in the 21st century it now looks like that an equally different approach will come to the fore alongside older models which will also survive. These will involve a more basic change in the nature of the health system to become more centred around the person, the patient, the individual, and social networks, rather than the disease, and more around the management of persistent and chronic risks that threaten quality of life as much as the fatal risks that drove health advance in the 19th and 20th centuries. This will be driven by

- new knowledge – genetic obviously but also many others
- technological possibilities – not just in medicines but also in how information can be handled
- cost pressures
- but perhaps most important changing values and demands of people for whom health has a different meaning in their lives

All of this I predict will fuel a wave of radical innovation in how health is organised – innovation that will be as much about how things are organised as about treatments or drugs.

It will in other words be social innovation rather than medical innovation. Innovation that involves changes to power structures, and innovation that changes the relationship between health care providers and the patient.

Let me explain why we are interested in playing a role in these changes, since I come from an organisation that is not specialist in health.

In its past incarnations under Michael Young the Young Foundation played a key role in social innovation in many fields that are relevant to where health is now heading –

- It pioneered consumerism in the private sector and public services – setting up Which/CA in the 50s, NCC in the 70s etc – and making arguments that in some areas were 40 years ahead of their time
- It pioneered new uses of technology – OU to language line – to meet social needs
- It pioneered new approaches to health – in particular the College of Health which paved the way for the Expert Patients programme and Healthline which paved the way for NHS direct etc
- And it campaigned for changed attitudes to ageing and to death that are the subject of argument in the House of Lords this week

Some of this work – as so often – was inspired by experience - Michael Young's own experiences with cancer and with a health system that was blind to both the needs and the skills of its patients echoed in this decade by another great social innovator, Eric Rasmussen in Denmark.

Our current interest is in the next wave of innovation, and particularly what may happen around chronic disease which is likely to be the area of greatest innovation and change. The bare statistics are striking. As many of you will know:

- 45% of UK's adult population has 1 or more long standing illnesses. For over-75s the figure is $\frac{3}{4}$
- The NHS spends 80% of its budget in chronic disease
- Around 80% of GP consultations relate to chronic disease
- Patients with a chronic disease or complications use over 60% of hospital bed days
- By 2030 it is estimated that the incidence of chronic disease in the over 65s will more than double
- Globally in 2001 chronic diseases contributed approximately 60 % of the 56,5 million deaths in the world and around 46 % of the overall burden of disease. This burden is expected to increase to 56 % by 2020.

- In the US more than 3/4 of hospital admissions are now for treatment of chronic conditions, as are 88 percent of filled prescriptions and about 70 percent of physician visits.¹

Many types of chronic disease are putting severe strains on the health system but perhaps none more than mental illnesses which most forecasters expect to worsen over the next few decades and which are already arguably more threatening than cardiovascular diseases, diabetes and cancer.

- Some 30% of all GP consultations and 50% of follow-up consultations were related to mental health problems.
- More than 900,000 claiming sickness and disability benefits for mental health conditions is larger now than the total of unemployed on the jobseeker's allowance
- Measured in lost working hours this is now the biggest category of illness in the world. In some European countries the mortality rate from suicide now exceeds that from road traffic accidents.

To put it bluntly a health system shaped by the 19th century problems of contagious and acute disease is now having to cope with a new epidemic of chronic disease, but without very good means of coping.

This epidemic is putting strains on the system – and indeed the acute care of chronic conditions is a primary factor in the continued dominance of hospital spending in the NHS budget (60% in 2003) and the crowding out of long term investment in prevention (4% in 2002). One estimate is that 'More than 90 per cent of people with mental illnesses never have contact with specialist services. They get all their care from GPs, practice nurses and counsellors at the local surgery' .

Our primary interest is in the scope for social innovation – for the systematic development of new models with the potential to deliver better results for the same or less money.

There are three reasons why we expect this area to be particularly fruitful for new models and organisations.

First, an increasing proportion of chronic diseases are the result of individual, social and environmental factors, many of which are in principle preventable if behaviours can be changed.

Second, once chronic disease has set in, many long term treatments depend as much if not more on the actions of the patient as on those of the medical staff.

Third, prevention and management of chronic illnesses requires action that cuts across organisational boundaries: the NHS, local authorities (leisure, housing, social services), other

¹ **Chronic Conditions: Making the Case for Ongoing Care.** Partnership for Solutions, Johns Hopkins University, for the Robert Wood Johnson Foundation, December 2002.

sections of Government (employment services, incapacity and other benefits, DCMS), the voluntary sector (from the disease oriented organisations like Diabetes UK, or MIND/ReThink to Age Concern).

In what follows I want to set out what follows from this and some of its implications for the whole health industry, eight key themes for next two decades and beyond

I Co-management

Recent years have brought lots of spending but despite efficiency improvements, new cures and impressive technological advances the cost burden of disease is mounting. Health professionals are working harder than ever and measurable activity in hospitals is becoming more efficient. Yet despite all of this the problems are mounting.

Part of the reason is that as we all know existing healthcare systems focus on diseases not patients. They are poor at mobilising the energies, resources and minds of people themselves. The ideal patient is passive and grateful. But peoples own insights and energies are key to managing and treating chronic diseases. Often they come to know more about their patterns; how to handle pain; how to motivate themselves; how to juggle networks of support – than the doctors treating them.

Tapping into that knowledge and commitment is likely to be key to achieving lasting improvements. Awareness of this parallels whats happened in other fields shows as its become ever clearer that people have to contribute to the outcomes that matter most – like learning, or welfare. Few things that are really valuable can simply be done to a passive consumer or patient.

And so in health it has been clear for years that the best results are likely to come from the combination of excellent diagnosis, treatment and care and support structures that allow people to manage their own conditions. Over 400 studies of self management have shown that programmes providing counselling, education, information feedback, and other types of support to patients with chronic conditions can demonstrate improved outcomes – many of them show dramatic results. For example the Michigan Diabetes Control Program's Upper peninsula Diabetes Outreach Network) proved that improvements in care and education reduced hospitalizations by 45 %. and death rate by 27 %. for participants, compared to non-participants. The Sheffield CIRC Programme of secondary prevention resulted within two years in a 24 % reduction in mortality rates. And a review of 23 studies, involving more than 3,000 patients with coronary artery, concluded that patients receiving behavioural/psychosocial interventions significantly lowered their risks of dying or having a heart attack. The reduction in cardiac mortality was 41 %. and 46 %. in non-fatal cardiac events. (London W. Stossel C, Maurice J. Psychosocial interventions for patients with coronary artery disease). Low income asthma patients experienced a dramatically improved health status in an innovative programme that taught physicians new skills in communication and disease management. Emergency room visits declined 41 %. for the patients participating in the program (Rossiter LF, Whitehurst-Cook MY, Small RE, Shasky C, Bovbjerg VE, Penberthy L, Okasha A, Green J, Ibrahim IA, Yang S, Lee K. The impact of disease management on outcomes and cost of care).

Yet most primary care professionals still don't see it as their job to encourage comanagement and they lack the training, or indeed the support structures to provide this sort of help advice and empowerment for their patients.

Tailored to the individual

The second dimension of change follows from this. Co management necessarily means a much more customised and personalised approach to care. This is not just a matter of choice of GP or hospital, or of being able to use complementary medicines.

Nor is it just about making the maximum use of new genetic knowledge that allows treatments and drugs to be tailored to individual needs and makeup – potentially with far greater efficacy, important as this is.

The more important aspect of personalisation is that services and the support mix are tailored to the individuals character, social networks and culture - putting them at the heart of the health system rather than seeing them as a condition to be processed.

Such a service culture remains patchy in health, as in most public and private services. Approaches that truly see the patient as sovereign, are rare, and primarily exist for the wealthy. GPs should be the most patient oriented – yet as we know the typical doctor still only spends some dozen minutes with each patient and according to some research interrupts a patient within 90 seconds of them describing their condition, even though research also shows that most insights only come out from letting them talk for much longer.

Even rarer are personalised approaches that can deal with the 'pre-symptomatic patient' providing personalised approaches ahead of problems rather than after them.

But this is bound to be the direction of change as people learn to cope with conditions over many decades of much longer lives and become used to a service culture in other areas of their lives. And some customisation is already being introduced in interesting ways – one for example is the work Philips has done in Chicago putting in play and kitty scanners to prepare children for MRI – justified in business terms because it hastens throughput but also enhancing the experience.

New forms of collective organisation

The third dimension of change is the rise of new forms of collective organisation to provide an alternative.

One of the most visible changes of recent years has been the rise of new social movements – self help in health, people suffering from conditions banding together to campaign, support each other, advise – in reaction to, and sometimes alongside, the formal health system.

This movement is manifest in the rising militancy of the disability rights movement that has completely transformed their position.

It can be seen in the rise of new commercial forms of social movement around Weightwatchers and others – here in the UK a 100,000 or so join weight reduction programmes each year, mainly run by the private sector

Organisations like NCT to the Alzheimers Society which has some 25000 members to Braintalk provide sophisticated support services as do the many organisations under the Long term medical conditions alliance, and the advice groups for disorders like post-natal depression.

There are even collectives raising funds to R and D ‘their’ genetic disorder to give themselves and their children a better chance in the future.

Many of these shifts reflect two profound cultural trends – a growing democratisation of health that has made people much more confident about taking charge of their own conditions.

The other is a change in how health is understood, that has made it much more about wellness rather than disease – a change which can be mapped in newspapers and magazines over 10-20 years so that cancer is talked about in terms of coping strategies, quality of life, quality of individual experience rather than just being seen as a disease that has to be fought.

Mobilising society

The fourth change follows on from this – the need for new partnerships between the formal health care system and society. Most health care takes place far away from hospitals and GPs – in the home, in the family and in the community.

So often much greater impact can be achieved by well designed programmes that support parents to do a better job of preventing and treating.

In the same way we know that cutting cardiac deaths is far easier if thousands of people are trained to be ready to act in the first few minutes of a heart attack.

The expert patients programme in NHS – first proposed decades ago by Michael Young – is a good example of this new kind of partnership, but there will be many others in the future, that link up motivated patients with others, providing an infrastructure of mutual help rather than assuming that every patient requires help from a doctor or a nurse.

One area that I expect we will see similar innovation is around elder care – not one of the private sectors more glowing successes – where generally grim places offer a typical life expectancy of 6 months and an ethos that often appears the very opposite of the hospice movement.

Environmental actions

The fifth dimension of change is the environment. 20th century medicine emphasised the individual patient and in its latest manifestations emphasised the patient as individual consumer. 21st century health emphasises the environment and how all the things around us contribute to our health – or sickness. The air we breathe, water, food, stress levels, toxins.

And so its not surprising that a new agenda is emerging that deals with these directly.

The school meals movement here in the UK that was given such momentum by Jamie Oliver was a health campaign more than anything and an argument that an area of public spending that had been divorced from health needed to be reconnected

The campaigns over the regulation of food contents are similar – influenced by the evidence that a reduction in dietary saturated fat of between only 1-3 %. will reduce coronary heart disease events by tens of thousands a year – and according to US evidence can save medical and productivity costs there between 4.1 and 12.7 billion dollars a year (Oster and Thompson, A Race Against Time)

There are also policies on planning, transport bicycling and walking that make it easier to take exercise

Policies to promote health lifestyles influenced by evidence that up to 80 %. of cases of coronary heart disease and around 90 %. of type 2 diabetes could potentially be avoided by changing lifestyle (Diet Nutrition and Prevention), and about one-third of cancers could be avoided by eating healthily, maintaining normal weight and exercising throughout life (Diet Nutrition and Prevention).

All of these are aspects of a mindset in which nothing is outside health and therefore a health strategy has to be all encompassing.

But we are still at the very early stages of practical programmes to put these ideas into effect, and there is still a gap between knowledge and practice.

Knowledge

That leads me to my sixth point: a new approach to knowledge. The creation of knowledge within medicine continues to be important – and we are seeing a potentially faster rate of progress than ever before. But it is also becoming ever clearer that different kinds of knowledge – about the social, psychosocial and environmental aspects of health – may be just as important to health gains in the next few decades.

This implies different views of how R&D should be organised which emphasise these – with a lot more R&D oriented to social innovations, cross disciplinary ideas, promoting wellbeing – and making use of experience as well as formal measurable knowledge.

It also implies different views about how knowledge should be organised in collaboratives, open systems, because these are fields where proprietary knowledge protected by legal controls of the kind favoured by the pharma industry is not likely to be very efficient .

Payments and funding

Seventh all of this will imply new ways of thinking about money. The UK system is simultaneously spending much more and trying to drive up productivity by driving its elements harder.

Some of that application of performance management methods has undoubtedly improved effectiveness, rooted out substandard practices. And some of the new ways of organising money and tariffs will I hope open the system up to better methods and new players.

But none of these systems really goes anything like far enough in dealing with the agenda I have described which calls for quite different alignments of individual corporate and social incentives.

Where we are headed will surely in time be towards more radical payment models rewarding outcomes achieved and distance travelled rather than simply interventions and actions.

Payment systems that provide incentives and penalties for any institutions which damage wellness – whether employers who do not take enough care of their employees stress levels, or back pain, or manufacturers who pollute the air, or pub chains that promote binge drinking.

And new methods of funding that reward results based on more holistic assessment of the full lifecycle costs of interventions as well as the full range of possible benefits– all of which requires far more radical leadership by finance managers and accountants.

Holism and systems

Eighth, the common thread through much of this is more systemic thinking about health and wellbeing, since this agenda implies new ways of organising health:

- Multidisciplinary teams straddling psychology, medical, social
- New forms of organisation that aggregate people with conditions – provide mix of treatments, support and mutual support
- More holistic approaches to R&D with deliberate emphasis on social innovation as well as medical

- New metrics that track wellbeing, and take experience seriously
- New partnerships across industry, employers, governments, health authorities, NGOs

Many of these ideas have fed into our concept of a Health Innovation Accelerator.

We see great value in the formal testing of models and interventions, and the powerful global system that now exists to create, develop and disseminate evidence.

But we also believe that there is a need for a different kind of evidence- for more flexible and quicker testing of new approaches that can tap social innovation, approaches more akin to design than hard science, with quick prototyping and testing.

We have therefore developed a methodology that can be applied in different areas of health to accelerate innovation, bringing together temporary coalitions of doctors, the public, other public agencies, sometimes businesses. These ideas draw on the experience of Health Action Zones and the NHS Modernisation Agency and they have parallels to the new NHS Institute for Learning, Skills, and Innovation's National Innovation Centre.

However, whilst the NIC will focus on stimulating and promoting technology innovation in the NHS, the HIA programme will focus on models for new organisations or forms of service delivery.

There is currently no dedicated programme or organisation focused on innovation straddling inside and outside NHS, and on achieving step improvements in savings through a patient-centred approach to prevention, self-management and patient empowerment – we think the time is ripe for one to be set up, and we are looking for partners to collaborate.

The kinds of output we expect will include new ways of combining technology, services and self-management in the main chronic diseases:

- New ways of organising coaches to help people with chronic diseases to navigate the health system, as well as mentors and motivators for the chronically ill.
- New types of employment better fitted for people with intermittent and unpredictable conditions
- New ways of coping with the cultural issues around health for a very diverse populations understandings of diseases
- New ways of incentivising lifestyle change
- New ways of aggregating support services
- And new ways of organising housing and care

All of which throw up new possibilities for enterprises as well as for professionals.

Let me conclude.

We face a slow epidemic of chronic disease

- around 3.5 million people with asthma
- 8- 10 million people in the UK suffer from arthritis, including: one million adults under the age of 45
- 1.3 million people with diabetes in England, a figure which increases every year

All are likely to grow through the combination of ageing and the other pressures that are fuelling some conditions, notably mental illness.

And none is likely to be much affected by current wave of reforms which I'm sure will bring further commodification of some processes – hip operations to cataracts – and further transformation of management within existing models – but not really radically change how these conditions are handled.

The new approaches are not just about running to catch up with a worsening problem. They also offer a chance to overhaul how health is organised, and for the better, giving more control to users, enabling more diversity within a still integrated NHS, and a bigger role for civil society as well as business.

There are no doubt many risks. The risk of widening tension between demanding patients and conservative system with professional protections. The risk of insufficiently effective innovations that cannot demonstrate clearly enough their value.

But we are now hopefully coming out of a period when the only priority was to restore balance to the traditional systems – hospitals and GPs – and can now raise our sights.

Some of this still feels quite alien to people in the midst of delivery – but one of the virtues of now being in an organisation that is some 50 years old is that it's a reminder that most things we take for granted started off being seen as rather marginal, threatening .

And if there is one lesson I learnt from being in government it is that we tend to exaggerate what can be achieved short term – perhaps one factor behind perpetual reorganisation – but underestimate how much can change over decades .