NEW ZEALAND SUMMARY REPORT

Based on the Study Tour of Australia and New Zealand organized by the Canadian College of Health Leaders (CCHL) and the Australasian College of Health Service Management (ACHSM), February 19, 2012 to March 2, 2012.

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EXECUTIVE SUMMARY

This report summarizes the observations and learning's from the Canadian participants in the Australia-New Zealand Study tour that was organized by the Canadian College of Health Leaders (CCHL) and the Australasian College of Health Services Management (ACHSM) between February 19 and March 2, 2012. This summary report focuses on the New Zealand component of the Study Tour and a separate report is available on the Australia component.

The study tour was well organized and Canadian participants had generous access to very senior leaders in the New Zealand health system. The presentations tended to cluster around six themes: the national health reform agenda; primary health care; PHARMAC; Accident Compensation Corporation (ACC); private health system; and innovation and transformation at the delivery level.

Overall conclusions from the study tour can be summed as follow:

- ☐ *The NZ experience provides an easier and more direct comparison to Canada as many of the same system characteristics are present between the NZ Government and its various devolved agencies e.g. DHBs and the situation in Canadian provinces. In addition the size and population of NZ makes comparisons to Canadian provinces more relevant.*

- ☐ *The very different policy framework to engage the Maori and Pacific Peoples population stands in sharp distinction from the aboriginal health policy framework in Canada or Australia. The historic commitment to a bi-cultural society is given real meaning in the implementation of new health strategies and programs in New Zealand.*

- ☐ *While sustainability is an issue in Canada, Australia and New Zealand, the economic situation in New Zealand makes this a far greater imperative for change. So embedded in all the major themes of reform is the clear expectation to reduce overall health system costs.*

- ☐ *A key difference between Canada and New Zealand is the presence of a National Health Reform agenda in New Zealand whereas in Canada health reform is largely rolling out on a provincial basis. However, given that the size and population of New Zealand compares to some Canadian provinces, lessons can be learned on a provincial level on how to implement health reform in a consistent manner across several major themes.*

- ☐ *New Zealand's approach to primary health care reform in the previous decade has many similarities to what was being attempted in Canada. However, recent initiatives in New Zealand appear to be taking that country to a new level of primary health care reform in several areas including: much broader public sector collaboration; increased stakeholder engagement and contracting; more flexibility in funding models; and the concept of "wrap around" services to meet the needs of disadvantaged populations.*

- ☐ *Sustainability of GP practices is seen to be a critical element of primary health care reform in New Zealand so new initiatives being taken in this area may be instructive to Canada.*

- ☐ *The PHARMAC experience in New Zealand makes Canada's efforts in pharmaceutical policy reform look very piecemeal and limited in terms of impact. The PHARMAC impact has been achieved both because of concerted national direction and not having to concern itself with the economic implications on a pharmaceutical manufacturing sector. However, serious questions exist as to whether Canada could make the same gains given the presence of a pharmaceutical manufacturing sector in this country.*

- ☐ *The Accident Compensation Corporation (ACC) presents a very novel and comprehensive approach in dealing with all forms of accidents. It is definitely worthy of consideration in the Canadian context.*

- ☐ *While the share of private funding of health care is lower in New Zealand than in Canada, the private sector has much more prominence in ambulatory care and hospital services. Canada may be able to learn how to incorporate these private sector components into its system. At the same time it was recognized that the mix of private and public systems does create tensions, including inequities in access.*

- ☐ *Innovation in health care at the delivery level appears to have been more bold and robust than in Canada. The national direction appears to inspire experimentation in new directions and clearly some of the major DHBs have responded very positively in shifting care to community settings by developing new linkages with a wide variety of stakeholders. Their success in reducing wait times, ED visits and hospitalizations is worthy of careful consideration in Canada.*

- ☐ *While there is not a fully developed E health system in New Zealand significant progress has been made with the concept of the "Shared Care Record" and this may be an incremental step worthy of more consideration in Canada.*

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1. Preamble

This summary report attempts to capture the major learning's from the CCHL-ACHSM study tour to New Zealand Australia during the period February 26 to March 2, 2012. The overview is from the perspective of the author who has been following the health care scene since 2004 when he participated in a similar study tour. This report focuses on areas that were given substantial discussion during the study tour and should not be considered an exhaustive list of the developments in New Zealand.

This report consists of two parts: the summary report which includes ***Insights from the Canadian Group and Lessons for Canada*** and a listing of presenters and organizations that were included in the Study Tour.

The summary report is organized around six major themes that were pursued during the study tour:

A. National Health Reform
B. Primary Health Care
C. Pharmac
D. ACC
E. The Private Health System
F. Innovation and transformation in Service Delivery

2. Background

Before delving into the major areas of this Summary Report it is important to recognize some key characteristics of New Zealand that are different from the situation in Canada and Australia.

1. **Unitary Government System** – while Canada and Australia are federations with powers split between two levels of Government as per their constitutions, New Zealand has a unitary system of Government. The national Government is the final authority on all matters. While decentralization of powers does occur in many fields including the health system where powers are given to District Health Boards, these are all delegated powers. Accordingly, it is much easier to drive health care reforms across the entire country.

2. **Bi-cultural society –** the treaty of Waitangi signed between the British and the Maori in 1840 created a bi-cultural society whereby Maori were accorded more rights and influence than is the case with aboriginal peoples in Canada and Australia. While these rights were often overlooked in the first 140 years, there has been a significant reclaiming of rights since the mid 1980s as a result of court decisions. Since then, Government policy has become increasingly sensitive to Maori issues and influence. For instance, all major health policy

documents focus on Maori issues and provide specific representation to Maori in implementing policy. A case in point is the legislation creating District Health Boards (DHBs) which requires two members on each DHB to be Maori.

3. **Size and Population –** in contrast to Canada and Australia, New Zealand is a small country both in geographical size and population. The land mass is slightly more than one quarter the size of British Columbia and the population of 4 million is slightly smaller than the population of BC. However, the rugged terrain and the land mass being over two major islands does create many hard to service areas as is the case in Canada and Australia. Similarly, the population is concentrated in urban areas with a drift to larger cities.

3. Study Themes

A. The National Health Reform Agenda

A unique feature of the NZ health system is that there are two major streams of funding: one from the Ministry of Health and the other from the Accident Compensation Corporation (ACC). ACC is discussed later in this report.

New Zealand's health system has undergone much structural change over the past 30 years. From 1938 to 1989 the health system was run as a Government service with 14 area health boards being introduced beginning in the mid-1980s. In early 1990s, an experiment with a purchaser provider split was introduced using four large regional purchasers and 23 crown enterprises as hospital providers. Elected board membership was removed. The four RHAs were amalgamated into one Health Funding Authority in 1997.

A new Labour Government came to power in 1999 with one of its goals to restore the democratic deficit in health care. It passed the Health and Disability Act in 2000 creating a new structure including the establishment of District Health Boards (DHBs) which are still in place. Initially there were 21 DHBs and there are now 20 given a relatively recent amalgamation two DHBs. However, the numerous DHBs serving a population of 4 million have often been criticized as being inefficient. In 2008 the newly elected National-led coalition government came to power to create a more efficient health care system. The Ministerial Review Group (MRG) that was put in place in mid 2009 completed its report recommending several major changes to the system Instead of dismantling the DHBs, a series of initiatives were put in place to drive joint planning and efficiency across the system. This resulted in a number of new national agencies which in effect have removed some administrative latitude from DHBs. The National-led coalition Government was returned to power in November 2008 and the Briefing to the Incoming Minister (BIM) document (December 2011) describes initiatives to improve the efficiency of the system.

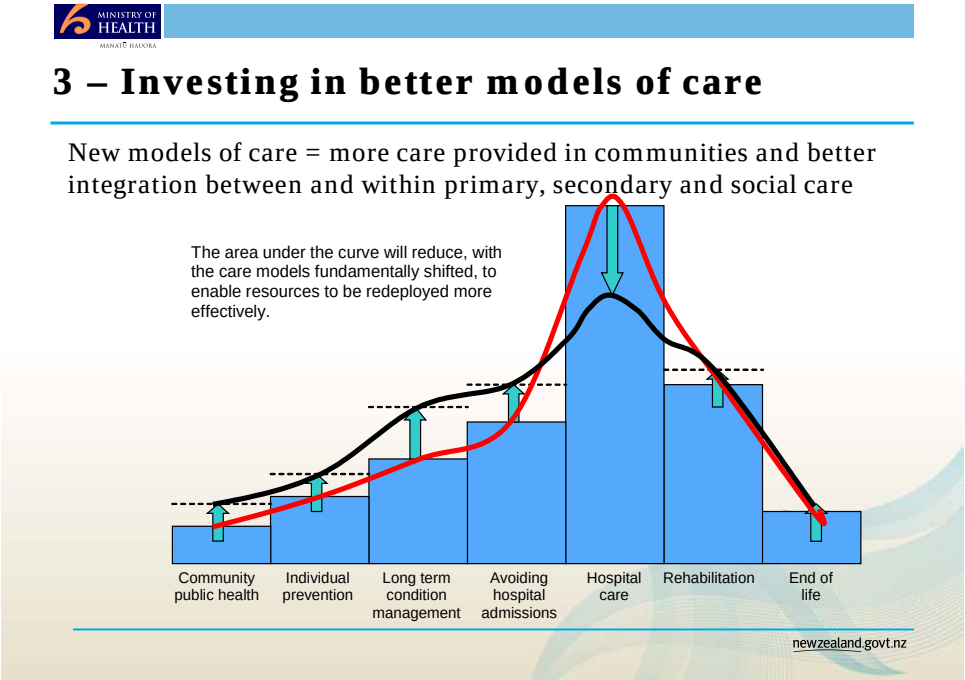
Overall NZ compares well on most international health comparisons, but the strategic challenge is how to accelerate pace of change to raise the performance of health services within a lower funding growth path. The Government's goal is to balance its budget by 2014-15, which means significant constraints on health funding. Seven major themes have been identified in the BIM. These are:

1. Moving intervention upstream
    - ☐ Preventing health conditions from developing
    - ☐ Moving from treatment in hospitals to preventing and managing long-term conditions in communities
    - ☐ Better patient experience and health outcomes and more sustainable: making the health system more fit for the future
    - ☐ Accelerating the pace of change means changing the way we fund and design health services to better focus on proven, cost-effective preventative measures
    - ☐ Use of incentives to drive change and lift performance

2. Meeting diverse needs in the population
    - ☐ Ageing population
    - ☐ Poorer health outcomes for Māori and Pacific peoples
    - ☐ More people with multiple, long-term health conditions
    - ☐ Need to integrate health and social care services to centre on person – e.g. wrap around services, integrated after hours care
    - ☐ Better access to primary care and shorter waiting times for treatment in hospitals

3. Driving investment towards better models of care

The following figure represents the intended reshaping of the New Zealand Health System. The intent to move resources from the red to black line:



4. Integrating services to better meet people's needs
   - ☐ Including taking a broad government perspective to influence health
   - ☐ 3 priorities this year: Unplanned and urgent care, long term conditions, wrap-around services for older people
   - ☐ Also focus on integrating child and maternity services over the next two years

5. Improving performance – How to lift health outcomes and financial performance of health sector. Measures being taken include:
   - ☐ Targets for patient safety
   - ☐ Adjust funding to incentivise quality improvement
   - ☐ Public reporting on quality indicators, including patient experience
   - ☐ Incentivise efficiency – both in Ministry and sector
   - ☐ Support clinical leadership

6. Strengthening leadership while supporting frontline innovation
   - ☐ Regional collaboration
   - ☐ Regional planning by DHBs
   - ☐ Clinical leadership
   - ☐ Front line staff support

7. Working across government to address health and other priorities

- ☐ Quality of people's health is influenced by many things – e.g. housing, income, education
- ☐ Need to work across government to tackle common causes of poor health (e.g. poor quality housing)
- ☐ Need to remove any duplication in health and other services so that people get a better service and it's more efficient (e.g. one car on the driveway, not several)
- ☐ Contribute to priorities in other agencies – e.g. Youth Mental Health project, Whānau Ora

A practice of public reporting in six key health domains for each DHB has been operating for 3 years. During the week of the study tour the Quarter two results from 2011-12 were released. The six target areas consist of:

- ☐ Emergency Department access time
- ☐ Access to elective surgery
- ☐ Wait times for cancer treatment
- ☐ Immunization rates
- ☐ Help for smokers to quit
- ☐ Diabetes and cardiovascular services

The target for emergency department wait times is that 95% of patients in will be admitted, discharged or transferred within 6 hours. The overall result for Q2 was 92% with a range from between 82 and 100%. Of note is that the three largest DHBs (in terms of service volumes) all met the target.

In summary the National-led Government's Reform agenda in New Zealand can best be characterized as consisting of the work of the new national agencies, new initiatives in primary health care as described later and the overriding themes described in the BIM.

As part of the study tour, two of new national agencies were reviewed:

1. **HWNZ -** Health Workforce New Zealand (HWNZ) was established in late 2009 as a result of recommendations of the MRG report. This was slightly in advance of Australia establishing a similar agency. HWNZ provides national coordination and leadership on the development of the country's health and disability workforce. As a business unit within the Ministry of Health but with its own external board, HWNZ provides dedicated oversight of workforce issues, while ensuring that workforce planning and development are fully aligned with planning of clinical services and implementation of health policy.

   HWNZ projects an estimated doubling of the demand for health services over the next 10 years. To meet this demand, NZ is making efforts to transform its health service delivery system in a number of ways, including more care out of hospitals, more emphasis on the home and community as focus of care,

more integration between hospital and community services and more emphasis on health promotion, prevention and self care so people can live more.

There is recognition of the vulnerability of the NZ health system because of many issues with the current workforce including the high dependence NZ has historically relied heavily on foreign trained health workers. Among OECD countries, NZ has the highest reliance on overseas trained Medical graduates and the second highest reliance on overseas trained registered nurses.

HWNZ has a very broad mandate with respect to recruitment, retention and the training of health workers. This role includes providing a framework to the Tertiary Education Commission that shapes curriculum content and determines enrolment levels, and direct funding of post-entry clinical training from DHB hospitals and other providers.

The priorities for HWNZ are:

- ☐ Improved recruitment and retention
- ☐ Development of a workforce with more generic skills
- ☐ Support for workforce innovation
- ☐ Improved data, systems and processes
- ☐ Strengthening of workforce relationships

While there is currently no major supply demand imbalance on a national level, there continue to be pockets of issues around the country. There is a recognition that the face of the GP practice will need to change dramatically in the next few years as the current generation of GPs is being replaced with a new cohort less willing to work lengthy hours in often near solo settings, and less desirous of owning their own business. There is major attention at this time on the use of Physician assistants and are currently using graduates from the US and from a program recently shut down in Queensland Australia. In contrast there has been a very slow uptake on the use of Nurse Practitioners in New Zealand.

HWNZ puts together teams of clinicians from various disciplines to examine issues and identify future solutions. A number of priority areas have been identified including aged care, rehabilitation, mental health, addictions and rural service delivery.

Incentive schemes to work in less popular locations in exchange for student loan write-off have proven popular. Retention schemes are being considered with evidence to date showing limited results with “Bonding Schemes” where individuals are forced to work in certain areas or face financial penalties.

With respect to training, the Health System Placement Network (HSPnet) from Canada is currently being adopted in 4 DHBs in NZ.

HWNZ has also given attention to increasing Leadership Capacity throughout the system. A key feature is the intent to establish Leadership Institute building on work done in a couple DHBs to date. This initiative has not yet got off the ground but leadership initiatives at the DHB level are continuing. See article in the Journal on Leadership in Health Services on New Zealand noted in the List of References.

HWNZ is attempting to push a transformation agenda at the service delivery level by focussing on innovations in clinical areas such as diabetes and to use regional training hubs to help innovative approaches.

2. **Health Quality and Safety Commission New Zealand -** the Commission was established in November 2010, again as a follow up to the MRG report, in response to the concern that only modest improvements in health quality and safety had been made over the previous years. The MRG report identified potential savings of around $60 million per annum from reducing preventable adverse events in NZ hospitals. The objectives of the Commission are to lead and co-ordinate work across the health sector for the purpose of monitoring and improving quality and safety and helping providers across the system to make improvements. It has been established as a Crown Agency and the Board members are appointed by the Minister of Health.

   The Commission's Triple aim program, based on Institute of Health Improvement (IHI)'s program, was worked out with the National Health Board with the goal of
   - ☐ Improved quality, safety and experience of care
   - ☐ Improved health and equity for all populations
   - ☐ Best value for public health resources.

   The Commission's Triple Aim program has now been adopted by all key players in the system including the National Health Board, the National Health Committee, DHBs, the National Health IT Board, HWNZ and, PHARMAC. This unification of purpose is seen as central to making improvements across the system.

The Commission has roles to advise, lead, coordinate, and identify data sets and to report publicly. The overall goal is create an improvement culture throughout the health system. Its focus to date has been on clinical leadership, consumer engagement and information. The Commission believes NZ lags behind some other countries in consumer engagement.

The Commission places high priority on getting clinician participation and partnership in its projects. The focus up to 2013 is in the following areas:
- ☐ Medication safety
- ☐ Infection prevention and control

- ☐ Preventing adverse events – e.g. falls, medication errors
- ☐ Surgical checklists

The work plan for 2013-14 plan is to set targets for reducing harm from falls, medication errors, infections, surgery. It is also working a national atlas of clinical variation.

In establishing the Commission, a conscious decision was taken not to make it a regulatory agency. While it has inherited four statutory mortality review committees, its role is to improve quality and safety. The Ministry of Health retains responsibility for accountability and standards.

Other key National Agencies – While the study tour did not provide for a review of all the new national agencies, another three agencies (National Health Board, the IT Committee and the Shared services agency-called Health Benefits Limited) received mention. These agencies have key roles in the national health reform agenda so some additional information from their respective websites is provided here:

National Health Board – The National Health Board is made up of a Ministerial appointed Board and is supported by a branded National Health Board Business Unit (NHBBU) within the Ministry of Health.

The National Health Board (NHB) and its two subcommittees (the Capital Investment Committee and the National Health IT Board) were established to improve the quality, safety and sustainability of health care for New Zealanders.

These committees, along with Health Workforce New Zealand (see below), work with the Ministry to consolidate planning, funding, workforce planning and capital investment, as well as supervise the billions of dollars in public funding spent on hospitals, primary health services and important national health services.

The NHB is responsible for overseeing the NHB Business Unit's work programme, which includes:

- ☐ funding, monitoring and planning of DHBs, including annual planning and funding rounds
- ☐ the planning and funding of designated national services
- ☐ oversight of DHB regional service planning and arbitration over regional disputes
- ☐ stronger alignment of service, capital and capacity planning, and strengthening and accelerating the linkages between IT, workforce and facilities capacity investment
- ☐ supporting the Government initiative to reduce bureaucracy

IT Committee **-** The National Health IT Board, also a sub-committee of the NHB, provides strategic leadership on the implementation and use of information

and information technology systems across the sector, and ensures IT strategy is reflected in capital allocation and capacity planning.

The role of the National Health IT Board (known formally as the National Health Information Technology Board) is to provide leadership on the implementation and use of information systems across the health and disability sector. The IT Board is charged with ensuring that health sector policy is supported by appropriate health information and IT solutions.

The National Health IT Board has developed New Zealand's first national health IT Plan to set priorities for regional and national IT investments over a five-year period. The main audience for this plan is clinical, IT professionals and executive leaders, but it is relevant to anyone engaged in planning or delivering health care services.

The IT plan is an integrated 'sector owned' and 'community supported' National Health IT Plan. For the first time there is a whole-of-sector plan to guide and prioritise investments in IT solutions throughout the health sector. It is a five-year view, which is integrated with the long-term planning framework being developed by the National Health Board (NHB) and with other plans for national services, workforce, capital and shared services.

The Plan recognizes that there are health care organizations making good use of health IT solutions, so the early goal of the Plan is to ensure the benefits from the smart use of health IT solutions are spread among all New Zealanders. To fund the proposed health information solutions, a greater level of DHB funding will need to be allocated to health IT projects, supported by targeted national funding.

The Plan is based on achieving the eHealth Vision. This means that each patient will have a virtual health record, with information stored electronically and accessible regardless of location by linking to: existing systems run by health care organizations (e.g. general practice, hospital-based systems), a regional clinical results repository and a shared care record.

The Plan proposes shared care planning for specific health events and long-term care that is supported by a single shared care record, which is a structured and comprehensive record, developed by the patient, their family/carer and their health professional(s). It will define mutually agreed problems, goals, actions, timeframes and accountabilities for all those involved.

The Plan also requires hospitals in each region to agree to operate a *common platform* for a patient administration system, a clinical workstation and a regional clinical results repository. A common platform is a way of describing a standard set of software systems that is used within a region.

There are two phases of the Plan:

- ☐ Phase 1: Consolidate, co-operate and lay the foundations (2010 to 2012)

- ☐ Phase 2: Shared Care (2012 to 2014) - will commence with a design and 'proof of concept' phase and will deliver a shared care capability covering patient vitals, medications, radiology results, patient care plan, and the decision support information needed to select the most effective treatment options.

Health Benefits Ltd - the shared services agency, now known as Health Benefits Limited (HBL) was established in July 2010 to reduce costs and deliver savings in administrative, support and procurement services for the health sector.

HBL's role is to facilitate and lead initiatives that result in savings and efficiencies for District Health Boards (DHBs) on non-clinical initiatives.

The establishment of HBL is a critical development to progress the wider work program for transformational change in the health sector. HBL is mandated to operate in a commercial manner and will identify for the sector the best way of delivering shared administrative and support services. HBL will also facilitate and lead initiatives to make savings and efficiencies, and manage the related implementation program. The benefits from these initiatives will include cost reductions, cost avoidance, operational efficiencies and sharing of good practice.

HBL has been established as a Crown company subject to the Companies Act. It is governed by a Board of Directors with shares in the Company being held equally by the Minister of Health and Minister of Finance. For its first year of operations, a primary measure of savings related to $30 million in savings which DHBs identified from "Target 30" programmes. These are collective procurement programmes. DHBs have estimated the overall benefits from these programmes are likely to achieve $49 million for the full financial year.

HBL has worked on establishing the robust baseline of DHB cost and service levels against which it will be able to measure success and which will assist with identifying future cost savings opportunities. This is a fundamental requirement of HBL's on-going success and therefore has been a focus of the company's attention.

Recommendations to date by HBL have included a single system to support finance, procurement and supply chain shared services and a number of process initiatives to reduce the transition time required. So far there are four programmes being implemented: office consumables, passenger vehicles, laptop/desktop computers and single/multi-function print devices. HBL is working with DHBs to ensure they take full advantage of these programmes.

HBL also worked closely with the four northern DHBs in the development of shared services for the northern region, under the healthAlliance banner. HBL has supported this initiative because it sees this development as an opportunity to more rapidly achieve savings within the northern region and provide learning's for application in other regions.

The role of HBL is to challenge existing practice, setting the stage for change and providing the initial leadership to deliver value.

Insights from the Canadian Group on National Reform Agenda & National Agencies

- ☐ *The national health reform agenda both in terms of policy directions and program initiatives is very similar to what is happening in many Canadian provinces. The key difference is that this agenda is being rolled out across the entire country in a consistent manner versus the Canadian situation with each province having its own agenda.*

- ☐ *NZ does not appear to be very far along its EHR journey. The vision for electronic health records and goals for an integrated system across the continuum of care aligns well with efforts in Canadian provinces.*

- ☐ *Health Benefits Ltd. has opportunity to provide great efficiencies and savings within the country.*

- ☐ *Public reporting on key health domains and focused improvement in priority areas is similar to Canada e.g. ED wait times, access to certain surgical procedures, diabetes strategy etc.*

- ☐ *Quality and safety agenda across country similar to many provinces with focus on patient experience, health equity and improving value for health dollar spent.*

Lessons for Canada

- ☐ *New Zealand's recent initiative to strengthen the linkage and working relationship of Primary Health Care organizations with broader public sector agencies that support income assistance, employment, education appears to have merit in dealing with the socio-determinants of health.*

- ☐ *The experience of Health Benefits Ltd. will be of interest to provinces that are looking at new arrangements to reduce administrative and supply costs.*

- ☐ *New Zealand has done some interesting work in health workforce by developing new categories of workers to address skill shortages (e.g. nurse endoscopists, expanded scope for anesthetic technicians). Canada can learn from this experience and there may be on ongoing opportunity to share Canadian/New Zealand lessons learned on expansion of scope of practice and recognition on new health provides (e.g. physicians assistants).*

B. Primary Health Care

Transformation of PHOs – in 2001 under the previous Labour Government the concept of Primary Health Organizations (PHOs) was introduced. These were to be networks that included GP services, and over time they were to expand to include a broader range of primary care services. A key objective of the PHO model was to reduce the level of co-payment for citizens in accessing primary care services, particularly for lower socio economic groups. Incremental funding was put into the system and much of this was targeted to Maori and other socially disadvantaged patients and communities. Key aspects were patient enrolment with a PHO through their general practice, and capitation payment from DHBs to PHOs for general practice and population health services. However, the capacity of PHOs to leverage change in general practice was relatively weak. Clinicians pushed back on the issue of Government influencing the levels of copays they charged to the public. While Government's view is that accountability should be attached to the increased revenue from the public purse, clinicians felt that the funding was largely subsidizing reduced copays and not providing resources to support the comprehensive service that to which the accountability was being attached.

By 2008 there were 82 PHOs in place, and virtually universal patient enrolment. Funding for the PHOs including the funding for GP services is through the DHBs with the expectation that there would be joint planning between DHBs and PHOs. Such planning would enable integration of hospital and community services resulting in improved coordination to provide for a continuum of care for patients.

However, the PHO impact varied widely. Some PHOs were very small in terms of population base. While improvements in integration and coordination of services were made in some areas, overall much more was left to be done.

The new Government introduced the "Better, Sooner, More Convenient (BSMC)" initiative. Under this initiative the PHO objectives were not changed but the intent was to accelerative change. In the 2009 MRG report commissioned by the new Government, primary care was identified as an area that needed to achieve more efficiency and improved outcomes. To advance BSMC, in late 2009 an Expression of Interest (EOI) process was put in place seeking proposals from PHOs for innovative approaches to accelerate change in primary health care. As well Government provided clear direction to consolidate the large number of PHOs. As of 2012 there are now 32 PHOs and as part of the study tour, the Canadian group reviewed two of the nine innovative projects that resulted from the EOI process.

The new approach to PHOs has introduced new operational flexibility and new incentives with the intent to control growth in overall health system expenditures and improve system performance. New alliances, flexible funding pools, shifting services, integrated family health centres as well as the consolidation of PHOs has been underway.

Alliance Health+ - AH+ was formed in July 2010 from the amalgamation of three PHOs all of which had significant Pacific people's population. (Pacific people are

immigrants to New Zealand from the Pacific Islands such as Samoa and the Cook Islands, and their descendants. Most of the immigration began in the 1960). AH+ has a population base of 75,000, the majority of whom are Pacific peoples. The Pacific people population is the fastest growing ethnic group in New Zealand. The enrolled population is urban and based in Auckland area.

AH+ has contracts with two groups within its Network – its contracted services and contracted NGOs that provide specific services (e.g. social services).

The Alliancing concept being used in AH+'s relationship with DHBs has some similarity to alliances in the construction industry where a number of independent partners come together to achieve a common goal. Whereas funding to PHOs in the past was earmarked for specific services, the new arrangement allows for the pooling of funds. The intent is to move from an input to an output and outcomes model with performance/quality incentives for the provider network ('results-based accountability'). AH+ deals with three DHBs in the greater Auckland region.

Decision making in the Alliance occurs at three levels. Governance and organizational oversight is provided by the Alliance Health Plus Board and the Clinical Governance Committee (a sub-committee of the AH+ Board) who determine the "What" - what is to be done and how much. Operational oversight is provided by the Alliance Leadership Team and the Clinical Governance Group who determine the "How". The Clinical Governance Group has a major role in service design and this enabled by the Alliance Leadership Team. The Alliance Leadership Team comprises clinical and management expertise from providers and funders. The intention is for the ALT to work together to enable the implementation of the plans agreed by the Board and Clinical Governance Committee. Bringing together primary and secondary expertise from across the sector is intended to enable more effective integration.

The Alliance concept has generated some key learning's to date including the wide variability that exists among all the provider groups in terms of their capacity to contribute. There are also the dual forces of collaboration on one hand but there is still a competitive environment among providers. There have also been challenges in having the Ministry facilitate action as the outsider to the alliance. Shifting services from hospital to community has been difficult and often these discussions get bogged down in issues of budgets and fees versus program outcomes. The building of strategic capacity in the primary care sector has been slow as the Government is not funding infrastructure. This in turn does not enable secondary services to reduce their capacity nor give certainty to primary care of long term arrangements.

AH+ is on track to enhance service delivery through a number of approaches including nurse led services and to reduce demand for acute care services. Key priority areas are acute care demand, child health, chronic care, elderly and palliative care, health promotion and disease prevention, women's health and mental health.

AH + operates the Whānau Ora program which is a holistic approach using a bio-psycho-social and Whānau centre approach to healthcare across the spectrum of a person's life. Whānau is a Māori term referring to family including the extended family. The word Fanau has a similar meaning for Pacific Peoples. This program resulted from a Task Force established by Government in 2009 to establish a new policy framework to meet the social service needs of Whānau. The Minister responsible for Whānau Ora stated "*Whānau Ora is about empowering Whānau to take control of their future. What we want for our Whānau is to be self-determining, to be living healthy lifestyles, to be participating fully in society and to be economically secure"*. Building on a Maori word this program is about restructuring health and welfare services around the total needs of the individual and family.

The Whānau/Fanau Ora program at AH+ was initiated with extensive community consultations in 2011 focusing on the broad range of socio-economic determinants of health. Stories from families were collected. A clear message is that families often need to think of other needs such as housing and jobs before they think about their health. AH+ has now plans to target certain families using their socio determinant criteria and to work closely with them by giving them one stop shopping to many health and social services. PHOs have now been some latitude to spend money outside traditional health services. A major issue in developing this type of focused program is securing the needed information so there is a great deal of interest in developing better IT systems.

Midlands Health Network (MHN) – the Midlands Health Network is another innovative PHO resulting from the EOI process in 2009. It is centered around Hamilton but covers a vast geographical area. Hamilton is about 100 kms south east of Auckland. MHN serves a population of 500,000 with a growing population. It has above average rates in the proportion of Maori and Pacific People population. MHN relates to 4 DHBs although the main relationship is with the Waikato DHB also centered in Hamilton. The area cuts right across the North Island from east to west, and has more communities with less than 10,000 people than any other region in the country. It has 385 GPs in 110 practices but many of these practices are in small communities so there is a particular challenge to sustaining GP services and the existing GPs faced rather low prospects for selling their practices to successors.

The EOI proposal submitted by MHN in 2009 involved eleven regional partners including four previous PHOs. Many of the concepts in the new approach were taken from the experience of Group Health in Seattle. The CEO John Macaskill-Smith has spent time at Group Health including a visit in 2008 just before the NZ study tour to Alberta.

The Midlands approach is built around the "Duty of Care model" and Integrated Family Health Centre. The Duty of Care model focuses on the patient journey and creating a pathway so the patient never feels unsupported on their journey through the health system. The model works focusing on the following:

- ☐ Direct, Consistent communication between Health team and Patient

- ☐ Wellness and preventative care in order to reduce demand on secondary services
- ☐ Moving toward the goal of self-management for chronic conditions
- ☐ Finding and reconnecting with disengaged populations
- ☐ Pathways for social services.

The Integrated Family Health Centre involves a team of interdisciplinary professionals working together to manage the Duty to Care model for their enrolled population. While the model involves several partners outside the PHO, much of the work in the first two years has been around improving the primary care platform. In the CEO's words -"you need to fix the deck before you invite others to the barbeque." A first objective was to put primary care into a gatekeeper role, not just a referrer to other services. So much work has gone into creating the core team and to develop processes to avoid rework on the same patient within the core team. A clinical pharmacist is now part of the core team. To do this more resources needed to be shifted to the front line. This is much more than co-locating but involves "re-wiring" the system.

Processes were put in place to limit GP Consults to 18 per day versus and average of 25 previously and to use the freed up time for phone consultations and other tasks that could create improved efficiency in the patient pathway. The patient's time is factored in as key consideration. The experience has shown that 20 percent of GP visits really did not require face to face contact. A telephone answering service and an online patient portal have been added to improve communication with patients.

A recent initiative with the Waikato DHB is to have many of the assessment services previously provided by the DHB done at the PHO level. Another key step has been to take non clinical tasks away from the clinicians. Much work remains to be done on information systems which are as the CEO stated is currently "like going to a Lego box to find the right piece."

A unique strategy which is part of the Midlands approach is to secure the future viability GP Practices. The regional approach involves a web of relationships among several entities. Pinnacle Inc. is a not for profit incorporated society with its membership being GPs and it serves as the "mother ship." The Midlands Health Network is the management organization that employs staff and makes things happen. Primary Health Care Limited has been established to own practices and employ GPs. The company has been used as the vehicle to purchase GP Practices or to give assurance of a sale when GPs want to retire. Funds for GP services flow though Pinnacle which in turn contacts with Primary Health Care Limited. The Midlands Network Regional Trust has representation from the above groups and other regional partners and it holds the overall regional contract for funding.

Given the many regional partners, Midlands Health has placed emphasis on creating a single Alliance team that includes all the regional partners and together they make strategic decisions.

Maori Initiatives **-** The Whānau Ora program noted above in the discussion of AH+ is a national program. The most advanced example of the program is in Auckland with Whānau House operated by Whānau Tahi, a charitable trust that has been in place for 25 years. The organization currently has contracts with 81 organizations involving education, social services and health. The focus is on the urban Maori as there has been a major rural to urban shift of Maori population over the past several years. Whānau House provides an entry point for a wide range of services including after hours GP services, dentists, pharmacy, radiology and many Nurse led clinics.

John Tamihere, CEO of Whānau House is a former Member of Parliament who has also established a National Urban Maori Authority and reviewed aboriginal initiatives in several other countries, including the ASASSIs agency in northern Manitoba.

Whānau House uses a system of Whānau navigators who work with clients not only on their health issues but also on matters pertaining to housing and education. Most of their funding is from Government. The Whānau Ora program noted above is focussed on developing "wrap around" services for disadvantaged Maori families. Whānau House has identified 150 families at risk, most of whom also have crime related issues.

Health Services provided by Whānau House are done under contract with DHBs. Whānau House has developed culturally sensitive strategies. For instance in dealing with the high youth suicide rates the pouring out of grief for those who commit suicide can have the effect of glorifying suicide. So intervention around the grieving process becomes important.

To work effectively with families at risk requires very good data systems that cut across health, social services, education and justice. This issue of consent to access data is overcome largely by using a reverse process whereby consent is assumed unless the clients specifically say they do not want their data to be shared. The Government policy on strengthening families is making it easier to access information across different services.

While only 14% of New Zealand is Maori, they represent a significantly higher proportion of the disadvantaged. For instance 54% of the prison population are Maori.

Whānau House is an attempt to create a new space to access services. Providers that come into the facility must agree to the general philosophy and conditions – in effect, Whānau House sets rules on how they will practice.

Insights from the Canadian Group on Primary Health Care

- ☐ *PHOs and the alliances they are developing to work across multiple service sectors with flexibility in contracting in many sectors increases funding flow to alliances and enables more effective services.*

- ☐ *The sustainability or primary health care services require that attention be given to the dynamics of GP practices - business models, practice succession planning and human resource metrics.*

- ☐ *The primary health care issues are very similar to the situation in Canada.*

- ☐ *The Midlands Health Network has put a high priority on the patient perspective and has thus shifted GP practice patterns to include telephone time with patients and use of patient portals to enhance communication and decrease face to face visits where not required.*

- ☐ *PHOs seem to have more liberty/flexibility in creating local/regional initiatives as compared to other similar groups in Canada. Building on their recent lessons, they cater to the local population needs and make appropriate changes as they see fit.*

- ☐ *The success of the Midlands Health Network is commendable and could be applicable to primary care practices in Canada at a local level, although the organizational arrangements are complicated. The patient portal with access to patient records and test results is relevant to work being done in Canada.*

Lessons from Canada

- ☐ *There is potential to consider some of the new GP group practice business models that meet physician practice needs, plus work in conjunction with integrated family practice offices with primary/community care delivery models as part of the primary health care evolution in Canada involving Local Health Integration Networks and Health Authorities.*

- ☐ *Lessons from Midlands Health Network in providing more patient centred care and decreasing face to face visit time where not required is worthy of serious consideration in Canada . This will likely require revising physician payment schemes to ensure there are not payment disincentives to doing this in Canada.*

- ☐ *The Maori Initiatives provide a good model for Canada to examine our approaches to health for our Aboriginal population. The success of the Whānau Ora program in developing wrap around services using navigators to support families at risk and working across sectors (education, social services, justice) is a good example to learn from. They have measurable outcomes identified for all levels of service through a dash board reporting system.*

- ☐ *There are key lessons here in terms of the business models with which Government funds primary care activities.*

C. PHARMAC - the Pharmaceutical Management Agency known as PHARMAC is another unique feature of the New Zealand health system. New Zealand has a long history having a national pharmaceutical benefit plan with the earliest scheme going back 1938 – this is even earlier than the first pharmaceutical benefit schemes in UK or Australia.

PHARMAC was set up in 1993 as an agency operated by the 4 Regional Health Authorities that were in existence at that time. It has since been changed to a Crown Agency. During the 1980s medicine prices were increasing at a faster rate than other healthcare spending, and were one of the fastest growing items of Government expenditure with growth rates of 20% per year. The financial crisis led to the creation of PHARMAC's – a move that was strongly attacked by pharmaceutical companies. The objective was to introduce purchasing strategies to a market where they had not previously existed. PHARMAC's role was, in effect, to get better value for medicines so that the best health outcomes could be achieved from public money spent on medicines.

PHARMAC's has four main roles:

- ☐ Managing the Pharmaceutical Schedule, the list of government subsidized medicines;
- ☐ Promoting the use of optimal medicines;
- ☐ Managing subsidies on medicines and related products for public hospitals; and
- ☐ Managing the Exceptional Circumstances program.

PHARMAC is a Crown agency responsible to Parliament and reports to the Minister of Health. It works within a defined budget set by Government. It has 70 staff.

The legislative objective is "*to secure for eligible people in need of pharmaceuticals the best health outcomes that are reasonably achievable from pharmaceutical treatment and from within the amount of funding provided*".

Decision about which drugs are to be licensed in New Zealand are made by another Government agency called MedSafe. PHARMAC's role is to do both clinical and economic assessments to determine which drugs should be put on the national formulary, that is, what drugs will be subsidized. To do this PHARMAC has a Pharmacology and Therapeutics Advisory Committee (PTAC) with a network of subcommittees. All PTAC minutes are made public, but the analysis is kept confidential.

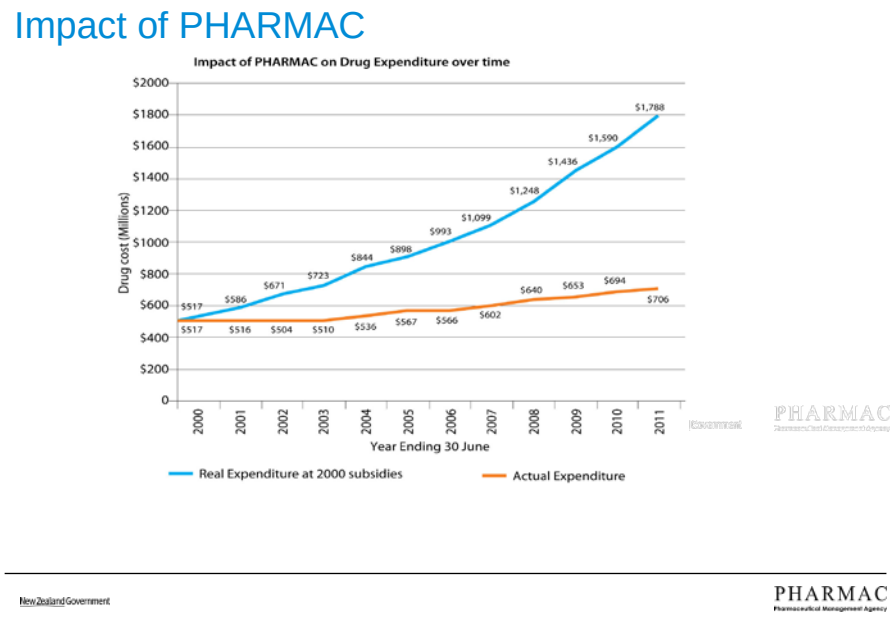
PHARMAC is neither a buyer nor a seller. Rather its role is to decide what drugs should be made available through the New Zealand Pharmaceutical benefit scheme and to put these drugs on the national formulary.

It then purchases those drugs. PHARMAC uses several approaches to set the price of drugs that will be subsidized. For generic products, that is, drugs that no longer have patent protection, tendering is used and the company that wins the tender becomes the sole supplier of drugs. The decision on which drugs will be selected is made on the basis of price and the record of the pharmaceutical supplier. PHARMAC also negotiates the price of patented medicines and using reference pricing for drugs in the same class. So a price is established for the drug where at least one drug in each class is fully subsidized. Other drugs can be listed but will only receive partial subsidy.

The DHBs actually hold the funds for purchasing the drugs whether those drugs are provided in hospital or to individuals in the community. In effect, the DHBs and the Ministry with advice from PHARMAC determine what the overall budget will be and that creates a notional budget that PHARMAC works within. All DHBs then work with the PHARMAC schedule. (DHBs separately contract with pharmacy for dispensing of drugs).

PHARMAC's approach has yielded huge savings for New Zealand – on some drugs there has been up to 95% reduction in costs. Initially, PHARMAC only had responsibility for drugs prescribed for people in the community but that now has been changed so they also have responsibility for all drugs in hospital and cancer drugs. Since its inception PHARMAC has made a wider range of drugs of subsidized medicines available while staying within the budget each year. The purchasing power of PHARMAC has tripled since 1993, meaning it can now purchase about the three times the amount of medicines than could be bought with the same money in 1993.

The graph below shows the impact of PHARMAC on national drug expenditures:



A process for exceptional circumstances exists if a patient cannot tolerate the formulary drug and if approved another drug can be used. Individuals can always choose to use a non-formulary drug but if they do they must pay the difference in costs.

Under the Pharmaceutical benefit scheme in New Zealand, there is no charge to the patient for drugs used in hospital and there is a $3.00 co-payment for drugs prescribed to individuals in the community.

Besides its roles in managing the Pharmaceutical benefit list and the Exceptional Circumstances Program, PHARMAC has a major role in promoting the best use or optimum use of medicines. To carry out this role, PHARMAC has a major role in monitoring drug utilization using several data systems. It works closely with DHBs and health professionals to promote best practices and runs information campaigns both to reduce the use of medicines (such as the Wise use of Antibiotics campaign) or increased appropriate use (such as the One Heart Many Lives CVD campaign). It identifies practice variation and inequalities in the access to medicines (e.g. the Maori Responsiveness strategy). PHARMAC has a Consumer Advisory Committee (CAC) to better understand consumer and patient perspectives. The CAC provides reports to the PHARMAC Board and its chair attends Board meetings to ensure the consumer and patient perspective is available. The CAC works closely with PHARMAC staff.

Insights from Canadian Group on PHARMAC

- ☐ *Would be difficult to achieve benefits of PHARMAC in Canada due to presence of pharmaceutical manufacturing industry.*

- ☐ *Annual rate to growth in pharmaceuticals costs is 3%; Canada's annual rate of growth is higher. The forecast growth for 2011 is 4 % (annual growth). This includes prescribed and non-prescribed drugs (public and private).*

- ☐ *PHARMAC's ability to drive deep discounting is a result of not having any Pharma manufacturing in NZ, combined with the remoteness and size of the country. Therefore, the unique pricing (lowest in the world) has very little to no impact on larger, more influential geographies. NZ is obviously not a strategic market for large Pharma, and they can allow this pricing without impacting their margins in other, more important markets.*

Lessons for Canada

- ☐ *Canadian Agency for Drugs and Technology in Health (CADTH) has undertaken some roles provided by PHARMAC; may be opportunity for expanded role of CADTH based on PHARMAC experience.*

- ☐ *PHARMAC is a very interesting model which may be able to be in some way relevant in our Canadian setting despite the significant differences that are inherent in our system.*

D. Accident Compensation Corporation (ACC) – ACC is a truly unique feature of the health system in New Zealand. The origin dates back to 1967 when a Royal Commission (Woodhouse report) looking into the then Worker's Compensation system recommended a significant shift in how New Zealand dealt with consequences of injury. It proposed a move away from a litigious, fault-based system toward a completely "no-fault" to compensation for personal injury. ACC was established in 1972 as a Crown agency. Its 8 Board members are appointed by the Minister for three year terms. The Minister of Labour is responsible for ACC.

ACC covers all accidental injuries – accidents at home, work, through motor vehicles, sports or accidental injury caused in the health system. Coverage is both for the health costs involved as well as loss of income while injured. As a no fault scheme recipients of assistance from ACC give up the right to sue in common law. The consequence of this in the health system is litigation is virtually non existent. Dr Kevin Morris, ACC's Director of Clinical Services, noted the focus of ACC is not on fault but on remedial action.

ACC has operates with five guiding principles:

- ☐ community responsibility
- ☐ comprehensive entitlement
- ☐ complete rehabilitation
- ☐ real compensation
- ☐ duty to compensate

Five accounts are maintained within ACC and the revenue for each differs:

1. Work - injuries caused at work with funding from payroll taxes on employees and employers.
2. Earners – all injuries incurred by a person who is an earner regardless of where the injury occurred.
3. Motor Vehicle – injuries resulting from motor vehicle accidents with revenue generated from premiums and taxes on petrol.
4. Non-earners – incurred by anyone who is non-earner in New Zealand. The largest groups here are retired persons and children but visitors to the country are also included. Funding for this account is part of the annual Government budget.
5. Treatment Injury – injuries resulting from adverse events in the provision of health services and funding for this is from payroll taxes on health providers.

ACC handles about 1.7 million claims per year, of which 80% are for minor injuries. About 300 per year result in long term compensation. ACC pays out about $3 billion in claims per year. It has 2,700 employees at 50 locations across the country.

The budget for ACC is about $3 billion per year, of which about 20% comes from Government to cover the non-earners account. Over the years the scope as to what constitutes an accident or injury has widened. For instance, mental injury caused by criminal acts such as sexual abuse is covered. At present 41% of benefits paid goes treatment (hospitals 20%, medical care 20%, dental 1%). The remainder consists of social and vocational rehabilitation (18%), weekly compensation (32%) and other (9%).

Treatment costs include payments to DHBs (via the Ministry of Health for acute hospital services, and direct for elective surgery), and private providers (including private hospitals, and general practice). Increasingly ACC is using contracts for clinical pathways versus a fee for service approach. So contracts are being sought out with providers with lowest costs and best outcomes. ACC pays for many services in private facilities as is seen as a positive benefit to both the patient ad ACC to get the individual back into the workforce. Funding from ACC accounts for about 10% of health expenditure in New Zealand and is this amount is included in the national health expenditure statements for the country.

In recent years there have been new measures to tighten criteria. Another goal of ACC is now to increase is investment portfolio so that it covers its lifetime liabilities. Currently it has $23 billion in lifetime liability and $11 billion in investments.

Insights from Canadian Group on ACC

- ☐ *ACC is a major funding stream for Health Care delivery in NZ.*
- ☐ *ACC contracts for services with both the public and private sectors for treatment; most elective surgeries performed in private system.*
- ☐ *This has led to issue whereby hospitals try to have procedure paid by ACC by finding good rationale as to why the cause of injury was an "accident".*
- ☐ *ACC is a funding "pot" that the healthcare sector relies on. There seems to be some inconsistency as to how providers determine what would be considered to be related to an accident, in order to maximize its reimbursement from that agency.*
- ☐ *There is some similarity between ACC and the No-Fault system the SAAQ has in place in Quebec.*

Lessons for Canada

- ☐ *ACC is a very unique aspect of the New Zealand system which does not appear to have developed in any other country. This needs to be carefully explored in more detail as to possible applicability here in Canada.*

E. The Private Health System

NZ has a mixed pubic private system. More than 20% of health expenditure is privately funded via insurance or out-of-pocket. In the period 1999 to 2008, the Labour Party formed the Government and its philosophy was seen to be very cautious on the role of the private sector. However, even since 2008, when the National-led coalition government came to power there has been no real growth in the private sector.

While individuals can purchase private health care insurance, unlike Australia there is no public subsidy for private insurance. (*See Australia Summary Report noted in List of References).* Insurance premiums are based on age categories (i.e. risk adjusted). Costs for 65+ is 3 times than for 20-29. Insurers can deny applicants because of pre-existing conditions.

Southern Cross Healthcare Group (SC) is the largest insurer with 61% of the market. Half of its policies are held within group policies and the other 50 % by individuals. About 1.2 million New Zealanders (34%) have some form of private insurance. SC has a large travel insurance business which pays dividends to the company.

SC does not provide coverage for complex or acute medical or surgical conditions as in Australia. The role of ACC changes the role of private insurance as compared to

Australia. Given that loss of earnings, there are clear advantages for an individual to have their condition classified as an accident. Another major influence on the role of private insurance in New Zealand is the impact of PHARMAC. Physicians and patients usually want to stay with what is on the PHARMAC list and these medications are heavily subsidized so little room exists for private insurance. Essentially private health insurance is therefore focused on faster access to elective surgery and diagnostics, and choice of practitioner.

Dr. Ian McPherson, CEO of SC, noted that there are essentially two major arms of SC: the Health Society (health insurance), and the Health Trust (hospitals, primary care, and travel insurance). SC has a chain of 17 private hospitals in New Zealand. These operate as not for profit private hospitals. SC does not operate any long term care facilities.

Unlike Australia, there is no major linkage between the public and private systems except physicians often work in both. Private hospitals are not co-located with public hospitals. Government to this point has not paid much attention as to how the private system could be better integrated with the public system. For example new OR theatres are still being built in the public system when capacity exists in the private system. DHBs do outsource some publicly funded elective surgery to private when they are not meeting their performance targets. The one area where some linkage between the two systems has solidified is in the Canterbury DHB as is discussed later. In part this is a result of the earthquake where the public system capacity was reduced so some services are now being purchased by the DHB in private hospitals.

Private hospitals largely focus on selected elective procedures such as – day surgery, orthopedics, eye procedures (but most cataracts are now done in doctor owned clinics), some cardiac procedures and a limited range of procedures in other areas like neuro and gynecology. Twenty five percent of total hospital procedures and 50% of elective surgery is done in private hospitals in New Zealand. This tends to be lower complexity work than that done in the public system. Overall 60% of the work done in private hospitals is day procedures. SC is the largest private hospital group. However, volumes have declined in recent years as waiting lists were reduced in the public system. In fact this situation has continued under the new National Coalition Government as it wants to demonstrate its interest in investing in health – a platform often held by the Labour party. In addition with changing technology, much low end surgery is being moved to physician offices or medical specialist owned rooms. These are usually cases that do not require much equipment but they still have the effect of lowering demand on private hospitals.

The advantage of having private insurance of hospital care is that patients have the choice of specialist, facility and time of treatment.

Rising costs have been a major issue for private hospitals as in the public system. For instance the average cost of a hip replacement in private hospitals is $21,700 which has doubled since 2003. This is of great concern given the aging population where it is estimated that 25% of the population could be over 65 by 2025. SC has a record of lower costs and very high quality.

There are no registrars (medical residents) in private hospitals so they are not involved in medical education. SC uses almost totally RN model as nurses are given higher levels of decision making. Nurses are non-unionized but about 50% still pay union dues to maintain their membership. About 2/3 of nurses work full time. There is no mandatory retirement and many nurses want to work beyond 65.

In Auckland and Christchurch there has been a recent initiative to offer Radiotherapy in private hospitals but this has been problematic for insurance as it is a big cost area and has led to an increase in premiums. However, public sector radiotherapy waiting times have gone down in response to a national wait time target, and DHBs have benefitted as they were at times paying to send people to Australia to ensure timely access.

The SC Health Society, which runs the insurance side of the business, has increasingly used contracts to secure service arrangements in private hospitals although there is difficulty in creating competition in small markets. There are big variations in prices across New Zealand – e.g. a knee replacement in Auckland averages $24K while in Christchurch it is $17K. This is driven by differences in physician remuneration and labour rates for health care workers.

As noted above, the SC Health Society offers both group (brokered) plans and individual plans. Premium pricing varies between the plans. SC is moving to online automated claims at point of service. Increasingly, SC is trying to brand itself as a health and wellbeing organization and not just an insurance company. So new initiatives to support people in maintaining their health are being implemented which is part of the reason for SC getting into primary care.

Moving into primary care is a new line of business for SC. While there has been a heavy investment in primary care by both the previous and present governments, much still needs to done. SC wants to become a major player. The present GP model is not sustainable – average of 2-3 GPs and little investment in infrastructure. SC Primary Care was incorporated in 2009. With the GP population aging, there is an opportunity at this time to buy physician practices.

SC based their business plan for primary care on concerns of GPs who want help with business development to increase the value of their practices. Some larger general practices approached SC and this was partly driven by their concern with impending corporatization of GP practices, primarily by external companies. So SC developed a shared vision with GPs. Whereas the competitor corporate investor buys practices, puts physicians on salaries for 3 yrs before they exit, SC has developed a different model where GPs remain co-owners and are left with more clinical independence. SC now has four practices with about 40 GPs and these are in four different locations. They work with the PHOs in their areas. The intent is to raise the quality of primary care. While SC is starting with GPs, it would like to broaden to other primary care practitioners in the future.

Insights from the Canadian group on the Private System in New Zealand

- ☐ *Physicians get paid (both primary and secondary specialists) from DHBs and on the basis of fee for services to private hospitals.*

- ☐ *Although the private system and public system co-exist, there is little coordination/integration between the 2 systems.*

- ☐ *Physicians can work in both Private/Public, with funding coming from different sources.*

- ☐ *The dynamics of having both a public and private system similar creates differential access and wait times for scheduled procedures. This remains a downside of the New Zealand system from an equity standpoint.*

Lessons for Canada

- ☐ *The private sector experience in New Zealand may be instructive to Canada in that there is an increasing focus on integrated primary health care organizational systems and delivery business models as opposed to the more traditional approach of clinic models.*

F. Innovation & System Transformation at the Delivery Level

The national reform agenda (including the work of the many new national agencies) and financial constraints is fostering a climate of innovation and performance improvement in New Zealand. In addition to the examples given on primary care above, the study tour was exposed to innovative activities in the three largest DHBs in New Zealand:

Auckland DHB – in terms of its budget, Auckland DHB is the largest DHB in the country. It provides services to both its own population and highly specialized hospital services for all New Zealand. It works with 4 PHOs and has 470 GPs in its local service area and has an annual budget of $1.8 billion. It is also the largest teaching and research organization and its major hospital is situated next the University of Auckland's medical school, the largest medical school in New Zealand. DHB provides the full spectrum of services from community to highly specialized quaternary services. It has over 97,000 Emergency Department visits, 7,600 births and 36,000 surgical procedures per year.

The Auckland DHB (and its predecessors) has a long history of deficits so it began to place much emphasis on finding new ways of doing things to achieve a sustainable organization. The CEO, Garry Smith, noted the organization places a high priority on transforming the way care is delivered.

Greg Balla, the Director of Performance & Innovation noted that patient safety, reducing health status disparities in the population and the need to better engage the workforce are

central themes. The Baldridge framework - with its 5 key dimensions: patient safety, quality of care, economic sustainability, health status, and staff engagement – is used.

A new leadership model at the clinical level has been developed to provide joint accountability to physicians and general managers. The leadership model takes on a whole system approach with leaders having responsible for the full spectrum of services from community to hospital services. There is also a Maori health manager within each team and these people can be pulled out to focus on issues facing the Maori population across the system.

While national targets for improvement have been identified, the transformational approach has been to focus on better patient care rather than the target. So for the 6 hour Emergency Department target set at the national level, a system of process redesign using LEAN and Sigma Six tools was used. This resulted in significant changes in service delivery. Between 2008 and 2011, the percentage of patients meeting the 6 hour target increased from 62% to 95% with 72% being dealt with within 4 hours. The average stay in ED has been reduced from 8 hours to 3.5 hours. To accomplish this required over 20 projects involving over 100 staff.

Auckland DHB has placed major emphasis on discharge planning which starts at the time of admission so there is no problem with ALC patients (patients awaiting alternate care) The NHS model of "Releasing time to care" is also in use with regular charting appearing in corridors showing the performance by unit for all staff to see. A surgical improvement program has been put in place as well as major changes in managing medical beds. For example they discovered the norm had become to discharge only on 5 days because of weekend downtime. This has now been changed to discharge on all seven days. Over 2,000 staff have been involved in improvement projects and Leadership Excellence awards have been introduced.

Another major focus of improvement work has been carried out by the Technology Assessment Committee, chaired by Dr. Stephen Munn. Their work has covered medical devices, medical diagnostics, and medical information services. Unlike drugs where there is a well-established process (through PHARMAC and MedSafe), there is no national agency looking these other areas. So issues like the recent high failure rates of certain hip prostheses had no place for review and this led the Auckland DHB to focus on these areas. A recent decision has been taken to move the medical devices review process to the national level by having PHARMAC's role extended. However, this is not yet in place and appears to be having some resistance within PHARMAC.

Auckland DHB's Technology Assessment Committee has placed most of its efforts at looking at new technology rather than what is already in place. However, they have found in their work on new technologies they often expose issues with old technology and that provides an avenue for intervention to disinvest from those procedures or limit their application. Their work on Medical information services has proved more difficult and this is now being addressed by the new National Health IT Board, as noted above.

The Technology Assessment Committee has now been in place for over 6 years and has reviewed 64 submissions. They have developed a tool kit for physicians and managers to use before putting forward a submission. There is an online submission form and changes in the care pathway and the cost utility of the proposed new technology must be addressed with evidence. There are 12 clinicians on the committee and for each submission there are two primary reviewers with a final vote being taken in the full committee. Each submission is scored using criteria and the committee's scoring and final decision is communicated to the CEO.

Auckland DHB has also created healthAlliance with the three other northern DHBs to deal with shared services. A new national agency on shared services has been established (Health Benefits Ltd. as noted above), but the northern DHBs view is that much could be accomplished by moving what their Alliance has already put in place to the national level.

Another innovative approach is the Concord program, headed up by Dr. Andrew Old and Leigh Masson. Their challenge was to find $31 million in savings - $368 a minute in the organization by looking at medical supplies and unnecessary waste.

The program adopted the "trinity" that solutions must be good for staff and patients as well as save money. A heavy reliance is placed on LEAN methodology as this fits well with physician problem solving approaches – identify, diagnose, prescribe, evaluate. A Web portal has been put in place that every staff member has access to and they can advance ideas. The program has created a core team with breadth and depth. An improvement SWAT team works with staff on improvement initiatives. Some key results to date have been in:

1. Lab ordering – eliminating tests they don't need – for example with Urea testing which had almost become routine, the ordering form was changed so clinicians had to think more why they were ordering the testes – not just a tick mark for certain tests instead have write in request. Urea testing dropped dramatically.

2. Sharps disposal – discovered sharps disposal bins being filled with other junk because other bins were too small. The solution was to change the mix of bins. There were actually able to reduce the total number of bins and achieve improved waste disposal while saving $200K.

3. Blood is a gift – review of orders for blood revealed common practice was to transfuse two units even if one might be enough. Several strategies were put in place including an education program, a blood bank handbook and guidelines and these resulted in $2.6m savings over 15 months.

Counties Manukau DHB (CMDHB)

Transformational change CMDHB **–** is the third largest DHB in terms of population served and budget. It serves the south outer Auckland area. It has a budget of $1.3 billion and serves a population of 500,000 that has several key characteristics including:

- ☐ Fastest growing population of all DHBs
- ☐ Highest proportion of Maori and Pacific peoples
- ☐ Extremes in wealth of the population from very affluent to the highest proportion of low socio economic people

Because of its rapidly growing population, CMDHB has benefitted from the Government's population funding approach which has meant significant new resources over the past 6 years (from $800m to $1.3b in total budget).

CMDHB has a passion for Quality and Safety in health care. Geraint Martin, CEO, refers to three major revolutions in health care – sanitation and water safety, then drugs and now the third revolution is about transforming the system to increase quality and safety, reduce inappropriate practice variation and to do this within resource constraints.

About half of the current budget is in direct service provision and the other half is in funding primary & community services. As growth occurs and new money comes the intent is to put the growth in primary & community services.

Despite growth money, serious funding challenges exist. So in 2010 CMDHB set a target to save $10 and actually saved $23m through a whole range of innovative approaches including medication savings, reduction in clinical variation, reducing hospital acquired infections through better line control and emergency department reengineering. Staff turnover which was very high before in ED has been almost eliminated. Staff are working better leading to higher levels of job satisfaction. But the savings were found throughout the organization including in the plumbing area where the simple change in toilet paper dispensers (people were using paper towels and plugging toilets) so the change allowed a reduction in plumbing services. By focussing on variations, lab tests ordering from junior medical staff was reduced. The CEO emphasized that all these changes result from a change in culture whereby improvement is ongoing quest. Many small changes can have major impact. CMDHB has introduced two new initiatives this year:

- ☐ Reduction in bed days – the target is to work with clinicians to find ways to deliver care in new ways so that 20,000 bed days can be saved.
- ☐ GPs incentive payments – in return for finding ways to reduce 20,000 inpatient bed days through new approaches, CMDHB will share half savings with GPs.

Because of the emphasis on community services and a variety of options being made available for accommodations, CMDHB does not have a problem in moving patients out of hospital to long term care, an ongoing issue in Canada. The typical length of stay in

Medicine is now down to 3 days and to 4 days in acute Surgery with a very low readmit rate. The needs assessment and service coordination function (NASC) is in place for older people and effectively moves patients to appropriate post acute accommodation settings. Largely through the infusion of private capital there has been a 20% increase in long term care beds in the past two to three years. It is noteworthy that anyone can open residential care facility providing it meets standards. The DHB will sign a contract but will not guarantee volume. Education sessions have been held with residential care providers to up their skills. The focus is now on needs assessment and not advocacy. Measures have also been put in place to fast track the asset and income testing. All these measures have produced major changes in the long term care scene over the past ten years. In addition to home based care there are 4 sub-groups in residential care:

- ☐ rest homes 24 hour care available in facility
- ☐ long term hospital - individual needs care constantly
- ☐ dementia - secured
- ☐ psychogeriatric care

The human resources scene has a number of notable points:

- ☐ Salary increases have been 1.8% over the last two years, after significant increases in prior years
- ☐ CMDHB has contracts with some GP providers so they eliminate their co pays or keep them low to ensue access for low income people
- ☐ Specialists like in other DHBs are on salary with salaries ranging from 250K to 400K (very low compared to Canada) however, most of these specialists also have an income from the private hospital work they do

As part of developing a transformational culture, CMDHB has also invested greatly in leadership development and change management with its staff. See a recent article in the Journal of Leadership in Health Services included in List of References on this program as well as the leadership program in the Canterbury DHB.

Ko Awatea

Developing a transformative culture has been given high priority in CMDHD and to move this forward a new business unit/facility called Ko Awatea focussing on applied healthcare innovation. This is a Maori word meaning "first light" the concept is as explained below:

> **Ko Awatea means 'first light' – "the first ray of sunlight as it warms the new day. Ko Awatea reflects this moment in time, in honour of our past, yet a signal for change and transformation within healthcare delivery for the betterment of people's health and wellness."**

Ko Awatea, a facility costing just under $10m, was recently opened after three years of planning and development work without any Government funding. Ko Awatea is intended to be a space to think and CMDHB believes this is crucial in that many of the

big issues in NZ will hit this region first because of its population growth and demographics.

Dr. Jonathon Gray, Director Ko Awatea, who was recently recruited from the UK, notes that KO Awatea emphasizes the challenges facing the health system revolve around quality, safety, value, inequalities and prevention. The context is one of rising expectations, increasing needs, implications from climate change and scarcity of resources.

The planned outputs from Ko Awatea are as follows:

- ☐ Education resource for our local staff and students, as well as National/International
- ☐ System improvement Faculty
- ☐ Student chapter for system improvement
- ☐ Patient involvement
- ☐ National Seminar series
- ☐ Atlas of care variation
- ☐ Detailed hopeful vision – personal

A central premise of KO Awatea is the need to move beyond improvement projects and structural change to fundamental system change. To do this requires will, ideas, and execution. The theory of change being adopted is that you need networks of people united around an aim, a pipeline of new ideas and technical support for improvement.

The facility is a very open modern environment with several key rooms to capture the various phases between idea development and system change, including:

- ☐ "Koru" Lounge
- ☐ "Apple store" Information centre
- ☐ "Google" innovation/care improvement
- ☐ "Situation room"
- ☐ teaching spaces
- ☐ seminar rooms
- ☐ lecture theatre

The situation room has a very innovative design allowing for clinicians and staff focussing on a problem with experts sitting in spaces behind to facilitate and encourage thinking rather than lecture or give solutions.

Mental Health transformation

CMDHB has a very high deprived population with 34% of its population and 43% of its children in decile 9/10 of socioeconomic status (i.e. most deprived). This has generated a very high mental health case load and in December 2002 a crisis point was reached when

on Christmas Eve there was 110% occupancy in inpatient mental health beds and the staff walked out. CMDHB got a court injunction to stop the strike and started a process to find solutions. An internal inquiry was held and clinical staff said staff levels were unsafe.

This starting point led to a number of initiatives over time to better manage acute care demand, improve access, expand the workforce and increase upstream investment in children. Today the mental health area has very good staff morale and good measures of success (both hard and soft). For instance there has only been a 4% growth in beds despite a 25% increase in population. CMDHB now has the lowest mental health beds per capita in the country despite having the highest need population. Bed savings have been in the vicinity of $350K per year. CMDHB has lowered its seclusion rates dramatically and outside the health system there is evidence to show a lower demand on social justice services.

Dr. Sue Hallwright, Manager Mental Health**,** notes that innovation came about because people took a 'whole of system' view. They questioned conventional wisdom, created development teams, identified evidence, sought out promising practices and engaged everyone including families and individuals with mental health issues.

Some of the major changes that were made include:

- ☐ Increased the number of clinicians but also changed the model to use more NGOs
- ☐ Alternatives to inpatient care developed in the community
- ☐ Use of peer support and self management by employing people with a history of mental illness. They now have 60 of these workers.

Dr. Hallwright notes that a big change in mindset came about when health professionals began to see the value of engaging the mental health clients as peers in developing services.

The triple aim approach has been used – quality, cost, experience. Throughout a major focus has been placed on the patient experience and getting to understand what works for them. This required engaging them to help find solutions. It also meant creating a learning and innovation culture and dedicating resources to support to change.

Canterbury DHB (CDHB) - CDHB is the second largest DHB in New Zealand in terms of geographical area. It has a budget of $ 1.3 billion and is the largest employer on the South Island with 9,000 employees. It serves a population base of 500,000 which is growing and also has the highest proportion of elderly among the 20 DHBs in the country. The transformational journey in Canterbury is interesting to review both because of its change management process but also because it was the site of the major earthquake that hit Christchurch in early 2011.

CDHB's emphasis on a change management process involves not only the DHB itself but also the many other players that are part of the larger health system in Canterbury. While DHB employees 9,000 people there is another 7,000 people working in the health system for a total of 16,000 health workers.

The CEO, David Meates, emphasizes that the transformational change process started with a realization that a new vision was needed for a sustainable future. From the outset the goal has been on improving the patient journey and to develop a vision that would be in place across the entire system. In doing this, efforts have been made to shift the focus away from resources in each part of the system to determining what is right care for patients: in essence to move away from silo thinking to systems thinking.

In the visioning process, wasted time by patients becomes a key consideration and a whole system approach was needed to both increase productivity and deliver the right care. The approach tries to avoid the language of cost savings by focussing instead on what is best for the patient and health system. This required new leadership at all levels and to enable this CDHB put several leadership and change management strategies in place starting in 2007. These included the Xcelr8 program, sessions to learn LEAN and other process engineering approaches, and a Showcase 09 program that painted a picture of a desired future - Seeing 2020. These were experienced based processes involving large numbers of clinicians, managers and staff at all levels and in all sectors of the Canterbury health system. *More information on these initiatives can be found in the recent article in the Journal of Leadership in Health Services that is noted in the List of References.* The intent of these strategies was to promote "partnership empowerment leadership". The mantra was to make the system better.

A major part of the Canterbury initiative has been to look at primary care and to redesign pathways between primary and secondary care. This required bringing the two sides together and for CDHB to show some new leadership by changing funding approaches and encouraging new ideas. The result has been a move away from price/volume funding and fee for service models as this can often create the wrong incentives and instead to look at how best outcomes can be achieved. The result of this new thinking has contributed greatly to taking 1.5 million waiting days out of the system.

The new approach places high priority on developing Alliances and on being open and transparent with all players in the system. CDHB has had to become more of an enabler to make things happen. To that end has created a new system of Alliance agreements and developed a much closer working relationship with private facilities. In fact, CDHB purchases services from private hospitals. The whole system is dependent on trusted relationships across all sectors.

Canterbury's resiliency and capacity to effect change was put to the test in the aftermath of the earthquake that hit Christchurch in February 2011 which caused extensive infrastructure damage to electrical power supply, roads, bridges, sewage and water systems and over 1,300 residential properties. In the health system 106 inpatient beds and, 635 aged residential care beds were lost and many other were "red zoned". In total over

7,500 rooms in the DHB needed to be repaired. Car parking for 1,200 visits a day were lost. Amidst this damage, the health system had to respond to a large number of unhealthy living conditions, mental health issues, infections, and increased demands on acute care.

An earthquake recovery plan was put in place using 6 week planning cycles for immediate recovery, a medium term transition and a future vision. In effect, all the work on vision and cross sector planning was put to an immediate test and forced a rapid acceleration in the change process to respond in innovative ways.

Some examples of the remarkable results that have been achieved are as follows:

- ☐ Much less use of acute care resources in CDHB than in other DHBs. *Trevor Read from the Francis Group provided the following statistics of changes made since the February 2011 earthquake:*
  - *Adult Acute Admissions declined by 10.8% per week*
  - *Adult Acute Surgical Admissions declined by 5.4% per week*
  - *Adult Medical Admissions declined by 13.2% per week*
  - *Adult Acute bed days reduced by 2,400 per month*
  - *ED Admissions reduced by 16% per week*
- ☐ A major shift to community services
- ☐ Major acceleration in referrals by changing radiology processes (films to digital)
- ☐ A major emphasis on acute admission avoidance
- ☐ Major reduction in waiting times
  - ☐ Skin lesions wait time reduced from 166 to 53 days
  - ☐ New care pathways to speed up referral for gynecological conditions
  - ☐ Significantly reduced demand in Emergency by using innovative approaches like diverting ambulance to primary care facilities
  - ☐ No reductions in elective surgery

There is no question the earthquake accelerated need to move forward but it is unlikely that the system could have reacted to the crisis as well as it did without all the change process that was already in place. As one New Zealand health system analyst observed, “the earthquake could not have occurred in a better place in terms of the potential to respond.”

While much has already been accomplished, the leadership team at CDHB believes much more can still be achieved. Two new initiatives are being rolled out in 2012:

- ☐ Electronic care records that will include service data across the entire system. The past year has been spent working through clinical and privacy issues and the system is now being piloted with positive response from practitioners. The Electronic Shared Record View (ESCRV) is seen to be another major step in improving delivery of care.

- ☐ A patient portal will be developed where patients can access their records. There seems to be increased acceptance of sharing electronic records in Canterbury since the earthquake as data sharing was critical in the response and in fact the electronic records proved to be more secure than paper records.

- ☐ While no electronic records were lost, there was a loss of some paper records in facilities that were severely damaged by the earthquake. The new initiatives in electronic records are being designed with an "Opt out" clause if patients or providers don't want records shared but very few are now expressing interest in this option.

Insights from the Canadian Group on Innovation and System Transformation at the Delivery Level

- ☐ *The NZ DHBs have explored and developed some innovation management systems and delivery models to support innovation…many have direct applicability to Canada.*

- ☐ *Many innovative clinical programs being redesigned with Lean approaches; have been very successful.*

- ☐ *Physicians working at hospitals are salary-based; appear to be much more engaged in hospital transformation initiatives and challenges.*

- ☐ *The DHBs in Auckland and Canterbury have implemented some innovative system changes that are similar to our focus in Canada in many provinces – use of process improvement/lean methodology, technology assessment, on primary care integration and moving services out of hospitals to community based care. Pressures around ALC patients not seen as a prominent issue with there being a reduction in rehab beds on CHB post-earthquake.*

Lessons for Canada

- ☐ *Experience from NZ has shown that patient care can be improved by using Lean or other quality/process improvement tools.*

- ☐ *Reform initiatives are much more successful if key stakeholders are engaged and working together with staff and management; we need to do this more in Canada.*

- ☐ *NZ has backed away from activity-based funding and is focusing on achieving outcome; concern is that activity based funding schemes create incentives to increase volumes and prices.*

- ☐ *The work around mental health in the CMDHB and the recruitment of mental health coaches was a most interesting concept, which merits further consideration.*

- ☐ *New Zealand's approach to dealing with the ALC patient in hospitals needs detailed further examination. The fact that speakers reported 0-1% ALC rates in acute hospitals is stands out in sharp contrast to the situation in Canada.*

4. Overall Study Tour Conclusions

Insights from the Canadian Group

- ☐ *The Study Tour provided a very good overview of New Zealand healthcare system at both the National and District Health Board (DHB) level. The wide scope of speakers and their generosity in taking the time to explain their structures, systems, successes and priority areas for improvement made this a very valuable learning experience.*

- ☐ *Canada, Australia and New Zealand are all struggling with the same system issues. There are many similarities in approaches among the three countries but also some major differences. Although the systems are different (e.g. public/private and distribution of funding) for health services; the issues and priorities are the same – aging population, chronic disease management; integration of services; fiscal sustainability of the system; primary care reform, health promotion etc.*

- ☐ *The NZ experience provides an easier and more direct comparison to Canada as many of the same system characteristics are present between the NZ Government and its various devolved agencies e.g. DHBs and the situation in Canadian provinces. In addition the size and population of NZ makes comparisons to Canadian provinces more relevant.*

- ☐ *The very different policy framework to engage the Maori and Pacific Peoples population stands in sharp distinction from the aboriginal health policy framework in Canada or Australia. The historic commitment to a bi-cultural society is given real meaning in the implementation of new health strategies and programs in New Zealand.*

- ☐ *While sustainability is an issue in all three countries, the New Zealand economic situation makes this a far greater imperative for change. So embedded in all the*

major themes of reform is the clear expectation to reduce overall health system costs.

- ☐ *New Zealand is making Health Workforce strategy initiatives a key element in all of its health care reforms. The new Health Workforce New Zealand agency has far greater impact on overall system planning including health sciences education production than is the case in Canada or Australia.*

- ☐ *On the Quality and Safety front, it appears that New Zealand has some catching up to do with other countries and while there is now a strong commitment in this area, initiatives are relatively recent.*

- ☐ *E health is a high priority in New Zealand with many similar directions to what is happening in Canada. However, at this point time New Zealand is still working with hybrid systems.*

Lessons for Canada

- ☐ *A key difference between Canada and New Zealand is the presence of a National Health Reform agenda in New Zealand whereas in Canada health reform is largely rolling out on a provincial basis. However, given that the size and population of New Zealand compares to some Canadian provinces, lessons can be learned on a provincial level on how to implement health reform in a consistent manner across several major themes.*

- ☐ *New Zealand's approach to primary health care reform in the previous decade has many similarities to what was being attempted in Canada. However, recent initiatives in New Zealand appear to be taking that country to a new level of primary health care reform in several areas including: much broader public sector collaboration; increased stakeholder engagement and contracting; more flexibility in funding models; and the concept of "wrap around" services to meet the needs of disadvantaged populations.*

- ☐ *Sustainability of GP practices is seen to be a critical element of primary health care reform in New Zealand so new initiatives being taken in this area may be instructive to Canada.*

- ☐ *The PHARMAC experience in New Zealand makes Canada's efforts in pharmaceutical policy reform look very piecemeal and limited in terms of impact. The PHARMAC impact has been achieved both because of concerted national direction and not having to concern itself with the economic implications on a pharmaceutical manufacturing sector. However, serious questions exist as to whether Canada could make the same gains given the presence of a pharmaceutical manufacturing sector in this country*

- *The Accident Compensation Corporation (ACC) presents a very novel and comprehensive approach in dealing with all forms of accidents. It is definitely worthy of consideration in the Canadian context.*

- *While the share of private funding of health care is lower in New Zealand than in Canada, the private sector has much more prominence in ambulatory care and hospital services. Canada may be able to learn how to incorporate these private sector components into its system. At the same time it was recognized that the mix of private and public systems does create tensions, including inequities in access*

- *Innovation in health care at the delivery level appears to have been more bold and robust than in Canada. The national direction appears to inspire experimentation in new directions and clearly some of the major DHBs have responded very positively in shifting care to community settings by developing new linkages with a wide variety of stakeholders. Their success in reducing wait times, ED visits and hospitalizations is worthy of careful consideration in Canada.*

- *While there is not a fully developed E health system in New Zealand significant progress has been made with the concept of the "Shared Care Record" and this may be an incremental step worthy of more consideration in Canada.*

Appendix 1. List of New Zealand Presenters and Participants

Visit the Canadian College of Health Leaders' web site to view available presentations.

NATIONAL LEVEL

1. Dr. Ian McPherson, CEO Southern Cross Healthcare Group
2. Peter Tynan Chief Executive, SC Health Society
3. Terry Moore, CEO, Southern Cross Hospitals
4. Victor Klapp, CEO Southern Cross Primary Care
5. Brenda Wraight, Director, Health Workforce New Zealand
6. Dr. Janice Wilson, Chief Executive, NZ Quality and Safety Commission
7. Dr. Peter Moodie, Medical Director, PHARMAC
8. Charlotte Denny, General Manager Strategy, Ministry of Health
9. Dr. Kevin Morris, Director of Clinical Services, Accident Compensation Corporation (ACC)

District Health Board or Local LEVEL

10. John Tamihere, CEO, Waipareira Trust Whānau (Health) Centre
11. Garry Smith, CEO, Auckland DHB
12. Greg Balla, Director of Performance & Innovation, ADHB
13. Dr. Stephen Munn, Chair, Tech Assessment Committee, ADHB
14. Dr. Andrew Old/Leigh Manson, Concord program, ADHB
15. Geraint Martin, CEO, Counties Manukau DHB
16. Dr. Jonathon Gray, Director Ko Awatea< CMDHB
17. Dr. Sue Hallwright, Manager Mental Health, CMDHB
18. Jenni Coles, Chief Operating Officer, CMDHB
19. Dr. Siro Fuatai, Chair, Alliance Health +
20. Danny Wu, Consultant to Alliance Health +
21. Dr. Siobban Trevellyan, Clinical Director, AH+
22. Malia Tuai, Whānau Ora Project Manager, AH+
23. David Meates, CEO, Canterbury DHB
24. John Macaskill-Smith, CEO, Midlands Health Network
25. Trevor Read, Francis Group, Canterbury DHB

Appendix 2: Comparative Health Statistics

Country Basic Facts, 2009

Country	Pop. (Million)	Size (km^2)	Size % of Canada	Pop. Density
Canada	33.4	9,997,140	100%	3.3/km^2
Australia	22.0	7,600,300	77%	2.8/km^2
UK	60.9	244,110	2.5%	253/km^2
NZ	4.3	268,680	2.7%	16.0/km^2
Sweden	9.3	449,964	4.5%	21/km^2
Netherlands	16.4	41,526	.41%	395/km^2

Source: OECD Health Data 2011, for Pop. (Million)

Comparative Health Systems, 2009 (or latest year)

Country	AUS	SWE	NZL	UK	NLD	CAN
Population (millions)	22.0	9.3	4.3	60.9	16.4	33.4
% Pop over 65	13.3	17.9	12.8	15.8	15.2	13.9
% of GDP	8.7	10.0	10.3	9.8	12.0	11.4
Per Capita Health Exp.*	3,445	3,722	2,983	3,487	4,914	4,363
% Public	68.0	81.5	80.5	84.1	79.0	70.6
% Private	32.0	18.5	19.5	15.9	21.0	29.4

* $US PPP

Sources: OECD Health Data 2011 and OECD Health at a Glance 2011

Health Care Resources, 2009 (or latest year)

	AUS	SWE	NZL	UK	NLD	CAN
Hosp. as % of Tot. Exp.	39.4	44.0	35.9	NA	31.4	28.0
Offices of Physicians as % of Tot. Exp.	13.9	NA	6.7	NA	8.2	14.1
Pharm as % of Tot. Exp.	14.6	12.5	9.3	11.6	9.6	17
Acute Beds/1000	3.8	2.8	2.3	3.3	4.7	3.3

Source: OECD Health Data 2011

Health Care Resources
% of Workforce in Health and Social Sector, 2009 (or latest year)

Canada	11.6
Australia	11.1
United Kingdom	12.9
New Zealand	10.4
Sweden	15.7
Netherlands	15.9

Source: OECD Health at a Glance 2011

Health Care Resources
Practitioner/1000 Population, 2009 (or latest year)

	AUS	SWE	NZL	UK	NLD[1]	CAN[1]
Physicians	3.0	3.7	2.6	2.7	2.9	2.4
Nurses	10.2	11.0	10.5	9.7	8.4	9.4

Note:
1. Data include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc.

Source: OECD Health at a Glance 2011

GP-Specialist ratio, 2009

Country	GP, %	Specialists, %	Unspecified**, %
Canada	47.4	51.2	1.5
Australia*	49.8	47.9	2.4
United Kingdom	29.8	66.1	4.4
New Zealand	32.0	53.2	14.8
Sweden*	16.7	50.2	33.1
Netherlands*	24.9	45.9	29.2

Data include interns/residents

*Data for 2008

**Unspecified include interns/residents if not reported in the field in which they are training, and doctors not elsewhere classified

Source: OECD Health at a Glance 2011

Wait times to see specialist, 2010

Country	Less than 4 weeks, %	2 months or more, %
Canada	41	41
Australia	54	28
United Kingdom	72	19
New Zealand	61	22
Sweden	45	31
Netherlands	70	16

Source: 2010 Commonwealth Fund International Health Policy Survey in Eleven Countries

Physician supply - gender, 2009

Country	Male, %	Female, %
Canada	61.8	38.1
Australia*	64.9	35.1
United Kingdom	56.8	43.0
New Zealand	59.9	40.1
Sweden*	55.4	44.6
Netherlands*	56.5	43.5

*Data for 2008

Source: OECD Health Data 2011

Wait times to see a doctor, 2011

Country	Same-day appointment, %	6+ days, %
Canada	51	23
Australia	63	10
United Kingdom	79	2
New Zealand	75	5
Sweden	50	22
Netherlands	70	12

Source: 2011 Commonwealth Fund International Health Policy Survey in Eleven Countries

Pharmaceutical expenditure

Country	Share of health care budget, 2009	Per capita annual growth rate, 2000-2009	
		nominal	adjusted for general inflation
Canada	17.0	6.8	4.5
Australia*	14.6	6.8	2.6
United Kingdom*	11.6	5.0	2.2
New Zealand**	9.3	N/A	N/A
Sweden	12.5	4.1	2.3
Netherlands	9.6	5.7	3.4

*Latest data are for 2008

** for NZ data is not available until 2004

Source: OECD Health Data 2011

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