VISIT BY DEREK WANLESS AND A MEMBER OF HEALTH TRENDS TEAM TO CANADA AND THE UNITED STATES: 27-29 JUNE 2001

This note summarises the main points arising from each of the visits made during the trip.

A contact list is attached at Annex A and a list of papers is at Annex B.

Copies of the papers are available from the Health Trends team and will shortly be made available on the Health Trends team intranet site.

Visit itinerary

Ottawa:

Health Canada

Washington DC:

Agency for Healthcare Research and Quality

Centers for Medicare and Medicaid Services (formerly Health Care Financing Administration)

Congressional Budget Office

An official, at the Council of Economic Advisers

Urban Institute

Philadelphia:

A Member of, Wharton School, University of Pennsylvania

Health Canada, 28 June 2001
Officials of Health Care System Division, Health Policy and Communications Branch

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Health Canada is the health department of the Federal Government. The meeting was centred around a presentation on funding Canada's health care system (*copy of slides available*).

Health system and funding

- The Canada Health Act essentially precludes private deliverers of "medically necessary" services. Thus avoiding waiting lists by paying for private provision is not generally an option. But some go across the border for treatment in the US.

- Private expenditure mainly covers the drugs bill for which most people need to have private insurance. The public system only covers drugs for the elderly and very poor (33% of total drugs spending). Each province has its own separate drugs review committee.

- Funding is allocated to the provinces on an equal per capita basis (although there is pressure for needs-based allocations). The funding is provided by means of the Federal Government's 'Health and Social Transfer' which together includes health, social services and post-secondary education funding.

- The health component of the Transfer is not separately identified. This approach was politically attractive in the early/mid 1990s when spending was being cut, but in times of healthier public finances it makes it harder to make a virtue of increases in health spending.

- Spending projections are limited. The Federal Government only makes projections five years ahead for the Health and Social Transfer in aggregate. Health Canada were not aware of projections produced by the provinces.

- In addition to the Romanow Commission on the Future of Health Care in Canada (we are arranging to speak to them), Health Canada pointed us to the Standing Senate Committee on Social Affairs, Science and Technology which is currently examining health issues. They also promised to provide a provincial contact who might be able to provide an alternative perspective.

Health outcomes

- Health Canada do very little at present to link spending to outcomes in each province. Nor as far as they are aware do Statistics Canada. But the Canadian Institute for Health Information have been working on comparative statistics and they promised to send us any available information.

- By September 2002 each province will be required to report to their constituents (not the Federal Government) against 14 common performance indicators spanning health status, health outcomes and quality of service. This should allow some comparison between provinces.

- The 14 performance indicators were agreed at political level by the Prime Minister and Provincial Governors. There is no available analysis of how they were selected. Work is underway on the definition and measurement of these indicators.

Demographics

- Health Canada thought that the aeging population was set to have a larger impact on health spending in Canada than in the UK over the next 20 years. They promised to forward us a report.

Public confidence

- Public confidence in the Canadian health system has been declining. However, users' experience of the system has remained high. While the latter is in many ways the important measure, they recognise the danger that a lack of public confidence could lead to low morale in the health service, falling levels of service and therefore lower user satisfaction.

Technology and IT

- Health Canada have not done any work on projecting the impact of technology and would welcome any material we have. More generally, little work appears to have been done in Canada looking at technology diffusion.

- A forthcoming Health Canada report will look at the rate of diffusion of MRI scanners. A low number of scanners, certainly in relation to the US, has become a big issue in Canada and private clinics have been setting up to meet the demand.

- As in the UK, the Canadian system makes relatively little use of IT.

- Last autumn a new $1 billion (Cdn) Medical Equipment Fund was established to contribute to the purchase of modern diagnostic and other medical equipment and associated installation costs. In addition, a $½ billion (Cdn) Health Information Technology Fund has been created to accelerate the adoption of IT in the health care system.

Workforce issues

- Not much has been done on a national basis in the past – most work has been done at provincial level (including how many doctors to train). A large study is due to begin this autumn and run over several years looking at workforce planning for physicians and nurses. It will cover all key stakeholders and will be used to think about different models of care.

Agency for Healthcare Research and Quality (AHRQ), 28 June 2001
Persons seen were from the Center for Cost and Financing Studies (CCFS)

The AHRQ is the agency of the US Department of Health and Human Services responsible for supporting research designed to improve the quality of health care, reduce its cost, improve patient safety, address medical errors and broaden access to essential services. The CCFS conducts and supports studies of the cost and financing of health care and develops data sets to support policy and behavioural research and analyses.

Key points

- They explained that their **modelling** work concentrates on micro databases using relatively small (around 30,000 individuals) samples but containing very comprehensive information on those individuals. They promised to send us a note on different modeling approaches and contact names for groups involved in various modeling exercises.

- Unlike in the UK, **demographic** forecasts have been fairly accurate. However, it has proved difficult to accurately forecast migration patterns.

- The AHRQ has close links with the National Center for Health Statistics on **mortality and morbidity statistics**. The AHRQ has also been working closely with the WHO.

- They stressed the need in modelling work to recognise and allow for **uncertainty** – building in different assumptions and producing ranges.

- On **patient expectations**, they have recently launched a survey using a self-administered questionnaire which includes a series of attitude questions (sense of public opinion, people's realism about needs, etc.). On **patient choice**, they suggested that it might be possible to get a handle on the issue by looking at US data on what insurance premiums people are willing to pay to guarantee higher levels of non-clinical services.

- On **workforce** issues, they referred us to the Health Resources and Services Administration and said they would provide a contact. They noted that it is an area where a lot of change is underway, e.g. the physician support grade, the need for more nurses in care homes and team working and continuity of care issues.

Centers for Medicare and Medicaid Services (CMS), 28 June 2001
(formerly Health Care Financing Agency)
Persons visited were from the Office of the Actuary

The CMS (formerly the HCFA) is the agency of the US Department of Health and Human Services that administers Medicare, Medicaid and the State Children's Health Insurance Programme.

Key points

- The CMS currently produce three sets of **spending projections**: 10 year projections of Medicare/Medicaid spending; 10 year projections of overall health spending; and 75 year projections of Medicare/Medicaid spending (the latter are basically straight line projections for the final 50 years). In addition, they are undertaking research into producing 75 year projections of overall health spending. A summary of their latest 10 year projections is included in an article in the March/April 2001 edition of *Health Affairs*. We were also given papers describing their methodology and model specification.

- They suggested that the top down approach was the best starting point as it is impossible to guarantee getting results from a bottom up approach.

- Their main advice on producing projections was not to be too ambitious and not to try to build everything into the model. Some things, e.g. genomics, are in their view simply too uncertain. In addition, they noted that once you begin to project beyond 5-10 years it is important to think about the wider economic and budgetary implications – health spending cannot grow significantly faster than GDP for an indefinite period.

- They also advised us to be cautious when building measures of **health status** into our projections – they think it is extremely uncertain what the health of a typical 65 year old will be like in 20-30 years time compared with now.

- On **demographics**, they said that the population projections produced by the Social Security Administration have been criticised for being too pessimistic about future lifespans (i.e. others think people will live longer in future).

- The CMS are intending to examine various issues around **mortality and morbidity**. Their projections currently assume that the cost of someone at, say, age 80 in 20 years time will be the same as the cost of someone age 80 now. They are undertaking work with the Rand Corporation –

Rand are currently finalising the conceptual thinking about the model and no results are expected until the end of the year.

- The social security administration have produced **mortality projections** by nine disease groups. However, this has proved to be a difficult area and they have tended to be overly cautious. For diseases where there had been big improvements in the past, they took the view that the scale of improvement could not continue. But they were unwilling to go out on a limb and project significant improvements in disease areas where relatively little progress had previously been made, e.g. a cure for certain cancers.

- The CMS health spending projections do not take account of **lifestyle** issues such as tobacco consumption other than the extent to which existing trends are already reflected in the baseline.

- On **technology**, they gave us a draft copy of a paper they have been working on evaluating the literature on the impact of technological change on health care cost increases. They recognised the impact of technology as a key but also a very tricky issue given its speculative nature. There is a large amount of individual disease information but not much which can be applied at the aggregate level. They also referred us to work by Newhouse and Cutler in the mid 1990s.

- The CMS do not feed changing **patient expectations** directly into their forecasts, other than to the extent that trends are already in the baseline. They do, however, attempt to model the effect of changes in the type of insurance on the market and spending on insurance. So to the extent that changes in insurance spending reflects what levels of service people are prepared to accept (e.g. the extent to which people are prepared to accept cheaper insurance for more restrictions), patient expectations are included indirectly.

- The projections assume the status quo as far as **workforce** patterns are concerned. They have compared their spending projections with projections of doctor numbers, but only as a reasonableness check. They suggested that the Bureau of Health Professions might have done some modelling work.

- They have just started to examine **productivity** issues. An official has been doing some work in this area, as has the University of Chicago.

Congressional Budget Office, 29 June 2001
Persons visited were in Health and Human Resources Division

The Congressional Budget Office is responsible for providing analysis to the US Congress, i.e. it is not part of the Executive. The Office analyses the economic and budgetary impact of all legislation pending in Congress.

Key points

- Their **projections** (usually covering 10 years) are based on the convention that legislation is unchanged beyond that which is currently being examined.

- Their interpretation of the CMS 75 year projections is that all they are really doing is taking account of demographic projections and making an assumption about Medicare spending per person (they assume that its rate of increase will gradually taper down to the rate of growth of the economy – something it has not done for the past 35 years).

- They regard it as relatively straightforward to make projections over the next 10 years, but much harder over the subsequent period as it becomes more difficult to predict technological change and the impact off an aeging population on spending.

- On **technology**, they view pharmaceuticals as the big challenge to get a handle on over the next 20 years. Over the past year, the CBO has increased its projection of prescription drug spending in 10 years time by 18 per cent. They also referred to a physician at Dartmouth, who has been examining variations in practice styles and has shown that the production process varies dramatically across countries.

- They referred to work by someone at Columbia suggesting that the growth in **drugs spending** may be partly offset by lower spending elsewhere if, for example, greater prescription drug use delays or eliminates the need for inpatient care, surgery, etc. However, greater use of some drugs also increases the risk of adverse reactions and requires more intensive monitoring.

- On **patient choice**, they noted the upsurge of managed care organisations between the mid 1980s and the mid 1990s. Most claimed to save money by managing care and negotiating discounts with provider groups. However, there has been a big push back from managed care in recent years as people have become unhappy with being restricted in the care they can receive, i.e. there has been a shift towards greater flexibility and a downward trend in managed care.

- There is a major shortage of **nurses** in the US. Many have moved out of patient care into the financing end of the industry or into other industries. Few college leavers now view nursing as an attractive career.

- Finally, they pointed us to work at Duke University which identifies a long-term decline in the **incidence of disability**. The latest study suggests that disability rates among the elderly are declining even faster than expected and concludes that the older you die, the less expensive healthcare costs are.

Council of Economic Advisers, The White House, 29 June 2001
Person visited a Member of the Council

The three member Council of Economic Advisers is appointed by the President and advises him on a wide range of economic matters.

Key points

- On the rate of **technology diffusion**, they referred to work they had been involved in taking a bottom-up look at heart attack care (*Health Affairs*, May/June 2001). They noted that there is some evidence of small differences in outcomes. But at the end of the day, how much is spent on technology depends on what value is put on a particular outcome improvement.

- They referred to the **micro model** being developed by the Rand Corporation (also referred to by the CMS – see earlier) focusing on the 65+ age group and taking account of changes in disability, changes in the prevalence of common diseases, technology, etc.

- On **demographics**, they said that the US had under-forecast the aeging of the population a little, but not by as much as the UK or other European countries. In the US, there is a disagreement about the next 20 years. The Social Security Administration is assuming that improvements in life expectancy will tail off. But others (including them) assume that gains in life expectancy will continue or even accelerate in the future.

- As people live longer, they think that particular interventions will become common among older age groups than they are generally seen in at present, e.g. cataracts and joint replacements.

- They expect relative **wages** in the health sector to rise to alleviate specific shortages, particularly in nursing. They anticipates a greater skills separation in the future with, for example, skilled nurses giving medication and less skilled nurses carrying out general duties.

Urban Institute, 29 June 2001
Three officials were visited.

The Urban Institute is a non-profit policy research organisation established in 1968.

Key points

- Their view on the **aeging population** is that people who die at, say, 90 are less resource intensive/expensive in their last year of life as far as the health system is concerned than people who die at age 60. But it is important to take account of the fact that people living longer are using more of other resources.

- Like the CBO, they pointed us to work on **disability trends** among the elderly by Duke University. The work suggests an accelerating downward trend in disability rates among the elderly. They also suggested we contact the National Institute on Aging who has access to a significant research portfolio in this area. They noted that researchers at the Urban Institute have been looking at these issues including trying to identify the main drivers in longevity trends and also looking at type and degree of disability.

- They said that there is some US evidence that people are having major interventions later in life as longevity increases.

- They were not aware of much work looking at how **technology** and medical advances are affecting health outcomes. They did, however, describe the US as at the "crazy frontier" with a market driven system taking on new technologies very rapidly compared to countries like the UK where budgets are set centrally.

- They highlighted how the US is being overwhelmed by the increasing cost of the **prescription drugs** bill. They referred us to Brandeis University which had hosted a conference on drugs spending. They also noted that the major drug companies had started advertising direct to consumers which was resulting in patients demanding particular drugs from doctors. This had led many of the medical insurance companies to introduce three tiers of drugs access: generic; older brand names and newer brand names.

- In their view, the recent rapid growth in the prescription drugs bill of around 15-20 per cent a year – driven by new drugs - is not sustainable. They observed that the strength of monopoly suppliers was at least partly countered in the case of the UK by the existence of a monopoly buyer.

- Their **overall view of the US system** is that people with very good insurance get a high level of service. But the growth of managed care between the mid 1980s and the mid 1990s, while containing costs, led to large scale dissatisfaction on the part of both consumers and providers. They believe that patient protection legislation will reduce the ability of the Health Maintenance Organisations (HMOs) to squeeze people and will lead to better patient care and higher satisfaction. However, that implies that the next decade will see strong growth in health spending and a larger proportion of the US population unable to afford health insurance.

- They noted that the fact that the US has relatively poor **health outcomes** (e.g. high infant mortality) does not generally worry the public or play into the political debate. People tend to accept that many of the poor outcomes are driven by broader social issues.

- **Patient expectations** are a growing issue. People are locating health information on the internet and demanding specific treatments and drugs from their doctors. This may lead to a widening of inequality.

Wharton School, University of Pennsylvania, 29 June 2001
Person visited was in Health Care Systems Department

Key points

- They said that the main driver of recent annual double digit growth in US **pharmaceutical spending** has not been demographics but the insurance system (not just the number of people with cover, but also the form of cover) and growth in direct-to-consumer advertising. The insurance system is now very efficient and for each person covered utilisation has increased sharply. The big drivers have been new products and increased volume per patient, plus to a lesser extent replacement of older drugs by newer, more expensive versions.

- Growth on this scale was nowhere near predicted a few years ago and the big issue is what will happen in future – both in the case of drugs and to some extent medical devices.

- Growth in pharmaceutical spending as a result of increasing insurance coverage is likely to slow, but drug development is expected to continue to proceed at a rapid pace. They explained how they look at pharmaceutical sector analysis produced by sector analysts (in their case Lehman Brothers) – because they are interested in future pharmaceutical company profitability they are regularly examining and reporting on issues such as stages of drug development. However, they cautioned that such analyses do not tend to factor in the scientific angle (new dugs do fall down at clinical trial stage).

- They referred to some US research on trying to improve measures of **health price inflation**. Traditional measures based on the cost of a hospital day or a physician visit tend to show medical inflation outstripping general inflation. However, work to produce measures of quality adjusted patient treatments (i.e. based on outcome delivered) has suggested that medical inflation is lower than general inflation. They mentioned a book edited by Jack Triplett at the Brookings Institution (*Measuring the Price of Medical Treatments, 1999*).

- On **technology**, they highlighted work by Chicago University looking at gains to health over the past 100 years and the contribution played by technology. We are trying to get a copy. They were in no doubt that new technologies will continue to come through at a rapid pace – the only issue is how much people are willing to pay, i.e. how clinical need is perceived.

- In their view, it is unfair to describe the **US health care system** as highly inefficient on the basis that it is characterised by high spending and low

outcomes. The poor outcomes mainly reflect a high rate of accidents (particularly car accidents), suicides and infant mortality – the latter mainly due to wider socio-economic factors. They noted that studies which have conditioned for birth weight show that the US has a high infant survival rate. In addition, they argued that a true comparison of the cost of health care systems across countries should take account of the cost of people's time spent having to wait – people generally have to wait less time in the US.

- They believe that the 'best bang for your buck' in improving health care comes through **preventative spending** – focusing on lifestyle issues such as smoking and diet. They said that someone (formerly of Duke University, now a private consultant who has been working for Kaiser – one of the largest HMOs in the US) did some work in the early 1980s for the Indian Government on the payoffs from different types of preventative spending. Kaiser had been interested in running their HMO in terms of thinking about achieving the best outcomes for their spending and were therefore interested in that person's work.

- They felt that single **electronic patient records**, if they ever came about, should lead to large efficiency gains, fewer medical errors and more effective treatments. However, they could not foresee such a development occurring in the US because of privacy issues. Single electronic records are perhaps more risky in the US than the UK because of the greater number of people in the US who would potentially need access to the records and the fact that many of them would be outside the institution of government.

- On **efficiency**, they said that they were amazed how little the HMOs know about their costs. They have poor data capture/information management systems and often only realise too late that their costs are running out of control.

- It is rather easier to obtain disease management information in the US than in the UK because of the availability of insurance data in the US which give information on how much individual interventions have cost, whether they are likely to have saved money later, what outcomes have been delivered, etc.

- They wondered whether, if aegism is essentially ruled out in the NHS, NICE apply different QALY thresholds to the young and the old.

- In **summarising the UK health system**, they thought that the main advantage was its national funding which makes it clear that there is a set budget and trade-offs which have to be made. This has led to the development of organisations such as NICE which are able to take

decisions on cost effectiveness. The main disadvantage they identified was the structure under the single market whereby some primary care groups have effectively created local monopolies without any management expertise or training.

Annex A: List of contacts

Annex B: List of papers

2001 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, March 2001

2001 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund, March 2001

Projections of National Health Expenditure: Methodology and Model Specification, Health Care Financing Administration

Technical Review Panel on the Medicare Trustees Reports, **Review of assumptions and methods of the Medicare Trustees' financial projections**, December 2000

Canadian Institute for Health Information, **Health Care in Canada**, 2001

Health Canada, **Implications of Aging for the Health Care System**, Health Care Policy Research, Volume 1 Issue 1, March 2001

Health Care Financing Administration, **National Health Accounts: Definitions, Sources and Methods**

Heffler et al, **Health Spending Growth Up in 1999; Faster Growth Expected in the Future**, Health Affairs, March/April 2001

King and Jackson, **Public finance implications of population aeging 2000-08** (Canada)

Manton and Waidmann, **International Evidence on Disability Trends Among the Elderly**, June 1998

McClellan and Kessler, **Technological Change Around the World: Evidence from Heart Attack Care**, Health Affairs, May/June 2001

Murphy and Topel, **The Economic Value of Medical Research**, University of Chicago, September 1999

Provincial and Territorial Ministers of Health, **Understanding Canada's Health Care Costs: Final Report**, August 2000

Smith, Heffler and Freeland, **The Impact of Technological Change on Health Care Cost Increases: An Evaluation of the Literature**, Health Care Financing Administration - **unpublished**

The Standing Senate Committee on Social Affairs, Science and Technology, **Interim Report on the state of the health care system in Canada**, The Health of Canadians – The Federal Role, Volume One – The Story So Far, Hon Michael Kirby (Chair), March 2001
Triplett (ed), **Measuring the Price of Medical Treatments**, 1999

Unpublished: University of Toronto Reports to The Standing Senate Committee on Social Affairs, Science and Technology:

Profiles of six health care systems: Canada, Australia, The Netherlands, New Zealand, the UK and the US

The structure, dynamics and impact of the public/private mix of financing on health care systems

International experience with managed care, managed competition and internal markets: lessons for Canada

The political economy of health care reform: a cross-national analysis

Waidmann and Liu, **Disability Trends Among Elderly Persons and Implications for the Future**, Journal of Gerontology, volume 55B, 2000