

Review of Health Services' Performance Monitoring and Management Frameworks and Systems in Different Countries Relevant to New Zealand

October 2001

Annexes

Source Material

Annexe 1. Questionnaire, with description of proposed NZ system, sent to overseas consultants	120
Annexe 2. Response from UK consultant (Dr Maria Goddard, York Centre for Health Economics)	144
Annexe 3. Response from Canadian consultants (Dr Adalsteinn Brown and colleagues, University of Toronto)	189
Annexe 4. Description of US HEDIS framework (Jackie Cumming, Health Services Research Centre, New Zealand)	201
Annexe 5. Description of Saskatchewan approach (Bridget Allan, Department of Public Health, Wellington School of Medicine, Wellington)	212

Annexe 1. A Questionnaire for Analysing the Proposed Accountability System for New Zealand District Health Boards

Material accompanying this questionnaire:

Attachment, setting out in more detail (Part A) the 'goals' of the New Zealand health system, and (Part B) proposed performance indicators (a very provisional list).

Glossary of acronyms and technical terms specific to New Zealand.

Purposes of Questionnaire

- To summarise the proposed accountability system for District Health Boards (DHBs) in the restructured New Zealand health system.
- For overseas consultants (Canada and UK) to comment on, in light of their experience with accountability systems in their own countries.

The New Zealand consultants have identified four main accountability strands. These are (1) organisational performance, or 'governance', both of the DHB and of its hospital(s); (2) the DHB as provider of hospital services; (3) the DHB as purchaser of healthcare services for its district; and (4) The DHB's performance in delivering on the NZ Health Strategy, in particular achieving good and equitable health outcomes for its district. This project is mostly about (3) and (4), but not exclusively.

Thus, the DHBs are responsible for the performance of the public hospitals and related services they manage within their districts, as well as for purchasing healthcare services in general, and for the overall health of their populations. They are monitored and held to account by the Sector Funding and Performance Directorate of the Ministry of Health. Hospitals, as providers, also have their performance monitored directly by the Ministry of Health (Hospitals Monitoring Directorate).

It should be noted that DHBs are expected to have 'non-health' or 'social care' responsibilities as well as 'health' responsibilities (using WHO definitions). During the 1990s funding responsibility for disability support services (DSS) in New Zealand was wholly transferred to the health sector, and devolution of responsibility for these services to the DHBs, perhaps in 2002, is currently under discussion. This includes residential subsidies for those without adequate other resources, in particular those affected by 'age-related disability' who require long-term rest-home or hospital accommodation.

Contextual Information

- **The country:** Current population 3.8 million. Approximately 15 percent are Maori, the indigenous people, (this is on the 'broad' definition, including all those who indicate some Maori ancestry); and another 5 percent are 'Pacific Islands

people', mainly Polynesian. Maori and Pacific islanders are particularly concentrated in the more northern parts of the country.

The 1840 Treaty of Waitangi, by which Maori ceded sovereignty, but in return received certain guarantees, has an important constitutional role. References to the Treaty in statutes and regulations recognise the status of Maori as the people first settling in New Zealand. Maori are on average less well-off than non-Maori New Zealanders. A general objective of government policies is to eliminate these differences, including differences in health outcomes (Maori life expectancies at birth are several years shorter than non-Maori life expectancies).

- **The health system:** Spending on 'health' accounted for 8.4 percent of New Zealand's GDP in 1998/99. Of this, 77.5 per cent was financed by government from general taxation, or from ACC insurance premiums for medical treatment following accidents. Treatment at public hospitals is free of charge, and accounts for approaching half of government health expenditure. However, there are waiting lists for 'elective surgery' (in recent years there has been a move from 'waiting lists' to 'booking systems', with the objective of establishing greater certainty about who qualifies for elective surgery, and when they can expect to receive it). Some 'elective surgery' is therefore carried out at privately owned hospitals, funded from patients' own pockets, or from health insurance.

Primary healthcare services are only partly subsidised by government. Maternity services are free, and laboratory tests, and most of the total cost of drugs is met by government. In the latter case, however, a government agency PHARMAC maintains tight control over which drugs are subsidised, and the amount of subsidy. Less than half the cost of General Practitioner services is met by government. These subsidies are 'targeted'. GP services and drugs are free for children under 6. Others on lower incomes who qualify for the Community Services Card (CSC), about 40 percent of the population, or those with chronic ill-health qualifying for the "High-Use Card", are also subsidised for GP visits and receive a greater subsidy for drugs. Dental care is in general free for children, but is subsidised only to a very limited extent for adults, apart from hospital dental surgery.

- **The current reforms:** The separately supplied article (submitted to the British Medical Journal, November 20, 2000), *New Zealand's new health sector reforms: Back to the future?*; Devlin N, Maynard A, and Mays N, provides a good review of the details of the latest health sector changes.

The following chart shows the relationship between the Ministry of Health and the 21 new District Health Boards. The DHBs range in population from about 40,000 at smallest to around 400,000 for the largest. They are based on the major public hospital in their district (in one case two major hospitals). The funding agencies formerly interposed between central government and the hospitals – 4 Regional Health Authorities from 1993 to 1997; and a national Health Funding Authority from 1997 to 2000 – have now been replaced by the direct funding of DHBs by the Ministry of Health. The DHBs will become progressively responsible for the purchase of all health services for the population of their district (with the exception of some services, still being decided but in general 'high cost, low

volume', to be provided nationally, or regionally for a number of DHBs). This includes services provided from their own hospital(s). The new structures place a strong stress on community involvement and consultation. DHB boards are to be part elected and part appointed, with specific requirements for Maori representation on the Boards.

The first chart below shows the new health sector structure.
The second chart shows the annual accountability cycle.

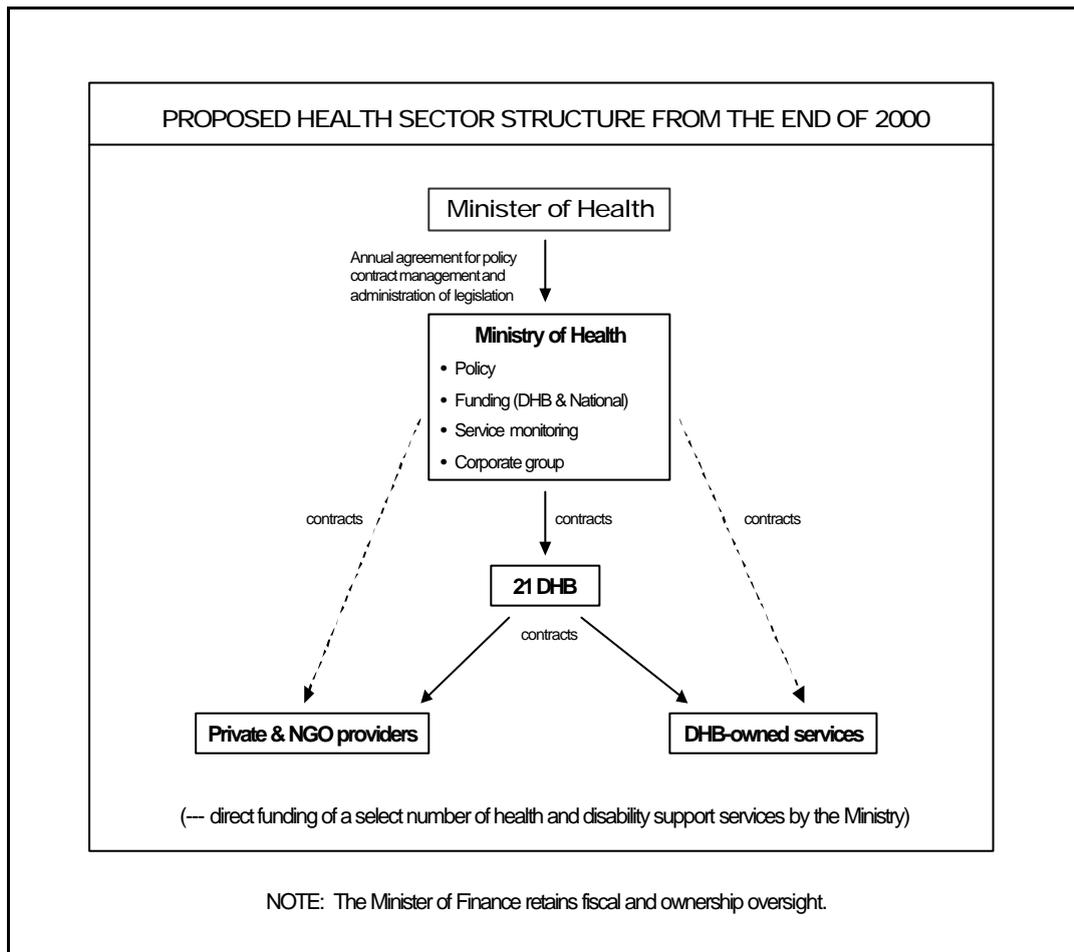
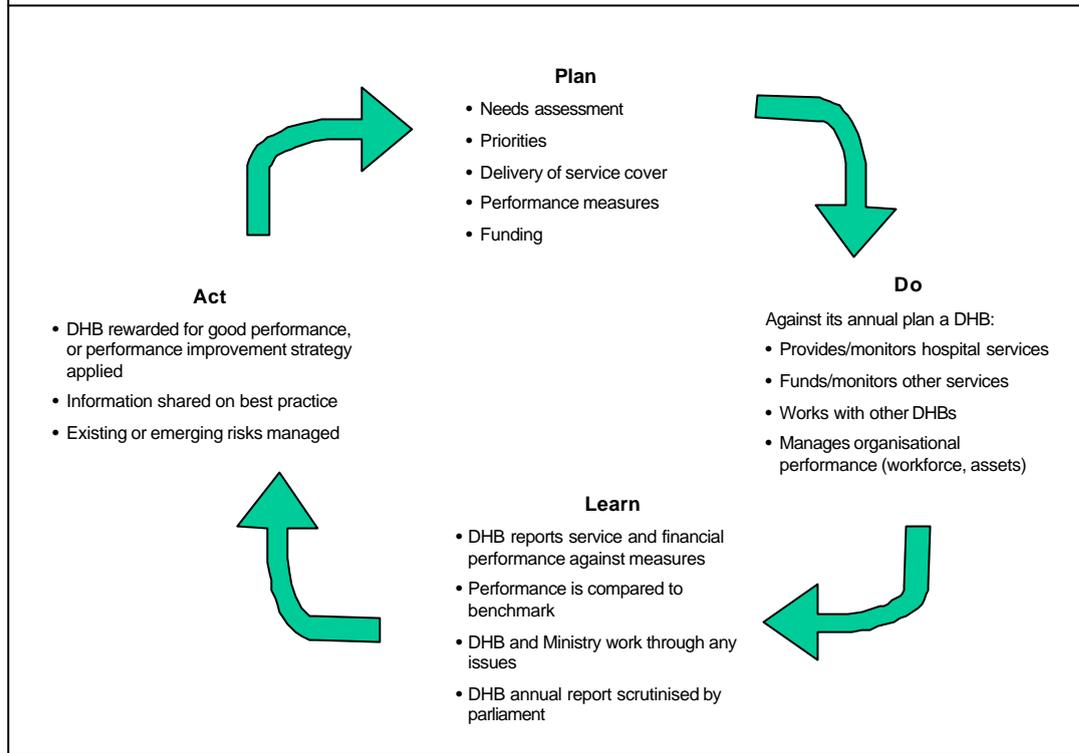


Figure One. The Annual Accountability Cycle



Headings

The material in this questionnaire is organised under the headings listed below. Each heading has under it an explanation of the main analyses being looked for, and a brief description of the proposed New Zealand system, as it will look when the transition over the next couple of years is completed.

Then there is space for insertion of comment by overseas consultants about key features of their system; and lessons they draw for New Zealand. Some additional 'prompting' questions are also inserted.

- Purpose and Goals
- Organisations
- Indicators
- Qualitative vs quantitative assessment
- Selection Criteria
- Ex ante and ex post accountability processes
- Consultation processes
- Use of legislation and regulations
- Information management systems
- Operating costs
- Multiple uses of information
- Underlying performance management model
- Behavioural Responses
- Completeness
- Performance management techniques
- Sanctions and Incentives
- Overall assessment

Purpose and Goals

The overall purpose and goals of the accountability system from the point of view of parliaments, governments and funding agencies.

Description of Proposed New Zealand System:

In New Zealand DHBs will be accountable to the Minister of Health and to Parliament for their performance. The overall purpose and goal of the accountability system is to ensure that DHBs are meeting Crown expectations in delivering health services to their district populations. During transition (1 January 2001 to 30 June 2001) the DHBs will be required to build capability to deliver these services. From 1 July 2001 DHBs will be responsible for funding and delivery of most health and hospital services in their districts.

More detailed information on Crown expectations and goals for the DHBs has been compiled from a number of sources. This is set out in Attachment A.

Other Country: *Comment to be inserted by overseas consultants. Note that you are not expected to provide an exhaustive description of your country's system, but rather to discuss key features and issues which you think would be relevant to the proposed New Zealand system.*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
- Are the key goals explicit in your accountability system?
- Is the number of goals manageable?
- Is any guidance given on trade-offs between different goals?
- What has been your experience of holding entities accountable for health outcome and health equity goals?
- Can you comment on your experience with health agencies being expected to report on 'non-health' socio-economic inequalities in their district which are possible causes of health inequalities, e.g. in housing, employment, income?

Organisations

The entities being assessed and held to account and the level(s) in the system at which different forms of accountability apply.

Description of Proposed New Zealand System:

The key agencies in the new health system will be:

The Ministry of Health

The District Health Boards (DHBs). These have a three-fold role:

- Managing the public hospital(s) in their district
- Purchasing other healthcare services for their population
- Gaining improved health for their population, in ways responsive to the wishes of that population, and also reducing inequities in health outcomes.

Other Agencies – in particular PHARMAC, and the NZ Blood Service.

The Ministry of Health is responsible for producing the New Zealand Health Strategy on behalf of the Minister of Health. It sets the overall goals for the health system. The Ministry of Health is responsible for managing the Crown relationships with DHBs and other key agencies such as PHARMAC. It is responsible for monitoring performance of DHBs. The Treasury also has a role in relation to the financial aspects of DHB accountabilities.

The 21 DHBs are Crown entities. In the new health system they will be responsible for both funding and provision of health and hospital services. It is anticipated that DHBs will be responsible for nearly all contract relationships with providers. This would include for example GPs, hospitals, Maori and Pacific providers. The exceptions will be some specialised services, where contracts will be held at a national level, or regional level. A timetable has been set for devolution of funding responsibilities from the Ministry of Health to the DHBs.

The new legislation requires DHBs to have three advisory committees:

- the Hospital Advisory Committee, to advise on matters relating to the DHB's hospitals;
- the Hospital Advisory Committee, to advise on matters relating to the DHB's hospitals;
- Gaining improved health for their population, in ways responsive to the wishes of that population, and also reducing inequities in health outcomes.

The restructuring of the health sector has resulted in a number of other agencies being set up that will work closely with DHBs. For example Crown entities such as PHARMAC and the New Zealand Blood Service will enter into contractual relationships with the DHBs. As Crown Entities, these two agencies will be accountable to the Minister of Health for their performance. The DHBs are also collaborating to set up shared services or support agencies. The first of these agencies to be set up is Healthshare Ltd, which will be set up under the Companies Act 1993 and wholly owned by a group of DHBs in the central North Island. The objective in setting up these shared services agencies is to achieve savings in the administration and operation of DHBs.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?

Indicators

The number and range of indicators used to hold purchasing and provider agencies accountable to public funding agencies (e.g. the balance between measures of inputs, processes, outputs and outcomes and the coverage of health and social care).

Description of Proposed New Zealand System:

The set of indicators has not yet been decided but the Ministry of Health is working towards producing a small set of key performance indicators that can be used for monitoring and benchmarking DHB performance in relation to delivery of the New Zealand Health Strategy, overall service access, DHB governance and DHB provider performance.

The set of performance indicators is intended to cover the following –

- Priority Population Health objectives
- Reducing inequalities in Health Status
- Service Priorities
- Ensuring Quality services
- Timely and Equitable Access
- Governance and Organisational Performance
- DHB Provider Performance

Attachment B describes in more detail the kinds of indicators being considered for the different goals.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * How often is the set of indicators reviewed?
The mix of indicators which is being used? E.g. Balance of health outcomes, healthcare outcomes, outputs, process' (delivery of a service), inputs. Also balance of financial – nonfinancial; efficiency, quality, equity, responsiveness, etc.
 - * Are there performance indicators which can be identified as working well?
And those not working?
 - * Are hospital 'productivity indexes' useful for monitoring performance?
 - * Which indicators are used in your system to measure 'health outcomes', particularly at regional level? (For example, life expectancies, potential years of life lost, infant mortality.)

- * Are 'burden of disease' measures such as Disability Adjusted Life Years (DALYs) an appropriate way of measuring, nationally and regionally, levels of health and health distribution?
- * As used for instance in World Health Report 2000 (WHO, 2000)
- * Is there a place for regular population surveys, for the measurement of population 'health state', and also degree of satisfaction with the healthcare system?

Qualitative versus Quantitative Assessment

The roles of qualitative assessments of performance as well as quantitative measures (e.g. the roles of 'hard' and 'soft' data in the system).

Description of Proposed New Zealand System:

One of the key planned features of the proposed New Zealand system is the strong focus on relationship management and the importance of "soft" data in the accountability process. This means a mix of both hard and soft accountability data will be used to assess DHB performance. Examples of qualitative indicators include:- extent of community and Maori consultation, carrying out of a 'robust needs analysis', maintaining a 'principles based prioritisation framework', developing appropriate plans, achieving milestones.

The Ministry of Health has been restructured to include a Sector Funding and Performance Directorate (SFPD) that will manage the accountability relationships with DHBs and others. Relationship managers are now employed to work closely on a day to day basis with individual DHBs to achieve outcomes in line with Crown expectations.

In addition to accountability indicators, there will be contextual indicators and information to back up analysis of DHB performance.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Kinds of qualitative data collected, and how analysed?

Selection Criteria

- How the indicators and measures of performance are/were selected (i.e. the criteria used such as relevance, scientific standing, feasibility, cost-effectiveness)
- How professionals, patients, the public, 'experts' etc. are involved)
- How the indicators are operationalised (i.e. measurement and data quality issues such as overcoming technical problems associated with rarity of events, probabilistic nature of outcomes, lag effects, confounding, attribution of effects, use of aggregate versus single measures, etc.)
- How the measures relate to government/funding agency policy goals and priorities.

Description of Proposed New Zealand System:

There was extensive public consultation by the Ministry of Health in developing the New Zealand Health Strategy and the other related strategy documents. Treasury and DHBs are being consulted in the preparation of the indicators.

The indicators are being developed after completion of a stock take of existing data collections. They will be based on historical series where possible. Contextual information will be important in interpretation of the indicators.

The measures will mirror the government's goals for health as set out in the NZ Health Strategy, and be supplemented with indicators on DHB performance in securing service access, overall DHB governance and DHB provider performance.

Two key criteria are that they should measure things that can be influenced by DHBs; as well as having minimal compliance and transaction costs.

Other Country: *Comment to be inserted by overseas consultants.*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are selection criteria clearly stated?
 - * Is account taken:
 - in selecting indicators
 - in reporting resultsof the various measurement and data quality issues referred to above?
 - * As an example of 'confounding', in New Zealand there are statistical difficulties in distinguishing the effects on health outcomes of 'ethnicity' and 'socioeconomic disadvantage'. Have similar difficulties been encountered in your country?

Ex Ante and Ex Post Accountability Processes

- How the expectations of funding agencies/governments are signalled to the sector
- The processes and interactions through which the indicators of performance are used to enforce accountabilities
- The timing, sequencing of events and feedback processes of the accountability system and the ways in which the different agencies involved signal their expectations.

Description of Proposed New Zealand System:

The government's expectations are set out in legislation (the NZPHD Act and the Public Finance Act); in the government's Health Strategies; and in the operating environment documents (the non-regulatory framework). These are the longer term documents.

Annual expectations and performance targets will be set out in the DHB Annual Plans, Service Cover and Funding Agreements. The DHBs will be monitored by the Ministry of Health, reporting monthly, and quarterly, and will make a year end Annual Report to parliament including audited accounts.

The Ministry of Health will send out a draft planning package to DHBs in March 2001, that will include the operational policy framework and service cover requirements, and will assist DHBs in the preparation of their Annual Plans.

Once the first Annual Plan has been finalised there will be an ongoing dialogue between DHBs and the Ministry of Health regarding the ability of the DHB to meet its performance targets. Annual plans will be revised and the process begins again.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Degree to which there is genuine feedback in your system from reporting of indicators to organisational improvement?
 - * Is there clinician involvement?

Consultation Processes about Plans

- Whether the expectations of other agencies and groups (e.g. members of the public) play any part in the system
- How these forms of accountability are included in the system

Description of Proposed New Zealand System:

Board members are both elected (7) and appointed (up to an additional 4)
Maori are to be represented on each DHB Board in proportion to their proportion of the DHB population, and in any case there are to be at least two Maori on the Board.

Requirements to consult on the DHBs' Strategic Plans, and on significant changes to their Annual Plans, are in the statute (NZPHD Act, 2000, Clauses 38-40). There will be indicators to monitor performance on consultation.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * What requirements are there for consultation at the different levels in your system?
 - * Are there specific requirements re indigenous peoples or other ethnic or cultural minorities?
 - * How much weight is given in assessing an agency's performance to its consultation processes?
 - * Is there genuine scope to vary performance expectations in light of local views/priorities?

Use of Legislation and Regulations

- The legislative frameworks governing the financial and clinical accountabilities of health agencies (e.g. legislation governing public finance)
- Other regulations relating to quality, safety, etc. that support the accountability framework

Description of Proposed New Zealand System:

The two key pieces of legislation for the accountability system are the NZPHD Act and the Public Finance Act. The former requires an Annual Plan, and Strategic Plan, and also enables the Minister of Health to make Crown Funding Agreements with DHBs. The latter requires of any Crown entity an annual Statement of Intent, and annual accounts and an Annual Report.

In addition there is a range of public health legislation and guidelines and standards for the health sector.

A feature of the new system is the decision not to take a regulatory approach to setting the operating environment for DHBs. Instead operational requirements or rules are being developed. These are a more flexible tool, but more difficult to enforce than regulations. There are regulation making powers in the NZPHD Act that can be used if required.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * What is your opinion, from observation of your system, of the effectiveness of the different ways of holding health agencies accountable? From:
 - Statutes and regulations
 - Directives from central agency
 - Less formal liaison measures

Information Management Systems

The information systems and information policies underpinning the accountability system

Description of Proposed New Zealand System:

DHBs (and also their Shared Support agencies) will report from their own accounting and information systems on contracts awarded, delivery targets, and performance to contract. Also at monthly, quarterly and annual intervals on the financial performance of their hospital(s) and the DHB itself.

Detailed hospital throughput statistics, and also mortality statistics, are compiled and published by the NZ Health Information Service (part of the Ministry of Health). The coverage is generally good, but with known gaps and deficiencies, particularly outpatient and community services.

Plus the Health Benefits section of the Ministry (formerly Health Benefits Ltd) compiles data on subsidised 'demand-driven' services. Almost all of these are in the primary healthcare sector, and include pharmaceuticals. Information on unsubsidised services is not necessarily collected, however.

New Zealand population health surveys are conducted every few years. But these cannot usually provide statistically significant measures at sub-national level.

A comprehensive 5-yearly census by Statistics New Zealand provides detailed socio-economic regional information. A recently-developed Deprivation Index measures 'areal deprivation' for Census mesh-blocks (population 100-300) and is already used by some DHBs as a measure of socio-economic gradient.

Note there have been statistical difficulties in defining ethnicity, i.e. Maori versus non-Maori. And also in enforcing consistent definitions in different data sources, e.g. hospitals records and death registrations.

The DHBs and Ministry of Health will have access to all this data.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * To what extent do your monitoring systems rely on standard data collections (providers' own information systems on 'encounters'; national data systems on utilisation, births, deaths, cancer registers, etc.)?
 - * Have data collection systems been developed specifically for assessment of the performance of the health sector and healthcare funders and providers?
 - * What have been the major challenges in capturing this sort of information? How are these being addressed?

Operating Costs

Any information available on the costs of developing and maintaining the system of performance measurement and management

Description of Proposed New Zealand System:

The goal is to develop a small set of key performance indicators and the Ministry of Health will be considering the costs of the system it proposes.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are such costs separately identifiable in your system?
 - * If so, approximate magnitude and proportion of overall expenditure?
How are they are minimised?
 - * From the NZ material outlined in this questionnaire, are there features which you would anticipate could lead to costs significantly higher than they otherwise would be?

Multiple Uses of Information

The relationship between governmental/managerial systems of accountability/performance management and clinical accountability and quality systems and initiatives

Description of Proposed New Zealand System:

The indicators are being developed in consultation with DHBs. It is expected that there will be benefits to DHBs as well as to government of consistent data collection across DHBs so that they can benchmark and compare performance.

Quality systems and initiatives are being systematised under the proposed Health and Disability Services (Safety) Bill, which is likely to be enacted during 2001. Under this legislation, health providers will be audited by designated audit agencies, using generic service standards and specific audit tools. In the first instance, hospitals, rest homes and homes for people with disabilities will be audited with other providers being covered in due course.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are accreditation and quality improvement strategies integrated with performance assessment procedures?
 - * To what, if any, extent are the views of clinicians and other healthcare professionals sought during the process of performance assessment?

Underlying Performance Management Model

How performance measurement is used to manage performance and encourage improvement - whether the system is predominantly based on one of a number of contrasting approaches such as the identification of 'bad apples', or zero tolerance of 'failure' (i.e. penalising performance below a certain threshold), or a model of 'best practice', continuous quality improvement and professional empowerment

Description of Proposed New Zealand System:

The focus of performance management will be on improvements, but the system that is being set up will also provide levers to address non-responsive poor performers. (See the note later about 'Rewards and sanctions'.) There are legislated powers in the NZPHD Act for both the Minister of Health and the Minister of Finance (in role as shareholding Minister in public hospitals). However it is clear that the Ministry of Health intends to use relationship management and publicity to manage DHB performance, drawing on legislative sanctions only when things go badly wrong.

The Ministry of Health will set realistic performance targets for individual DHBs taking into account the starting points and their position relative to other DHBs. Sharing of knowledge, collaboration and cooperation between DHBs will be encouraged.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?

Behavioural Responses

Evidence of actual and potential, positive and negative (e.g. tunnel vision, sub-optimisation, myopia, misrepresentation, gaming, etc.), behavioural responses to the performance measures and management techniques in the system

Description of Proposed New Zealand System:

Administrative controls, in part to encourage positive responses, are being built into the new system such as the committee structure of DHBs (see 'Organisations' earlier), the existence of the Hospital Monitoring Directorate in the Ministry of Health and the production of separate financial statements for the three different arms of DHB function (hospital provision, other DHB operations, and the DHB's funding activities.)

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Is there any evidence (either 'hard' or 'anecdotal') of 'subversion' of your country's performance monitoring system?
 - * If so, what methods have been used to address the problem?
 - * Is the system such that agencies can focus on those aspects of performance covered by 'key indicators' at the expense of other areas?
 - * In the proposed NZ system, there are likely tensions between local and central objectives in a system where there are locally elected board members but performance accountabilities are to a central agency. Also tensions between hospital services and non-hospital services with respect to resource allocation. Do such tensions exist in your system, leading to 'gaming' behaviour? Solutions?

Completeness

The completeness of the accountability cycle through:

- Setting national/funding agency strategic priorities
- Completion of operational planning processes
- Ex post assessment of performance against priorities and plans
- Subsequent modification of funding and health agencies' policies, systems and actions

Description of Proposed New Zealand System:

The proposed system has all these elements and there are plans for a review a few years down the track of the performance monitoring and benchmarking system. In brief the Minister of Health (and/or Disability) determines and publishes strategic priorities in the *NZ Health Strategy* and the *NZ Disability Strategy* (specific strategies are also being developed for child health, Maori health, etc.). The Minister(s) must report on progress annually.

The DHBs must determine district strategic plans, not inconsistent with the national strategies, covering 5 to 10 years into the future, reviewable at least once every 3 years.

The Minister and each DHB must agree an annual plan for each financial year, which will include intended outputs of the DHB for the year, their relationship to the strategic plan, and the funding proposed for the intended outputs. These to include the DHB's expected hospital and related services performance during the year. The plan is to be accompanied by the DHB's statement of intent and the Crown Funding Agreement for the year. To assist DHBs, and to make comparisons easier, the Ministry will provide a standard format for the annual and strategic plans, and set out planning and operational requirements.

The published annual report by the DHB is required to report on the extent to which it has met its general objectives. Provision of information can be required by the Minister of Health (and by the Minister of Finance on financial matters) under Clause 44 of the NZPHD Act, and it appears to be this provision which governs the reporting of accountability indicators.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?

Performance Management Techniques

The extent to which the system relies on one or a combination of the following: audit, inspection, regulation, financial and non-financial incentives, peer emulation, accreditation, licensing, standard setting, etc

Description of Proposed New Zealand System:

Audited annual accounts, and annual reports to parliaments are important parts of the process. Key accountability documents required by legislation are annual plans, strategic plans, annual reports and Statements of Intent (SOIs).

Non-financial incentives are expected to be important (e.g. publicity, and other incentives/sanctions discussed below).

Overall the intention is to use a non-regulatory operational policy framework rather than regulations.

The following developmental framework for performance management has been proposed as a way of encouraging high performance and collaboration between District Health Boards. The framework would have three modes of autonomy ranging from low autonomy (a highly prescribed environment), through moderate autonomy, to autonomy (a focus on minimum standards and on ensuring consistency in key areas). Initially all DHBs would start in low autonomy mode. They would be assessed annually by the Ministry of Health on their capability, and move up or down the development framework according to the assessment.

This framework would be part of the operating rules, would be applied consistently across all District Health Boards, and reflected in the level of prescription in the Annual Plan/Funding Agreement of the DHB.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are there any positive incentives/rewards in your system for good performance?
 - * Do you know of any discussion of whether accountability systems such as outlined here can be over constraining?

Sanctions and Incentives

The explicit sanctions and incentives (if any) used to encourage performance improvement and reward good performance (financial and non-financial) and their effectiveness in practice

Description of Proposed New Zealand System:

(Cabinet Committee paper 'Sanctions and Rewards for District Health Boards' 11/9/00)

Formal rewards and sanctions are to enable the Minister of Health "to influence the performance of DHBs to ensure that they deliver on key government expectations arising from the *New Zealand Health Strategy* and the *New Zealand Disability Strategy*.

Also "Formal rewards and sanctions should generally be used in an encouraging rather than punitive fashion and be applied only to DHB management of risks over which DHBs have an ability to respond. Their application should assist the objective of improving health and disability outcomes for a DHB's population."

The proposed rewards include public praise, board re-appointment, greater autonomy and less detailed monitoring, and ability to generate and retain surpluses. The proposed sanctions are the opposite of these, with a worst case option of dismissal of the Board and appointment of a Commissioner.

Legislative sanctions are seen as a last resort. Non-legislative sanctions and incentives eg publicity are the most likely to be used.

Other Country: *Comment to be inserted by overseas consultants.*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are performance comparisons publicised in your system? With what effect?
 - * Has, in your system, increased autonomy been held out as a possible reward for good performance? If so, our comment on how well it works?
 - * It is quite conceivable that an agency will perform well in one role, say long-term improvement of health outcomes, and less well in another, say in its hospital services. How should, or can, sanctions and incentives be applied in this situation?

Overall Assessment

An overall assessment of the system in relation to its ability to maintain and improve the quality and efficiency of health and social care and meet the aims and objectives of governments and public funding agencies

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's healthcare system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are there, in your opinion, identifiable key elements likely to make a performance assessment and accountability system successful?
 - * Any key factors likely to lead to failure?

Annexe 2. Response from UK Consultant

30 January 2001

A Questionnaire for Analysing the Proposed Accountability System for New Zealand District Health Boards

Purpose and Goals

The overall purpose and goals of the accountability system from the point of view of parliaments, governments and funding agencies.

Description of Proposed New Zealand System:

In New Zealand DHBs will be accountable to the Minister of Health and to Parliament for their performance. The overall purpose and goal of the accountability system is to ensure that DHBs are meeting Crown expectations in delivering health services to their district populations. During transition (1 January 2001 to 30 June 2001) the DHBs will be required to build capability to deliver these services. From 1 July 2001 DHBs will be responsible for funding and delivery of most health and hospital services in their districts.

More detailed information on Crown expectations and goals for the DHBs has been compiled from a number of sources.

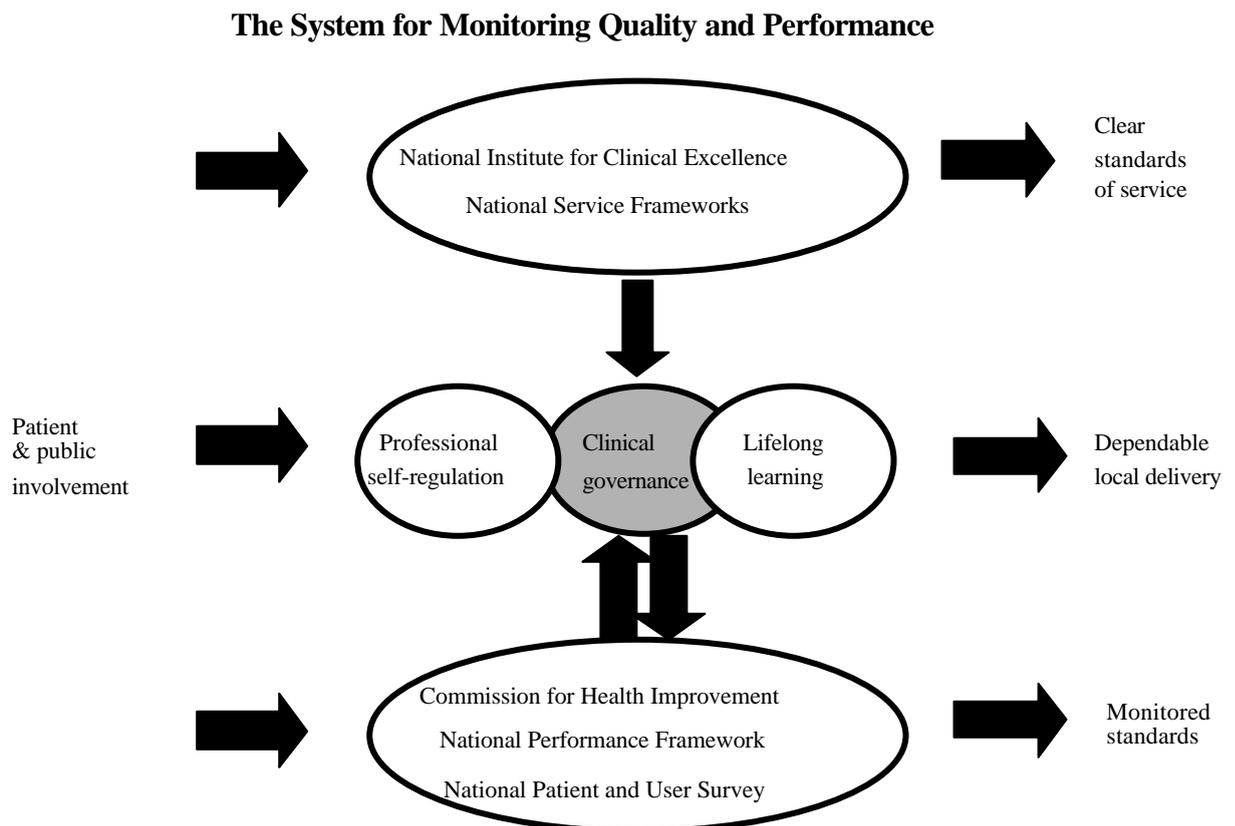
Other Country: *Comment to be inserted by overseas consultants. Note that you are not expected to provide an exhaustive description of your country's system, but rather to discuss key features and issues which you think would be relevant to the proposed New Zealand system.*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are the key goals explicit in your accountability system?
 - * Is the number of goals manageable?
 - * Is any guidance given on trade-offs between different goals?
 - * What has been your experience of holding entities accountable for health outcome and health equity goals?
 - * Can you comment on your experience with health agencies being expected to report on 'non-health' socio-economic inequalities in their district which are possible causes of health inequalities, e.g. in housing, employment, income?

UK RESPONSE

Arrangements:

- The performance management agenda in the UK spans almost all the public sector services, not just health care. As part of the government's "modernisation" agenda, a series of "public service agreements" have been made which set out the relevant Ministers' responsibilities for meeting key performance targets.
- In health care, the recent NHS Plan (Department of Health 2000) builds on previous policy developments and aims to create a more performance orientated, quality service. A three-pronged approach has been devised in order to secure quality and performance improvements: the setting of clear national standards; the establishment of dependable local delivery systems; the development of new systems of monitoring and performance assessment.
- The approach to accountability for performance is quite complicated, involving multiple agencies. The diagram below outlines the main elements and roles:



- *Setting standards* - The National Institute for Clinical Excellence (NICE) now promotes clinical and cost-effectiveness through guidance, audit and advice on best practice. National Service Frameworks are used to set standards and define service models for individual care groups;

- *Delivering standards* - At the local level new systems of clinical governance are being developed. These local frameworks for ensuring accountability for clinical quality and performance are to be augmented by new systems of professional self-regulation and life-long learning to ensure that national standards and guidance are reflected in the local delivery of services;
- *Monitoring standards* - The Performance Assessment Framework (PAF) replaced the Purchaser Efficiency Index in April 1999 and focuses on six areas of activity and outcome: health improvement; fair access; effectiveness; efficiency; patient/ care experience; and the health outcomes of NHS care. Targets for progress against these six areas are now built into local Health Improvement programmes, accountability agreements between devolved levels of the NHS, and the agreements between commissioners and providers of health care. The Commission for Health Improvement has been established to undertake local reviews to check that systems to monitor, assure and improve clinical quality are working effectively.
- A new Modernisation Agency is to be established to advise the Secretary of State and help deliver the NHS Plan. The Agency will produce an independent annual report on progress.
- At the operational level, the Department of Health's Regional Offices (RO) (there are 8 of these based on geographical boundaries – they are actually part of the Dept of Health) will performance manage improvements against the NHS Plan targets by setting performance agreements with local health organizations (health authorities and Trusts) in the form of local action plans. Health Authorities will draw up performance agreements with their Primary Care Groups/Trusts (PCGs/Ts). The Regional Directors of each RO will in turn be accountable to the Department of Health for delivery of specified, written targets.
- The guiding principle is meant to be local ownership of targets and freedom to innovate within a clear accountability framework.

Goals:

- In theory, organizations are to be accountable for achieving performance improvements in each of the 6 areas of activity which constitute the performance assessment framework (PAF): health improvement, fair access, effectiveness, efficiency, patient/carer experience, health outcomes of NHS care (see later for more detail on these).
- However, given the emphasis on the importance of local autonomy, the latest policy development involves the notion of a small number of *absolute* key targets – “must dos”; accompanied by a larger number of targets based on *relative* performance which reflect the dimensions of the PAF. This relates to the “traffic light” status approach which is discussed in more detail later.
- A consultation document just issued by the Department of Health concerns the implementation of this approach, outlining a number of possible “must-dos” for consideration (Department of Health 2001). They specify that the final number will be “small” but the “long-list” of must-dos for Health Authorities contains 11 suggested targets and it is not clear how many of these will be chosen. For hospital Trusts the “long-list” of must-dos contains 7 targets.
- The areas which these targets cover reflect the guidance issued annually to Health Authorities and Trusts which summarises the priority areas for the NHS and Social Care. The 2000/01 guidance referred to the reduction of

waiting lists and times; the delivery of effective emergency care; financial stability; prevention and control of communicable diseases, especially hospital acquired infection; immunisation targets. Most of the suggested “must-dos” reflect these areas.

Trade-offs:

- It is probably fair to say that the government recognises the existence of trade-offs. However, they are keen to be seen to be securing a minimum acceptable level of care across the board. Hence the insistence that the “must-dos” will have to be achieved within the traffic-light approach.
- The latest consultation document contains a description of a “planning tool” which can illustrate the position of organizations along the different dimensions of the PAF, highlighting areas in which the organization is doing better or worse than average of their peers. Trade-offs therefore can be neatly illustrated.

Health Outcomes and Equity:

- The PAF recognised that health care organizations do not have complete control over certain dimensions of health outcomes. Hence the distinction between *health outcomes of NHS care* – which is meant to reflect those areas in which the NHS can be expected to have a major influence; and *health improvement* – meant to reflect areas where NHS may not be the only/main agency. Examples of the former include survival rates from breast and cervical cancer; adverse events/complications of hospital treatment; examples of latter include suicide rates; deaths from all causes.
- Three “interface” indicators are to be shared between health and social care agencies in acknowledgement of their joint influence. These relate to emergency hospital admissions for older people; emergency psychiatric admissions; and hospital admissions due to falls or hypothermia.
- Equity is a relatively new concern in the NHS, having been the focus of attention only since the Labour Party was elected. One dimension of the PAF relates to fair access to services, but many of the targets proposed in this area relate to waiting times and volume of services and specific treatments (eg CABGs) rather than variations according to socio-economic group or other dimensions.
- However, the NHS Plan announced that there would be, for the first time, a national health inequalities target which will be reflected in local targets and agreements. This is to be developed in consultation with experts and supported by a new health poverty index which will combine data on access, health status, uptake of preventive services etc.
- The general areas discussed in the NHS Plan include the narrowing of the gap in infant and early childhood mortality and morbidity by social group as well as a target to address inequalities later in life. The drive towards reducing health inequalities is not only to be focused on health care but also supported by broader government policies addressing poverty for example. The government has also placed much emphasis on reducing inequalities faced by minority ethnic groups.
- It is interesting to note however, that the implementation document recently released for consultation does not contain anywhere in its list of suggested indicators, any targets relating to reductions in socio-economic or ethnic

inequalities in access or health status. It may be that these will come later or are going to be the subject of local discussion.

- It is also interesting to note that the government have decided to introduce a new resource allocation criteria – resources are to be distributed (to health authorities and primary care groups) in order to reduce “avoidable” inequalities in health. There is much work to be undertaken to define what is meant by “avoidable” as well as an increasing recognition that it may be necessary to performance manage how resources are spent in order to achieve this goal – just giving areas extra money will not in itself translate to reductions in inequalities – it depends how it is spent.

Lessons/Issues:

- Definite move in UK (not just health care sector) towards trying to devolve responsibility and encourage local ownership within clear accountability framework.
- Recognition that giving NHS organizations a plethora of “top-down” targets is counter-productive – (a) they will waste time and energy trying to find out which ones “really count” and then just focus on these anyway as there are too many pressing demands on them to respond to everything; (b) they are less likely to commit to meeting targets set centrally when they should also be responding to local needs and priorities. Thus the local organizations need to be told which targets they really have to meet and which are more flexible and open to local agreement.
- There is a tension in the NHS system between the rhetoric of devolution and local autonomy and the creation of more monitoring and regulatory agencies (eg Commission for Health Improvement, Modernisation Board etc). We do not know how this will develop yet. I am not sure whether this will be an issue in NZ but it is something to be aware of.
- Real attempts have been made to recognise the need for a multi-agency approach, especially where NHS will not have the major influence over outcomes. This can be achieved in NZ if consideration is given to development of shared targets and responsibility between different agencies. It can also reduce the degree of gaming which may otherwise go on.
- There is a lot of discussion and focus on issues of inequalities (eg substantial research initiative funded by the Department of Health is underway) but, at the moment, this does not seem to have been translated into the PAF and suggested targets for this year. This suggests that if issues of inequality are to be addressed in the NZ system, this probably needs to be reflected in specific measurable targets as a core part of the performance system.

Organisations

The entities being assessed and held to account and the level(s) in the system at which different forms of accountability apply.

Description of Proposed New Zealand System:

The key agencies in the new health system will be:

The Ministry of Health

The District Health Boards (DHBs). These have a three-fold role:

- Managing the public hospital(s) in their district
- Purchasing other healthcare services for their population
- Gaining improved health for their population, in ways responsive to the wishes of that population, and also reducing inequities in health outcomes.

Other Agencies – in particular PHARMAC, and the NZ Blood Service.

The Ministry of Health is responsible for producing the New Zealand Health Strategy on behalf of the Minister of Health. It sets the overall goals for the health system. The Ministry of Health is responsible for managing the Crown relationships with DHBs and other key agencies such as PHARMAC. It is responsible for monitoring performance of DHBs. The Treasury also has a role in relation to the financial aspects of DHB accountabilities.

The 21 DHBs are Crown entities. In the new health system they will be responsible for both funding and provision of health and hospital services. It is anticipated that DHBs will be responsible for nearly all contract relationships with providers. This would include for example GPs, hospitals, Maori and Pacific providers. The exceptions will be some specialised services, where contracts will be held at a national level, or regional level. A timetable has been set for devolution of funding responsibilities from the Ministry of Health to the DHBs.

The new legislation requires DHBs to have three advisory committees:

- the Hospital Advisory Committee, to advise on matters relating to the DHB's hospitals;
- the Community and Public Health Advisory Committee, to advise on health improvement measures;
- the Disability Support Advisory Committee, to advise on disability issues.

The restructuring of the health sector has resulted in a number of other agencies being set up that will work closely with DHBs. For example Crown entities such as PHARMAC and the New Zealand Blood Service will enter into contractual relationships with the DHBs. As Crown Entities, these two agencies will be accountable to the Minister of Health for their performance. The DHBs are also collaborating to set up shared services or support agencies. The first of these agencies to be set up is Healthshare Ltd, which will be set up under the Companies Act 1993 and wholly owned by a group of DHBs in the central North Island. The objective in setting up these shared services agencies is to achieve savings in the administration and operation of DHBs.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?

UK RESPONSE

- Much of this information has been given in the previous section.

Indicators

The number and range of indicators used to hold purchasing and provider agencies accountable to public funding agencies (e.g. the balance between measures of inputs, processes, outputs and outcomes and the coverage of health and social care).

Description of Proposed New Zealand System:

The set of indicators has not yet been decided but the Ministry of Health is working towards producing a small set of key performance indicators that can be used for monitoring and benchmarking DHB performance in relation to delivery of the New Zealand Health Strategy, overall service access, DHB governance and DHB provider performance.

The set of performance indicators is intended to cover the following:

- Priority Population Health objectives
- Reducing inequalities in Health Status
- Service Priorities
- Ensuring Quality services
- Timely and Equitable Access
- Governance and Organisational Performance
- DHB Provider Performance

Attachment B describes in more detail the kinds of indicators being considered for the different goals.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * How often is the set of indicators reviewed?
 - * The mix of indicators which is being used? E.g. Balance of health outcomes, healthcare outcomes, outputs, process' (delivery of a service), inputs. Also balance of financial – nonfinancial; efficiency, quality, equity, responsiveness, etc.
 - * Are there performance indicators which can be identified as working well? And those not working?
 - * Are hospital 'productivity indexes' useful for monitoring performance?
 - * Which indicators are used in your system to measure 'health outcomes', particularly at regional level? (For example, life expectancies, potential years of life lost, infant mortality.)

- * Are 'burden of disease' measures such as Disability Adjusted Life Years (DALYs) an appropriate way of measuring, nationally and regionally, levels of health and health distribution?
- * As used for instance in World Health Report 2000 (WHO, 2000)
- * Is there a place for regular population surveys, for the measurement of population 'health state', and also degree of satisfaction with the healthcare system?

UK RESPONSE:

Scope of Indicators/Review:

- The PAF covers 6 areas in which performance is to be assessed:
 - * Health Improvement
 - * Fair Access
 - * Effective Delivery of Appropriate Health Care
 - * Efficiency
 - * Patient/Carer Experience of the NHS
 - * Health Outcomes of NHS Care
- The 6 areas are seen as interdependent: Starting from the perspective of the health of the local community (health improvement), we need to ensure everyone with health care needs (fair access) receives appropriate and effective health care (effective delivery) offering good value for money (efficiency) as sensitively and convenient as possible (patient/carer experience) so that good clinical outcomes can be achieved (health outcomes of NHS care), to maximise the contribution to improved health (health improvement again).
- In theory, this represented a radical shift away from the dimensions of performance which had been the focus of attention under the previous government ie finance and waiting times, towards a more rounded picture of performance. In practice, although substantial progress has been made, the difficulties in finding good indicators for some of these dimensions means that some are less developed than others. Additionally, as noted above, the main focus is on areas which are seen as priority areas for the year ahead – which in the UK, implies that financial issues and waiting times are still at the forefront of the system.
- There is a recognition that process indicators have a useful role to play in many circumstances. For example, people often care about the process of treatment or their care experience itself (this was illustrated in the public consultation exercise undertaken prior to the NHS Plan); they can be good indicators of outcome if process and outcome are strongly related; they may be easier and less costly to measure; poor performance on process indicators may be more easily attributable to specific activities and thus more amenable to management change than outcome indicators.
- In 1999, a set of high level indicators and clinical indicators were published (Department of Health 1999; 1999a); and more recently, an expanded version

was published in a single document (Department of Health 2000a). This incorporated additional indicators to reflect policy developments, including: more indicators linked to cancer services, indicators linked to key targets which were set for mental health and coronary heart disease in national service frameworks, indicators linked to primary care; indicators reflecting concerns of the public assessed through consultation for NHS Plan. There is a constant process of consultation – especially with clinicians and managers – about improving existing measures (data quality and accuracy) and adding new measures. I am not aware of measures dropping out which suggests the set is expanding all the time.

The following table summarises the indicators published in July 2000 (Department of Health 2000a):

NHS Performance Indicators

(a) Health Authority Level

Health Improvement
Deaths from all causes (ages 15-64)
Deaths from all causes (ages 65-74)
Deaths from cancer
Deaths from all circulatory disease
Suicide rates
Deaths from accidents
Serious Injury from accidents
Fair Access
Inpatient waiting list
Adult dental registrations
Early detection of cancer
Cancer waiting times
Number of GPs
GP practice availability
Elective Surgery rates (hips, knees, cataracts)
Surgery rates – Coronary heart disease (CABG/PTCA)
Effective Delivery of Appropriate Health Care
Childhood immunisations (MMR & diphtheria)
Inappropriately used surgery (D&Cs; grommets)
Acute care management – potential “available” hospitalisations
Chronic care management – potential “available” hospitalisations for asthma & diabetes
Mental health in primary care – level of benzodiazepine prescribing
Cost effective prescribing
Returning home following treatment for a stroke
Returning home following treatment for a fractured hip
Efficiency
Day case rate
Length of stay
Maternity unit costs
Mental health unit costs
Generic prescribing

Patient/Carer experience of the NHS
Patients who wait less than 2 hours for emergency admission (through A & E)
Cancelled operations – for non-medical reasons
Delayed discharge (interface indicator with Social Care)
First outpatient appointments for which patient did not attend
Outpatients seen within 13 weeks of GP referral
Percentage of those on waiting list waiting 18 months or more
Patients satisfaction – proportion who complained/felt like complaining about GP surgery staff
Health Outcomes of NHS health care (Part 1)
Conceptions below age 18
Decayed, missing or filled teeth in five year old children
Emergency readmission to hospital following discharge (within 28 days)
Emergency admissions of older people (interface indicator)
Emergency psychiatric re-admissions (interface indicator)
Still births and infant mortality
Health Outcomes of NHS health care (Part 2)
Breast cancer survival
Cervical cancer survival
Lung cancer survival
Colon cancer survival
Deaths in hospital following surgery (emergency admissions)
Deaths in hospital following surgery (non-emergency admissions)
Deaths in hospital following a heart attack (ages 35-74)
Deaths in hospital following a fractured hip

NHS Performance Indicators

(b) Hospital Trust Level

Effective Delivery of Appropriate Health Care
Discharge from hospital (stroke)
Discharge from hospital (fractured neck of femur)
Health Outcomes of NHS health care
28 day emergency re-admission
In-hospital premature deaths (30 day perioperative mortality – emergency admission)
In-hospital premature deaths (30 day perioperative mortality – non-emergency admission)
In-hospital premature deaths (30 day mortality following AMI)
Deaths following fractured neck of femur

Hospital Productivity Indices:

- There has been a substantial investment of resources in producing efficiency indices in the UK – “reference cost indices”. Several different indices have been developed, each representing some degree of refinement over the previous version eg better methodology for taking into account factors outside control of hospital management etc.
- We have undertaken research in this area here at the Centre for Health Economics (CHE), exploring the methodology used and the degree to which

the variation in results can be interpreted as variation in efficiency between hospitals. Several papers have been produced with detailed analyses and critiques (Dawson and Street 1998; Street 1999, 2000; Jacobs 2000). In a nutshell, we maintain that the results are (a) highly dependent on the methodology used eg a hospital can move from top 10 position to bottom 10 depending on the index; and (b) that the differences are not statistically significant, suggesting that there is not a great deal of variation in efficiency overall. We also found no other examples in other countries (with possible exception of New South Wales, Australia which was moving in this direction) of comparative cost information being used to measure relative hospital efficiency (Dawson et al 2001).

- It is interesting to note that, at present, the results of the reference cost index do not appear to be incorporated into the performance framework, which suggest the government are taking a cautious approach which is what we would recommend.
- However, one benefit associated with the developments in this area is the production of much higher quality information on costs and activities than we have previously had in the NHS.

Health Outcomes:

- The table above shows the measures used for health outcomes – in terms of health improvement and outcomes linked to NHS care. The latter are not particularly well defined as there is recognition that factors outside the control of the NHS may influence these outcomes eg rate of teenage pregnancy will also be influence by general education strategies as well as specific prevention programmes in NHS and is likely to be linked to deprivation rates. The cancer survival indicators are very topical as there is a drive towards improving cancer services in the UK.
- Health improvement indicators are at a more general level eg all cause mortality rates, cancer morbidity. National 10 year targets have been set as part of a general public health strategy (Department of Health 1998) for deaths from cancer, circulatory disease, suicides and accidents.

Surveys:

- The NHS Plan placed a great deal of emphasis on the perspective of the patient and carer. A national annual survey of patient satisfaction and experience of health care have been initiated and is to be repeated over time so progress can be measured. In addition, we already collect some data as part of the national census and the General Household Survey on morbidity and use of services. The government are also undertaken various surveys of the health of particular groups eg ethnic minority groups.
- The NHS Plan will require all hospitals, primary care groups and health authorities to ask patients and their carers for their views on the services they receive. All patients leaving hospital will have the opportunity to record their views in writing or electronically through new bedside TV information services.
- Every local NHS organization will be required to publish in a new Patient Prospectus, an annual account of views obtained from patients and the action taken as a result.

- At local and regional levels, there is increasing interest in surveying population health status. CHE has been involved in some of this work, using the Euroqol measure (EQ- 5D).
- The views of the public were gathered as part of the consultation process for the NHS Plan and some of the issues are reflected in the targets planned for future eg progress on reducing mixed sex wards.
- At the moment the main indicators relating to patient/carer experience centre around waiting times (emergency, in-patient, out-patient and GP), cancelled operations, delayed discharges.

Lessons/Issues:

- Attempts to measure relative productivity/efficiency of hospitals should be treated with caution.
- Measurement of health outcomes is possible but great care is needed to specify the degree to which health care organizations are expected to influence such outcomes given the strong role of socio-economic and other factors.
- There is a role for patient satisfaction surveys as long as they are well-designed and consistent over time. There is a specialist niche in designing surveys of this nature to avoid the trite answers which then show 99% of people are satisfied etc (even though there are statistics to show many more of them would have had operations cancelled, waited too long etc). This suggests that substantial resources will be required to do this properly.
- In the past, leaving satisfaction surveys to local organizations to design and implement was unsatisfactory – too much variation in quality and methodologies used. It is not clear whether strict guidelines for local satisfaction surveys are to be produced in the UK but this would seem to be appropriate if NZ is to follow this road.

Qualitative versus Quantitative Assessment

The roles of qualitative assessments of performance as well as quantitative measures (e.g. the roles of 'hard' and 'soft' data in the system).

Description of Proposed New Zealand System:

One of the key planned features of the proposed New Zealand system is the strong focus on relationship management and the importance of "soft" data in the accountability process. This means a mix of both hard and soft accountability data will be used to assess DHB performance. Examples of qualitative indicators include:- extent of community and Maori consultation, carrying out of a 'robust needs analysis', maintaining a 'principles based prioritisation framework', developing appropriate plans, achieving milestones.

The Ministry of Health has been restructured to include a Sector Funding and Performance Directorate (SFPD) that will manage the accountability relationships with DHBs and others. Relationship managers are now employed to work closely on a day to day basis with individual DHBs to achieve outcomes in line with Crown expectations.

In addition to accountability indicators, there will be contextual indicators and information to back up analysis of DHB performance.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?

Kinds of qualitative data collected, and how analysed?

UK RESPONSE

- Our research has highlighted the importance of "soft" data in the assessment of performance (Goddard et al 1999). Whatever the performance of an organization may look like "on paper", those close to it and working with it will form their own views based on personal experience, knowledge of local environment, mitigating factors etc.
- However, we have also warned about some of the pitfalls of relying too much on "soft" information as it is subject to manipulation – just as "hard" data can be.
- The recent consultation exercise on the implementation of the performance system suggests several indicators which may be termed "qualitative". Some examples are as follows:
 - * Development of no-smoking policy
 - * Enforcement of such policy
 - * Participate in local drug action teams
 - * Develop and implement policies on stroke and CHD

- As yet, there is no detail about how this will be monitored. It is likely to be either a case of regional offices stating whether this has been achieved in their local hospitals and health authorities; by a box-ticking data collection exercise; or possibly through examination of relevant policy documents eg local health improvement plans should mention whether non-smoking polices have been developed.
- It is likely that monitoring organizations such as the Commission for Health Improvement will take into account much of the softer information on performance available at local level.

Lessons/Issues:

- There is a place for qualitative aspects of performance management. Both in terms of qualitative indicators and in terms of the sort of supporting information which is used by those in the health service to form judgements about performance.
- However, there must be a balance. Too much of a focus on “hard” data will ignore the valuable information which can be found as part of informal networks and relationships; too much of a focus on “soft” information will create difficulties in analysis and may be insufficient as a basis for challenging poor performance. It is always easier to initiate an investigation of apparent poor performance when there is at least some hard information from which to start.
- The NZ system may need to incorporate elements of inspection and informal assessment or reporting in order to utilise this valuable source of information.

Selection Criteria

- How the indicators and measures of performance are/were selected (i.e. the criteria used such as relevance, scientific standing, feasibility, cost-effectiveness)
- How professionals, patients, the public, 'experts' etc. are involved)
- How the indicators are operationalised (i.e. measurement and data quality issues such as overcoming technical problems associated with rarity of events, probabilistic nature of outcomes, lag effects, confounding, attribution of effects, use of aggregate versus single measures, etc.)
- How the measures relate to government/funding agency policy goals and priorities.

Description of Proposed New Zealand System:

There was extensive public consultation by the Ministry of Health in developing the New Zealand Health Strategy and the other related strategy documents. Treasury and DHBs are being consulted in the preparation of the indicators.

The indicators are being developed after completion of a stock take of existing data collections. They will be based on historical series where possible. Contextual information will be important in interpretation of the indicators.

The measures will mirror the government's goals for health as set out in the NZ Health Strategy, and be supplemented with indicators on DHB performance in securing service access, overall DHB governance and DHB provider performance.

Two key criteria are that they should measure things that can be influenced by DHBs; as well as having minimal compliance and transaction costs.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are selection criteria clearly stated?
 - * Is account taken:
 - in selecting indicators
 - in reporting resultsof the various measurement and data quality issues referred to above?

As an example of 'confounding', in New Zealand there are statistical difficulties in distinguishing the effects on health outcomes of 'ethnicity' and 'socioeconomic disadvantage'. Have similar difficulties been encountered in your country?

UK RESPONSE

Consultation:

- The draft PAF took into account some of the views and research of experts in the field (NHS Executive 1998). To a large extent it tried to build upon the data already available in the NHS which may not have been used to form indicators in the past. In this way the burden and cost of data collection would be minimised. However, as some of the proposed areas were new, further indicators were to be developed.
- As a first stage, the consultation document proposed an initial set of “high level” indicators (29 in all) which would be collected at health authority level only and were meant to give an initial picture of the performance of the NHS in each of the 6 areas covered by the PAF. The intention was that although some of these were “far from ideal”, they would be developed further over time.
- There followed a period of consultation on the draft PAF as well as a period of “road testing” with health authorities and regional offices in 1998-9.
- As a result of the consultation and road-test, a final set of “high-level” indicators were published in 1999.
- Some of the original suggestions were dropped eg district nurse contacts and avoidable diseases, some were changed and some new additions for the following year were also suggested – largely based on new public health policy which emphasised the need to reduce deaths from heart disease, stroke, cancer, suicides and accidents.
- In some cases, indicators were dropped due to feedback from the consultation exercise and questions about their appropriateness; in other cases, problems with data collection hindered their production. For example, teenage conceptions were originally proposed as a measure of fair access to family planning services. However, this was dropped as it was felt it would not capture issues of access which apply to whole age group. However, it was later revived as an indicator of outcomes of NHS care.
- A consultation process relating just to the clinical indicators was also undertaken, with suggestions for 15 clinical indicators given. As a result of consultation a final set of 6 were chosen.
- Many of the initial high-level indicators and clinical indicators have remained in the PAF (some in slightly different format).

Selection Criteria:

- The stated criteria for assessing possible indicators are:
 - * *Attributable*: indicators should reflect health and social outcomes which are substantially attributable to NHS as provider, advocate or partner (although note that there is scope for measurement of health improvement which is felt to be less attributable to NHS care alone than other indicators)
 - * *Important*: indicators should cover an outcome which is relevant and important to policy makers, health professionals and managers as well as resonating with concerns of patients.
 - * *Avoid perverse incentives*: indicators should be presented in a way which does not encourage perverse incentives, especially shifting of problems onto other organizations. If this is the case, a counterbalancing indicator should be introduced.

- * *Robust*: measurement should be reliable and coverage of outcome high, although sampling may be appropriate for some. Data should be robust at the level at which monitoring is undertaken eg if it is at health authority level, the indicator should measure sufficient number of events so that the values are not subject to large random variations.
- * *Responsive*: indicator should be responsive to change and change should be measurable. It should not be an indicator where changes are so small that monitoring trends is difficult. Consideration should be given to expected rate of change to decide if it is suitable for monitoring purposes.
- * *Useability and timeliness*: data should be readily available within a reasonable timescale.
- Each consultation document has indicated the rationale for choosing the suggested indicators which often includes issues of measurement and data quality.

Presentation:

- The overall set of performance results published in 2000 for both health authorities and hospital trusts takes into account many of the data issues mentioned above and the publication contains details of how to interpret the graphical presentations.
- Where there is a degree of uncertainty around an indicator, 95% confidence intervals are provided in a visual presentation.
- Age and sex standardisation has been carried out
- Hospital trusts have been grouped into clusters of similar type (eg large teaching; small specialist) to facilitate like with like comparison in terms of expected case-mix.
- Some hospitals have been excluded from the analysis if they have low level of the activity for the indicator which may give unrepresentative results; if the hospital deals only with a single service; if they had significant data problems (see later sections for more on data quality)
- Socio-economic differences were not taken into account in the latest set of indicators published, although it is acknowledged that different circumstances will influence health and the results of health care. However, the rationale given is that where there is evidence that a service is effective or a certain service should be met, this should apply equally regardless of socio-economic status. Also, adjustment may mask issues of socio-economic variation which may need to be addressed.
- It is important to note that in the most recent consultation exercise on how the “traffic light” status is to be implemented, one of the specific questions asked is what the balance should be between achieving absolute minimum standards which apply to all organizations; and relative performance which reflect the different starting points of organizations (which depend in part on socio-economic circumstances).

Lessons/Issues:

- Rationale for selection should probably include more than the 2 key factors outlined in NZ system – consider some of the other issues outlined above. May be a trade-off with costs as routinely available data may not be suitable for creating indicators.

- Consultation has been made at most stages in the process of developing the PAF and this has probably enhanced credibility of the final options. Piloting and road-testing is also important.
- The indicators do change in response to the key objectives and goals of the government eg more were added to reflect new public health priorities. It is important to make sure they reflect current concerns but of course, if change is constant this will defeat the purpose of monitoring progress over time as well as creating dissatisfaction amongst those responsible for collecting data.
- The issue of the adjustment for socio-economic differences is still under debate in the UK. The most recent consultation reflects this concern and may be in response to the observation that most of the hospitals which would be classed as performing poorly under the proposed traffic light scheme would be located in the less prosperous parts of the country; whilst the opposite was true of the good performers. Thus performance was thought to reflect social circumstances rather than anything within the control of the hospitals.

Ex Ante and Ex Post Accountability Processes

- How the expectations of funding agencies/governments are signalled to the sector
- The processes and interactions through which the indicators of performance are used to enforce accountabilities
- The timing, sequencing of events and feedback processes of the accountability system and the ways in which the different agencies involved signal their expectations.

Description of Proposed New Zealand System:

The government's expectations are set out in legislation (the NZPHD Act and the Public Finance Act); in the government's Health Strategies; and in the operating environment documents (the non-regulatory framework). These are the longer term documents.

Annual expectations and performance targets will be set out in the DHB Annual Plans, Service Cover and Funding Agreements. The DHBs will be monitored by the Ministry of Health, reporting monthly, and quarterly, and will make a year end Annual Report to parliament including audited accounts.

The Ministry of Health will send out a draft planning package to DHBs in March 2001, that will include the operational policy framework and service cover requirements, and will assist DHBs in the preparation of their Annual Plans.

Once the first Annual Plan has been finalised there will be an ongoing dialogue between DHBs and the Ministry of Health regarding the ability of the DHB to meet its performance targets. Annual plans will be revised and the process begins again.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Degree to which there is genuine feedback in your system from reporting of indicators to organisational improvement?
 - * Is there clinician involvement?

UK RESPONSE

- I have not got precise details of arrangements at hand but there are indeed annual agreements on performance as described in section on accountability.
- I am not sure what you mean about clinician involvement. If hospitals are performing poorly, it is for managers to decide how this is to be tackled and this of course will need to involve clinicians for most of the indicators.

- I think perhaps there has been less thought given in the UK so far to how the provision of the performance information will actually impact on performance. We have explored this in our research in relation to the publication of clinical outcome data in Scotland (Mannion and Goddard 2000) and we found little impact has occurred. However, the system there was different from the English performance system, in that it was not incorporated into a formal system or set of agreements nor accompanied by appropriate incentives and sanctions.
- I think the issue of impact and the degree of change which can be expected as a result of the system, hinges largely on the incentive structure within which the system operates and this is discussed later.

Consultation Processes about Plans

- Whether the expectations of other agencies and groups (e.g. members of the public) play any part in the system
- How these forms of accountability are included in the system

Description of Proposed New Zealand System:

Board members are both elected (7) and appointed (up to an additional 4)
Maori are to be represented on each DHB Board in proportion to their proportion of the DHB population, and in any case there are to be at least two Maori on the Board.

Requirements to consult on the DHBs' Strategic Plans, and on significant changes to their Annual Plans, are in the statute (NZPHD Act, 2000, Clauses 38-40). There will be indicators to monitor performance on consultation.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * What requirements are there for consultation at the different levels in your system?
 - * Are there specific requirements re indigenous peoples or other ethnic or cultural minorities?
 - * How much weight is given in assessing an agency's performance to its consultation processes?
 - * Is there genuine scope to vary performance expectations in light of local views/priorities?

UK RESPONSE

Consultation:

- As new agencies are developed, there is an increasing recognition of the need to ensure Board members are representative of society more generally. For instance, the Modernisation Board will include representatives of citizens and patients (one-third of the members). There will be a new Independent Reconfiguration Panel to investigate major structural changes to health care (eg mergers of hospitals) and again, one-third of the members will be lay or citizen members. The Commission for Health Improvement will include lay and citizen inspectors. Older people will also be represented in order to make sure their interests are fully taken into account. A new Citizens Council will be set up to advise the National Institute of Clinical Excellence (which is responsible for producing advice on provision of

effective and cost-effective technologies and drugs to the NHS). Patients will be represented on hospital boards through the Patient's Forum. Half of the membership of the latter will be drawn from local patients' groups and voluntary organizations; the other half randomly drawn from respondents to the hospital's annual patient survey.

- A new NHS Appointments Commission is to be set up to appoint non-executive directors to hospitals and health authorities – appointments which were made by the Secretary of State in the past. The commission will take into account targets for diversity when making such appointments.
- In general terms, the NHS Plan places more focus on the patient perspective and plans to introduce a range of fora in which patients can have a role in the development of local health services. Every health authority is to establish a local advisory forum to provide a sounding board for determining health priorities and consulting on health improvement programmes; major increases in citizen and lay membership of all professional regulatory bodies.
- A major change is the ability of local authorities (which are elected bodies rather than appointed ones as in the NHS) to scrutinise health policy at the local level.

Lessons/Issues:

- Many plans to increase role of patients and citizens have been put forward recently. We are yet to see how some of them will develop and work in practice. However, in theory they give the opportunity for various groups to be well represented on the boards of various new bodies in the NHS.
- I am not aware of any plans to assess formally performance in relation to an agency's consultation process.
- In the light of the emphasis on the importance of local priorities and developments, there IS likely to be scope for performance expectations to vary in the light of local priorities. This appears to be the overall aim of the system, although a minimum level of performance must be achieved in a number of must-do areas, regardless of local issues.
- Achieving a balance between national and local priorities is likely to involve a degree of trial and error. The problem will be that as the number of national priorities proliferate, less scope is available for local innovation and determination of priorities.
- It may be helpful to develop some pilot sites for investigating the effects of letting local agencies choose their own priority areas eg evaluate what impact this has on achievement of national goals, whether more progress can be made on local issues when this freedom is given, views from staff and local population etc.

Use of Legislation and Regulations

- The legislative frameworks governing the financial and clinical accountabilities of health agencies (e.g. legislation governing public finance)
- Other regulations relating to quality, safety, etc. that support the accountability framework

Description of Proposed New Zealand System:

The two key pieces of legislation for the accountability system are the NZPHD Act and the Public Finance Act. The former requires an Annual Plan, and Strategic Plan, and also enables the Minister of Health to make Crown Funding Agreements with DHBs. The latter requires of any Crown entity an annual Statement of Intent, and annual accounts and an Annual Report.

In addition there is a range of public health legislation and guidelines and standards for the health sector.

A feature of the new system is the decision not to take a regulatory approach to setting the operating environment for DHBs. Instead operational requirements or rules are being developed. These are a more flexible tool, but more difficult to enforce than regulations. There are regulation making powers in the NZPHD Act that can be used if required.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?

What is your opinion, from observation of your system, of the effectiveness of the different ways of holding health agencies accountable? From:

- * Statutes and regulations
- * Directives from central agency
- * Less formal liaison measures

UK RESPONSE:

- I do not have all the information to hand to give you an accurate picture of legislative system within the time available.
- In general, the aim is to provide a clear accountability framework within which all agencies are aware of their responsibilities, but then to allow them freedom to innovate and develop services locally. Devolution is at the heart of the new plans for the NHS.
- The NHS Plan stated that too many directives were being issued by the Department of Health and they made a commitment to reduce the circulars issued to hospitals and primary care organizations to no more than one short communication per week (as opposed to up to 10 per week in the past).

Lessons/Issues:

- It is too early to tell whether the rhetoric of devolution will be borne out in practice. It is probably fair to say that there is some cynicism about the degree to which central “interference” will be reduced as most governments have said this in the past.
- However, there does seem to be a real will this time round to give more control to local agencies. Whether this will be possible politically remains to be seen. I am sure the same thing applies in NZ.
- An interesting example has emerged recently as one health authority has said they do not have sufficient resources to start prescribing a particular drug recommended by the National Institute of Clinical Excellence (NICE). The latter agency was set up, in part, as an attempt to end “postcode rationing” by issuing guidance about the evidence on the effectiveness and cost-effectiveness of technologies and drugs. However, it remains *guidance* which leaves room for local variations to continue. In response to the situation, the Department of Health said they had provided new resources for health authorities to use in relation to NICE guidance, but the health authority remains adamant that their own situation means they will not be following the guidance. This creates some embarrassment politically for the government but it is perhaps only to be expected if freedom to decide on priorities is to be truly devolved.

Information Management Systems

The information systems and information policies underpinning the accountability system

Description of Proposed New Zealand System:

DHBs (and also their Shared Support agencies) will report from their own accounting and information systems on contracts awarded, delivery targets, and performance to contract. Also at monthly, quarterly and annual intervals on the financial performance of their hospital(s) and the DHB itself.

Detailed hospital throughput statistics, and also mortality statistics, are compiled and published by the NZ Health Information Service (part of the Ministry of Health). The coverage is generally good, but with known gaps and deficiencies, particularly outpatient and community services.

Plus the Health Benefits section of the Ministry (formerly Health Benefits Ltd) compiles data on subsidised 'demand-driven' services. Almost all of these are in the primary healthcare sector, and include pharmaceuticals. Information on unsubsidised services is not necessarily collected, however.

New Zealand population health surveys are conducted every few years. But these cannot usually provide statistically significant measures at sub-national level.

A comprehensive 5-yearly census by Statistics New Zealand provides detailed socio-economic regional information. A recently-developed Deprivation Index measures 'areal deprivation' for Census mesh-blocks (population 100-300) and is already used by some DHBs as a measure of socio-economic gradient.

Note there have been statistical difficulties in defining ethnicity, i.e. Maori versus non-Maori. And also in enforcing consistent definitions in different data sources, e.g. hospitals records and death registrations.

The DHBs and Ministry of Health will have access to all this data.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * To what extent do your monitoring systems rely on standard data collections (providers' own information systems on 'encounters'; national data systems on utilisation, births, deaths, cancer registers, etc.)?
 - * Have data collection systems been developed specifically for assessment of the performance of the health sector and healthcare funders and providers?

- * What have been the major challenges in capturing this sort of information?
How are these being addressed?

UK RESPONSE

- Many of the indicators are based on data already collected. There are a variety of sources. Much of the mortality data and data on some diseases is collected nationally by the Office for National Statistics and is likely to be of high quality. Two other main sources – both of which rely on information provided by the hospitals and health authorities are the “Common Information Core” which is a set of core data collected in the NHS on issues such as delayed discharge; and the Hospital Episode Statistics.
- Data on waiting times and lists has been collected for some years as part of the Patient’s Charter initiative and again relies on data from the providers.
- The Hospital Episode Statistics have been available for many years but have never been exploited before as a source of performance information. However, this data set is often incomplete. For this reason, the performance information produced last year was accompanied by a “Data Quality Mark” which considers coverage and record quality. These are published and agencies with poor quality information are asked to improve it in future. Exclusions are based on the quality mark in order to ensure robust comparisons can be made.
- There are plans to look at aspects of information technology as part of the performance assessment eg number of computerised GP practices, whether qualified health informatics staff are employed etc.
- In future, the responsibility for validating data and producing the performance indicators is to pass to the Commission for Health Improvement plus the Audit Commission. These are seen as independent agencies so the hope is that the data will improve and the whole process will be seen as more independent and professional.

Lessons/Issues:

- Our research has indicated that unless those who are meant to respond to the performance information have faith in the quality, relevance and timeliness of the data on which the indicators are based, action is unlikely to be taken (Mannion and Goddard 2000; Goddard et al 2000b).
- In the UK, some attempts have been made to improve data quality although it is acknowledged that many problems still exist. It is probably fair to say that this aspect of the performance strategy has not, to date, received sufficient attention in the UK.
- Good information is essential to underpin any performance system and an imaginative national strategy is required to make sure this is available. This is likely to be expensive and so should be undertaken as part of a co-ordinated national strategy rather than on an ad hoc basis by regions or district health boards.
- The timeliness of data is a major issue – managers and clinicians will not be willing to act on indicators based on out-dated information as their practices and situation are likely to change over time so the information may be far less relevant. In addition, it is harder to get organizations to accept responsibility for

performance if the data is too old to be meaningful as they are able to say that things have changed since the data was collected.

- Consideration in NZ might be given to the role for an independent agency in the collection, validation and production of performance information – especially if credibility is going to be an issue if everything is left to the providers and to the government.

Operating Costs

Any information available on the costs of developing and maintaining the system of performance measurement and management

Description of Proposed New Zealand System:

The goal is to develop a small set of key performance indicators and the Ministry of Health will be considering the costs of the system it proposes.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are such costs separately identifiable in your system?
 - * If so, approximate magnitude and proportion of overall expenditure? How are they are minimised?
 - * From the NZ material outlined in this questionnaire, are there features which you would anticipate could lead to costs significantly higher than they otherwise would be?

UK RESPONSE

- I am not aware of any evaluation of costs of the overall performance management system, so I cannot answer this question.
- As mentioned above, much of the data was already being collected so the costs were already being borne. The original consultation exercise on the PAF suggested that in order to minimise cost, maximum use would be made of routinely collected data.
- The smaller "must-do" list suggested as part of the traffic light system mentioned earlier does not imply that information on other indicators will cease to be collected. Thus although there is a small sub-set of indicators used for the purposes of rewarding organizations, a great deal more is to be collected and disseminated.
- It is admirable that the NZ Ministry will be considering cost issues explicitly and this is likely to be a useful exercise.
- Clearly there is a trade-off between collecting a small set of indicators which may be cheaper than a large set and collecting information on all relevant aspects of the health care system. I think that the current UK government has probably been keen to ensure they collect information on each of the 6 PAF dimensions as the previous government had been criticised for a narrow focus on efficiency and waiting times only. Thus they have probably accepted that this will require extra resources.

Multiple Uses of Information

The relationship between governmental/managerial systems of accountability/performance management and clinical accountability and quality systems and initiatives

Description of Proposed New Zealand System:

The indicators are being developed in consultation with DHBs. It is expected that there will be benefits to DHBs as well as to government of consistent data collection across DHBs so that they can benchmark and compare performance.

Quality systems and initiatives are being systematised under the proposed Health and Disability Services (Safety) Bill, which is likely to be enacted during 2001. Under this legislation, health providers will be audited by designated audit agencies, using generic service standards and specific audit tools. In the first instance, hospitals, rest homes and homes for people with disabilities will be audited with other providers being covered in due course.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are accreditation and quality improvement strategies integrated with performance assessment procedures?
 - * To what, if any, extent are the views of clinicians and other healthcare professionals sought during the process of performance assessment?

UK RESPONSE

- The intention has always been to encourage the organizations themselves to use the information for benchmarking purposes and for seeking out and learning from best practice.
- In the UK, several benchmarking organizations have developed at hospital and health authority level and there are web-sites dedicated to this purpose as well.
- It is generally accepted that the indicators are meant to do just that – *indicate* aspects of performance which may justify further investigation. They are supposed to act as “can-openers” to suggest ways of digging beneath the surface to see what the causes of variation in performance are.
- However, I am not aware of any systematic research which has investigated whether and how it is used by the organizations to learn from each other.
- I am not able to comment on all the audit and quality strategies in the NHS – they are many and varied and I do not have specialist knowledge in this area. It does seem as if these have been proliferating recently – for instance a recent

announcement launched a new commission to investigate issues of poor clinical performance.

- I am not sure what is meant by whether the views of health professionals are sought during the *process* of performance assessment. I have outlined earlier the process of consultation on the developments and implementation of the system.

Underlying Performance Management Model

How performance measurement is used to manage performance and encourage improvement - whether the system is predominantly based on one of a number of contrasting approaches such as the identification of 'bad apples', or zero tolerance of 'failure' (i.e. penalising performance below a certain threshold), or a model of 'best practice', continuous quality improvement and professional empowerment

Description of Proposed New Zealand System:

The focus of performance management will be on improvements, but the system that is being set up will also provide levers to address non-responsive poor performers. (See the note later about 'Rewards and sanctions'.) There are legislated powers in the NZPHD Act for both the Minister of Health and the Minister of Finance (in role as shareholding Minister in public hospitals). However it is clear that the Ministry of Health intends to use relationship management and publicity to manage DHB performance, drawing on legislative sanctions only when things go badly wrong.

The Ministry of Health will set realistic performance targets for individual DHBs taking into account the starting points and their position relative to other DHBs. Sharing of knowledge, collaboration and cooperation between DHBs will be encouraged.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?

UK RESPONSE

Traffic Light System:

- Our research has indicated that in the past, the emphasis of the performance system has often been on exposing the "bad apples" by producing comparative information in a league table approach. Outliers are therefore highlighted but no incentives to improve are given to the majority of organizations in the centre of the distribution even though it is only by moving this majority upwards that substantial improvements overall could be obtained.
- Our recent work in Scotland supports this view: it revealed that hospitals appearing as "bad" outliers often used this information to argue for more resources; similarly, those appearing as "good" outliers also pressed for more resources as a way of supporting their centre of excellence! Those in the middle did nothing (Mannion and Goddard 2000).
- The traffic light system which was first put forward in the NHS Plan attempts to address both *absolute* minimum standards as well as encouraging improvements in *relative* performance, regardless of the different starting points of organizations. Those organizations which meet all core national standards and are in the top 25%

of organizations on other PAF dimensions will be classed as GREEN; those who meet the core targets but are not in the top 25% along PAF indicators are to be classed as YELLOW; those who fail to meet the core national targets will be classed as RED.

- At the moment, the way in which this is to be implemented is the subject of consultation. The list of possible “must-do”/core targets mentioned earlier are to be decided and also issues such as whether red status should apply to organizations failing to meet one or all of the core targets.
- In order to allow for the fact that different organizations start at different points and are dealing with different circumstances, the consultation exercise is also asking for views on the balance between absolute and relative measures. The latter may include measures of “value-added” depending on socio-economic circumstances and measures of improvement over time.
- The incentives associated with this scheme are discussed later, but it is clear that the government are hoping this will enhance the responsiveness of organizations to the performance information.

Lessons/Issues:

- The traffic light scheme represents a real attempt to try to tackle both absolute and relative performance and to provide incentives for ALL organizations to respond.
- However, there are a number of potential pitfalls. First, as detailed earlier, there has to be some way of taking into account socio-economic status or otherwise all red organizations will be found in the more deprived areas of the country. Second, there is a danger that categorising organizations as red or failing will just exacerbate their problems. This sort of system has been tried in the education sector in the UK and many schools classed as “failing” have found it impossible to recruit and retain good quality staff. Staff feel it is a reflection on their personal ability and they leave and others may not wish to join failing schools. Third, it is not clear how patients and the public may react to being told their local hospital or health authority is “red” status – in the case of schools, patients had some degree of choice over where to send their children (although this is restricted in practical terms) but patients may not have the same choices. The red status may lead to the “ghettoisation” of red organizations. Fourth, classifying the whole organization as red may not be helpful if the shortcomings are isolated in one particular department.
- The degree to which organizations move between different coloured status is important – the consultation document says they do not want rapid switches to occur, but it is not clear how this will be achieved. However, staff working in the organizations will not welcome constant changes to their status and if serious problems are behind the poor performance on targets, then some time will be required to attend to these.
- In the NZ system, care must be taken with making comparisons of relative performance between boards – there are only 21 of them. What sort of robust comparison may be made between such a small number of agencies? In the UK, there are many health authorities and hospitals but even here we have some problems once we try to group them into “similar” groups.

Behavioural Responses

Evidence of actual and potential, positive and negative (e.g. tunnel vision, sub-optimisation, myopia, misrepresentation, gaming, etc.), behavioural responses to the performance measures and management techniques in the system

Description of Proposed New Zealand System:

Administrative controls, in part to encourage positive responses, are being built into the new system such as the committee structure of DHBs (see 'Organisations' earlier), the existence of the Hospital Monitoring Directorate in the Ministry of Health and the production of separate financial statements for the three different arms of DHB function (hospital provision, other DHB operations, and the DHB's funding activities.)

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Is there any evidence (either 'hard' or 'anecdotal') of 'subversion' of your country's performance monitoring system?
 - * If so, what methods have been used to address the problem?
 - * Is the system such that agencies can focus on those aspects of performance covered by 'key indicators' at the expense of other areas?
 - * In the proposed NZ system, there are likely tensions between local and central objectives in a system where there are locally elected board members but performance accountabilities are to a central agency. Also tensions between hospital services and non-hospital services with respect to resource allocation.
 - * Do such tensions exist in your system, leading to 'gaming' behaviour? Solutions?

UK RESPONSE

- This is a massive area. We have documented examples of the dysfunctional consequences arising from the performance system in the past in our research (Smith, 1995; Mannion and Goddard 2000b; Goddard and Smith 2001). The UK government say they will attempt to monitor this.
- We have also documented the sort of strategies which can be employed to overcome some of these problems, but we have noted that many of them will clash – for example, setting year on year targets may tackle *complacency* but at the same time may encourage *gaming* as organizations try to manipulate their performance in a baseline year in order to avoid tougher targets in future.

- Judgements will have to be made about the relative importance of different adverse outcomes and a portfolio of strategies may be needed to address such issues.

Lessons/Issues:

- In the UK, some of the problems have been addressed in a number of ways which may also be relevant to NZ.
- The problem of *sub-optimisation* (pursuit of narrow local objectives by staff at the expense of the objectives of the organisation as a whole) has been addressed by giving joint responsibility in some areas for agencies which can influence the outcome ie social care and NHS agencies can influence hospital discharge policies. Access to the financial incentives of the traffic light system will also be used to reward joint working.
- The problem of *myopia* (pursuit of short term measures at expense of longer-term outcomes which may not show up in performance measures for many years) has been addressed in part by setting longer term targets (10 years) for some diseases which will require efforts to be made in preventive care as well as curative care.
- Problems of *misrepresentation and manipulation and misinterpretation* are being addressed by the involvement of independent agencies in data validation and analysis.
- The traffic light system attempts to overcome the problem of *complacency* by taking account of relative as well as absolute performance, as described earlier.
- Problems of *ossification* may be avoided by reviewing the indicators for their continuing relevance eg a focus on increasing day case rates in a specialty may detract from innovative ways of carrying out procedures on an out-patient basis. However, constant change will not be appreciated by those in the health service.

Completeness

The completeness of the accountability cycle through:

- Setting national/funding agency strategic priorities
- Completion of operational planning processes
- Ex post assessment of performance against priorities and plans
- Subsequent modification of funding and health agencies' policies, systems and actions

Description of Proposed New Zealand System:

The proposed system has all these elements and there are plans for a review a few years down the track of the performance monitoring and benchmarking system. In brief the Minister of Health (and/or Disability) determines and publishes strategic priorities in the *NZ Health Strategy* and the *NZ Disability Strategy* (specific strategies are also being developed for child health, Maori health, etc.). The Minister(s) must report on progress annually.

The DHBs must determine district strategic plans, not inconsistent with the national strategies, covering 5 to 10 years into the future, reviewable at least once every 3 years.

The Minister and each DHB must agree an annual plan for each financial year, which will include intended outputs of the DHB for the year, their relationship to the strategic plan, and the funding proposed for the intended outputs. These to include the DHB's expected hospital and related services performance during the year. The plan is to be accompanied by the DHB's statement of intent and the Crown Funding Agreement for the year. To assist DHBs, and to make comparisons easier, the Ministry will provide a standard format for the annual and strategic plans, and set out planning and operational requirements.

The published annual report by the DHB is required to report on the extent to which it has met its general objectives. Provision of information can be required by the Minister of Health (and by the Minister of Finance on financial matters) under Clause 44 of the NZPHD Act, and it appears to be this provision which governs the reporting of accountability indicators.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?

UK RESPONSE

I do not have the detail required on this topic and there is insufficient time to collate it.

Performance Management Techniques

The extent to which the system relies on one or a combination of the following: audit, inspection, regulation, financial and non-financial incentives, peer emulation, accreditation, licensing, standard setting, etc

Description of Proposed New Zealand System:

Audited annual accounts, and annual reports to parliaments are important parts of the process. Key accountability documents required by legislation are annual plans, strategic plans, annual reports and Statements of Intent (SOIs).

Non-financial incentives are expected to be important (e.g. publicity, and other incentives/sanctions discussed below).

Overall the intention is to use a non-regulatory operational policy framework rather than regulations.

The following developmental framework for performance management has been proposed as a way of encouraging high performance and collaboration between District Health Boards. The framework would have three modes of autonomy ranging from low autonomy (a highly prescribed environment), through moderate autonomy, to autonomy (a focus on minimum standards and on ensuring consistency in key areas). Initially all DHBs would start in low autonomy mode. They would be assessed annually by the Ministry of Health on their capability, and move up or down the development framework according to the assessment.

This framework would be part of the operating rules, would be applied consistently across all District Health Boards, and reflected in the level of prescription in the Annual Plan/Funding Agreement of the DHB.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are there any positive incentives/rewards in your system for good performance?
 - * Do you know of any discussion of whether accountability systems such as outlined here can be over constraining?

UK RESPONSE

Rewards/Rewards:

- In the past, the lack of clear incentives to reward good performance and sanction poor performance has been a major gap in the PAF.

- The new approach contained in the traffic light system aims to address this. Green light organizations are to be rewarded with greater autonomy, including automatic access to the new *performance fund* which will provide extra resources for locally designed incentive schemes. They are free to use the funds as they wish without seeking prior approval from any other body.
- Yellow organizations will have the use of their share of the performance fund moderated by the regional offices and the Modernisation Agency – the aim is to ensure it is spent in ways which will improve performance. These organizations will need approval from the regional offices for their plans.
- Red organizations will receive intensive “support” from regional offices and the Modernisation Agency and the latter will hold their share of the fund. Some of the funds may need to be spent on getting external assistance to help address their performance.

Earned Autonomy:

- In addition to the above aspects of autonomy in the use of the performance fund, there is emphasis on other aspects of earned autonomy for green and yellow organizations.
- These include: automatic access to discretionary capital without having to bid, lighter touch monitoring by the regional office; less frequent monitoring by the Commission for Health Improvement (which has the brief to inspect organizations); greater freedom to decide on local organization of services; used as “beacons” and exemplars for Modernisation Agency; have the ability to take over red organizations.
- Others mentioned as possibilities in the recent consultation document: reduced progress and routine monitoring; ability to sign off service strategies without regional office approval; retaining land sale receipts up to a certain limit; being first choice for pilot sites; increase in the threshold at which approval is needed for business cases.

Lessons/Issues:

- Unfortunately we do not yet know how any of this will work in practice, so lessons are limited.
- The aims are certainly valid and (as discussed later) there is a real attempt to try to think of ways of rewarding staff who are at the front-line and are responsible for the performance improvements.
- Retention of funds is always going to be a problem in a publicly funded system – the NZ system proposes the ability to make and retain surpluses. The UK system does not go this far although there is discussion of retention of land sale receipts.
- The UK focus is on rewarding individual staff or groups rather than organizations as a whole. Thus any retention of funds would need to happen at the department or team level and it may be difficult to allow this to happen if other parts of the organization were running deficits. Hence in the past, many departments have had to give up underspends/savings made on their budget when the hospital as a whole has run into financial problems. This provides a weak incentive for making savings.

Sanctions and Incentives

The explicit sanctions and incentives (if any) used to encourage performance improvement and reward good performance (financial and non-financial) and their effectiveness in practice

Description of Proposed New Zealand System:

(Cabinet Committee paper 'Sanctions and Rewards for District Health Boards' 11/9/00)

Formal rewards and sanctions are to enable the Minister of Health "to influence the performance of DHBs to ensure that they deliver on key government expectations arising from the *New Zealand Health Strategy* and the *New Zealand Disability Strategy*.

Also "Formal rewards and sanctions should generally be used in an encouraging rather than punitive fashion and be applied only to DHB management of risks over which DHBs have an ability to respond. Their application should assist the objective of improving health and disability outcomes for a DHB's population."

The proposed rewards include public praise, board re-appointment, greater autonomy and less detailed monitoring, and ability to generate and retain surpluses. The proposed sanctions are the opposite of these, with a worst case option of dismissal of the Board and appointment of a Commissioner.

Legislative sanctions are seen as a last resort. Non-legislative sanctions and incentives eg publicity are the most likely to be used.

Other Country: *Comment to be inserted by overseas consultants*

- Relevant features of your nation's system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are performance comparisons publicised in your system? With what effect?
 - * Has, in your system, increased autonomy been held out as a possible reward for good performance? If so, our comment on how well it works?
 - * It is quite conceivable that an agency will perform well in one role, say long-term improvement of health outcomes, and less well in another, say in its hospital services. How should, or can, sanctions and incentives be applied in this situation?

UK RESPONSE

Incentives:

- As mentioned above, the purpose of the performance fund is to incentivise staff to develop service delivery in ways which will lead to improved performance.
- The intention is to support local initiatives which will contribute to delivery of NHS Plan. Examples include: redesigning care around the patient (eg booking systems and reduced waiting); increasing capacity in priority areas (eg intermediate care); improving environment to retain key staff; improving organization of care.
- Local incentive schemes are to be devised to motivate and reward good performance. The types of rewards which are being discussed at present include financial and non-financial rewards:
 - * Paying for additional equipment/one-off investment in a service
 - * Education and personal development
 - * Non-consolidated cash bonuses for key individuals and teams
 - * Improvements in physical environment eg office space, parking
 - * Setting up fund for training of key staff
 - * Non-recurrent expenditure for providing support services for key staff
- The Fund will release £250 million in 2001/2; rising to £500 million in 2003/4. There is also a social care performance fund which is smaller.

Autonomy:

- I outline in the previous section the system of earned autonomy proposed for the UK
- We do not yet know how it will work. Partly this will depend on the uses to which the performance fund is put ie getting unrestrained access to it is not going to be a strong incentive unless staff feel the uses of the fund are valuable.
- Some of the proposed “advantages” of autonomy do not appear to necessarily be that advantageous eg will being chosen as a pilot site for developments act as an incentive? Some staff who have been “over-piloted” may view this as a distinct disadvantage!

Publication:

- The results of the PAF are made generally available on the internet and in published documents. These are most likely to be accessed by other health care organizations (eg GPs) and by special interest groups.
- We found from previous research that some hospitals will publicise their results more widely if they are favourable eg invite local press to do a review. In some cases, the media pick up on poor results locally and publish articles which “name and shame” the organizations.
- Quite recently, a whole series of league tables was published in the Sunday Times (a major newspaper) as part of a “Good Hospital Guide”.

Issues/Lessons:

- We do not yet know whether the sort of incentives outlined above will actually prove to incentivise staff or not.
- It is clear that all expenditures are to be one-off as recurrent expenditure cannot be guaranteed as the organization’s traffic light status may change. This will limit

the potential uses to which the fund can be put. This is a problem with financial rewards made on an annual basis and should be considered carefully in the NZ system as well.

- It is also not clear how easy it is going to be to link improved performance with the actions of a small number of front-line staff. This may be relatively straightforward in some cases eg if a team designs a new booking system which reduces waiting; but less clear in other cases eg who is responsible for reductions in emergency admissions?
- Publicity alone is unlikely to provide a strong incentive for hospitals to improve. However, it is likely to play some role in encouraging the very worst organizations to try to get out of the glare of publicity by moving up the performance distribution.

Overall Assessment

An overall assessment of the system in relation to its ability to maintain and improve the quality and efficiency of health and social care and meet the aims and objectives of governments and public funding agencies

Other Country: *Comment to be inserted by overseas consultants.*

- Relevant features of your nation's healthcare system (or system at provincial or regional level)
- Any specific lessons for New Zealand? Things to emulate and things to avoid?
 - * Are there, in your opinion, identifiable key elements likely to make a performance assessment and accountability system successful?
 - * Any key factors likely to lead to failure?

UK RESPONSE

The following factors have been highlighted as important elements in a successful PM system in our research into the health care sector and in other public sectors (such as education, social care, police services etc) (Mannion and Goddard 2000a):

Measurement Issues:

- Shift away from narrow focus (normally financial) towards a "balanced scorecard" approach which recognises the multiple aims and outcomes of health care system
- Notwithstanding the above, a more streamlined approach to data collection to avoid organisational paralysis and minimise costs.
- Recognition that organisational performance is influenced by the actions of agencies outside the sector being monitored. Design of interface indicators where responsibility is shared.
- Acceptance of the fact that there are many aspects of performance which cannot be captured by quantitative analysis. This means that most performance indicator systems need to be accompanied by additional approaches such as inspection and review which incorporate softer information.
- A shift towards locally set targets and bespoke measurement systems within a boarder framework of standardised data collection. This should maximise the sue of the data for local purposes whilst still providing national overview.

Issues to do with Purpose:

- Clear analysis of what the purpose of the system is and whose needs are to be met.
- Distinction between the use of this information for internal management control purposes and their use by external stakeholders for purposes of monitoring and accountability.

- Promotion of opportunities for the organizations to use the data themselves in order to identify and spread best practice. Creation of networks, benchmarking clubs, web-based tools etc
- Focus on the role of communities in the process, involving consultation with the public, reflection of their needs and concerns in the chosen indicators, experimentation and piloting.

Analysis:

- Careful consideration of the full range of factors which may influence the indicators measured but which are outside the control of the organization eg socio-economic factors etc.
- Technical progress is being made in this area with econometric techniques such as data envelopment analysis and stochastic frontier analysis being used in health and other sectors for measurement of relative performance. However, we are still some way from being able to measure this in a way which gives us confidence that the variations observed and unexplained by the above factors, actually reflect “real” variations in performance.
- Consideration of changes in performance of organizations over time can avoid some of the above problems arising in cross-sectional analysis. This depends on availability of robust longitudinal data sets (which also requires consistency in the indicators measured over time).

Action:

- Dissemination is important but should be tailored to audiences for whom it is intended. Many of the subtle technical issues about comparison are not easy to explain to a lay audience. The internet is opening up opportunities for dissemination.
- However, the provision and publication of data alone is unlikely to encourage action. Incentives are a major key in achieving this goal. These may be financial or non-financial (the latter include things such as “beacon status” to signify high achievers). The latter may be quite powerful in sectors where staff are not motivated by financial considerations alone.
- There is little experience and evidence in relation to what sort of incentives work in health care. There is a role for experimentation and trial.
- Care needs to be taken to ensure the rewards target those who are responsible for the improved performance. This is likely to work best at the level of team or individual rather than institution. However, linking the performance with individuals is not always straightforward.
- Imaginative options may be required especially where recurrent expenditures are not feasible.

References:

Dawson D, Goddard M and Street A (2001) Improving performance in public hospitals: a role for comparative costs? *Health Policy* (forthcoming).

Goddard M, Smith P (2001) Performance Measurement in the NHS. *Health Policy Matters* (forthcoming).

Jacobs R (2000) Alternative methods to examine hospital efficiency: DEA and Stochastic Frontier Analysis. CHE Discussion paper 177.

Mannion R and Goddard M (2000) The Impact of Performance Measurement in the NHS: Empirical Analysis of the Impact of Public Dissemination of the Scottish Clinical Resource and Audit Group Data. Report to the Department of Health (unpublished).

Mannion R and Goddard M (2000a) The Impact of Performance Measurement in the NHS: A Cross-Sectoral Study. Report to the Department of Health (unpublished).

Goddard M, Mannion R and Smith P (2000b) Enhancing Performance in Health Care: A Theoretical Perspective on Agency and the Role of Information. *Health Economics*, 9, 95-107.

Street A (2000) Confident about efficiency measurement in the NHS? *Health Care UK*, 2000, 47-52.

Goddard M, Mannion R and Smith P (1999) Assessing the performance of NHS hospital Trusts: the role of 'hard' and 'soft' information. *Health Policy*, 48, 119-134.

Street A (1999) Interpreting the NHS cost indices for acute trusts. CHE Discussion Paper 168.

Dawson D and Street A (1998) Reference Costs and the pursuit of Efficiency in the new NHS. CHE Discussion Paper 161.

Smith P C (1995) On the unintended consequences of publishing performance data in the public sector. *International Journal of Public Administration*, 18, 277-310.

Official Documents:

Department of Health (January 2001) Implementing the Performance Improvement Agenda: Policy Position Statement and Consultation Document.

Department of Health (July 2000) The NHS Plan.

Department of Health (July 2000a) Quality and Performance in the NHS: NHS Performance Indicators.

NHS Executive (June 1999a) Quality and Performance in the NHS: High Level Performance Indicators.

NHS Executive (June 1999) Quality and Performance in the NHS: Clinical Indicators.

NHS Executive (January 1998) The New NHS, Modern, Dependable: A National Framework for Assessing Performance: Consultation Document.

Department of Health (1998) Saving Lives: Our Healthier Nation.

Annexe 3. Response from Canadian Consultants

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31 January 2001

Dear Sirs,

Thank you for the opportunity to review the *Proposed Accountability System for the New Zealand District Health Boards* documentation. We have organized our response to the proposed systems into some general comments about the relevance of the Canadian and national experiences with health care accountability initiatives and more specific comments grouped according to the headings used in your questionnaire. We have also submitted one document to avoid any confusion due to three distinct sets of responses.

We will forward a paper copy of this letter under separate cover.

We will submit an invoice under separate cover for a total of 2 days work. However, we realize that you may have additional questions, particularly as they relate to the hospital balanced scorecard initiatives in Ontario and other performance measurement initiatives in Canada. We hope that you will not hesitate to contact us with any questions. It is apparent that much work has gone into the *Proposed Accountability System* and we would very much appreciate the opportunity to learn more about its implementation and development.

Best regards,

Adalsteinn D. Brown

Geoffrey M Anderson

G. Ross Baker

General Comments

Overall assessment

The *Proposed Accountability System* (System) provides a comprehensive framework for promoting accountability across the continuum of care in New Zealand. The system represents a mix of strategies including balanced scorecards, report cards, and oversight mechanisms. The system also encompasses a broad range of providers and relationships between providers, the District Health Boards (DHB), the Ministry of Health (MOH), and other organizations such as PHARMAC.

However, this diversity of methods and relationships makes it difficult to protect against gaming within the system. We have reviewed the literature on accountability and found little consistency in different definitions of accountability. However, a key element of accountability is the notion of relationships, that is, accountability is the process by which one party holds another responsible for meeting its stated objectives, the expenditure of scarce resources, or other tasks. The accountability of providers to both the District Health Boards (DHB) and the Ministry of Health (MOH) may lead to conflicts between those relationships. The system will benefit from clear delineation between the services and populations covered by the DHB and the MOH *and* little opportunity for substitution of services covered by the DHB and the MOH.

Likewise, the notion of relationships is also important from a provider perspective. For example, if both the ambulatory care and the in-hospital care sectors are evaluated for efficiency there will be a tendency to cost-shift between these sectors unless both sectors are evaluated together. Experience from the US suggests that guidelines and other quality improvement tools often fail to extend beyond one sector of care so even without conflicting incentives, it is often possible for the performance of different sectors to be inversely correlated because of the absence of a system perspective. Some of these issues may also be resolved by extending a strategy-drive balanced scorecard perspective to include the entire continuum of care for which DHB are responsible.

We assume that you view the system as part of an ongoing process and are prepared for political and other obstacles. However, there is also the opportunity within the system to create unreasonable expectations. The type of communication required for accountability may be different from that required for quality improvement. If this occurs, reliance on one set of indicators and one reporting format may disappoint both the public and providers. Likewise, the hospital sector indicators tend to be “lead indicators” that will change quickly while many of the DHB indicators are “lag indicators” that will change more slowly. More clear identification and use of lead and lag indicators will demonstrate the usefulness of the system for evaluation and management. Diagnostic indicators (indicators distinct from the reporting system), such as waiting time indicators or selective referral or transfer patterns at hospitals, may also help to identify gaming.

It will also be important to link incentives to performance measures. The experience of the Pacific Business Group on Health in California suggests that it is possible to

shift provider behaviour with even relatively small financial incentives for performance at a benchmark level.

Some quick ideas for early success and management of expectations include the use of benchmarking as a tool to drive performance and publicizing or highlighting successes of agencies. Think about relationships between measures as a way to identify critical success factors. Don't try to measure everything, instead be strategic and link each performance indicator to realizable key strategic goals. Try to maintain a balance between different types of indicators, however, and try not to focus mostly on measures of clinical outcomes.

Be clear about the goals of accountability (i.e., reporting and improvement) and develop a framework before defining specific measures. Second, make public reporting a priority. Nothing focuses the mind of an organization like public reporting. Third, develop a suite of measures that is a mix of measures that are reported to the public and measures that are used directly by providers. Make sure there is a clear link between the two types of measures. The public should understand what the relevant outcomes are and the providers should know what they can do to improve their performance on those indicators.

Finally, although it is important to link quality improvement to accountability, it is also important to identify the several possible uses of health care activity data. Data may be used for management (adequacy and distribution of current resources), evaluation (performance of current resources), and planning (adequacy and distribution of future resources). The Accountability System should not be expected to meet all data needs. However, it will be important to look beyond the data you have to the information you need and be prepared to invest in information systems. It will also be important to spend time developing the partnerships and involvement of the stakeholders that are required for the "cultural shift" necessary for successful behaviour change and performance improvement.

Purpose and Goals

The Canadian System. According to our Constitution, health care falls largely within the provinces' jurisdiction. The Canadian federal government directly provides health care services to only indigenous people and the armed forces. The federal government provides funds to the provincial governments for certain defined services and the provinces themselves can cover other services.

The Canada Health Act defines the types of services that are provided under the nationally funded health insurance program (physician and hospital services for medically necessary care) and the conditions that are required of the provincial plans (public administration, portability across provinces, comprehensiveness, accessibility, and universality). The Canada Health and Social Transfer Act defines the levels and sources of funding transferred to the provinces.

Provinces can set up their own plans around prescription drug coverage, coverage for other practitioners (e.g. chiropractic) and for community and long term care services. Other than public health services the provinces do not directly provide health care

services. Services are provided by hospitals or regional health authorities and by private practitioners.

There are two important levels of accountability – one between the federal and provincial governments and the other between provincial governments and providers. Historically, accountability between the federal and provincial governments was related to the conditions listed in the Canada Health Act, with provinces suffering financial penalties if found to be in violation. More recently the federal and provincial governments have agreed on a process to develop a framework for measuring health care performance and to regular public reporting on these measures. There are still few clear definitions of accountable performance except some that relate to how health services are funded. Thus, outside of the provincial-federal agreement, report cards, balanced scorecards, and other performance measurement instruments have developed at different rates and in different directions across the country. In Saskatchewan, the provincial system focuses on population health indicators while in Ontario there is a public-private collaboration that focuses on balanced scorecard evaluation of hospital performance. We are now encountering the trade-offs and difficulties that are involved in developing and applying accountability frameworks.

Equity is a key underpinning of the Canadian health care system. The national health insurance system provides comprehensive, universal care with no financial barriers, but the system tries to deal with equity in access not directly with equity in health. There has been a great deal of debate over the broader determinants of health in this country and an understanding that health care is not synonymous with health. However, holding entities accountable for health outcome and health equity goals requires also identifying the *key strategies* through which local or national governments hope to achieve those goals and to measure progress on the strategies as well as the larger goals (which will move more slowly.) Holding health agencies accountable for socio-economic inequities makes no sense unless they have powers to influence those inequities. We do not hold health care providers accountable for aspects of equity that are beyond their control, although one can help ensure that provider efforts are focused on those with the greatest need for health care.

The key issue in Canada for many accountability efforts has been putting a “so what?” clause against our indicators, that is, their use for planning, evaluation, management, or public demonstration of accountability. The three functions of planners and providers require different types or adjustments to data, for example, management requires unadjusted or crude data while evaluation generally requires adjusted or standardized data. Data for public accountability, in contrast, is typically less detailed and may not always focus on those areas of practice over which providers and managers have control.

Organizations

In Canada we are trying to move from a vague federal-provincial accountability framework defined by broad conditions in legislation to a public reporting framework that attempts to look “objectively” at performance. Because of the long standing animosity between provincial and federal governments, provinces are not really interested in responding to a federal initiative for reporting, (although interestingly almost every province has its own public reporting initiative) and are trying to limit

the reporting. Providers are only likely to be interested in the accountability framework to the extent that they can use it to improve their own performance or compensation. Virtually all professional organizations remain staunchly opposed to physician profiling and similar initiatives that identify individual doctors.

The independence of the organizations involved in monitoring is essential. Here in Ontario, we have based the performance reporting for hospitals out of the University and now, out of a collaborative that includes the University, a public corporation that manages data, and a research institute. Interestingly, we were unable to involve the Joint Policy and Planning Committee in our collaborative. This committee is jointly supported by the MOH here and the hospital association. It provides a forum for dispute resolution around funding and workload. It was felt by both the government and the MOH that inclusion of the Committee in performance reporting would limit the capacity of the forum to hear disputes and differing interpretations of any financial performance data.

In Ontario, we have been focused on hospitals and rolling out from there, kind of a bottom up approach, instead of starting at a population level. The advantage of our approach is that we have clearly engaged a major part of the delivery system and will now “pick off” other parts. We have also been able to work closely with one sector and this has given us the chance to improve our methods without fighting political battles on too many fronts.

Indicators

A number of different bodies produce information on similar sounding indicators in this province, for example, stroke length of stay. This can lead to problems where slightly different definitions can lead to substantial differences in the ranking of organizational performance, confusion among providers and the public, and frustration among providers and researchers. It is difficult to limit the diversity of indicators but a lot of problems can be eliminated through efforts to describe and make publicly available the methods so that providers have a foundation to help them choose which ones to work from.

There are probably also too many indicators in Ontario. We have one provincial balanced scorecard for hospitals that contains more than 40 indicators spanning clinical outcomes, financial performance, patient satisfaction and learning and growth. We are expanding the process this year to include emergency departments and chronic care hospitals. This means that there will be over 120 distinct indicators floating around the province and for some hospitals that provide all three types of care, the public will face that number alone when considering one institution.

Satisfaction has been one of the most important and most widely understood measures of health system performance. We are expanding this year to include explorations of provider (physician and nurse) satisfaction and to try to measure the relationship between patient satisfaction and patient health outcomes.

Some key criteria for evaluating proposed measures include feasibility (and costs) of specific measures; and finding measures that will show some change in a year. The list of measures should shift slowly, replacing some and adding others. It is also

important to be able to assess key healthcare strategies from the mix of measures. The challenge is to develop a set of measures that are relevant and feasible. The relevance depends on the goals. I would argue that you need a set of measures that are useful to funders and the public, who are mostly focused on outcomes, and that are useful to providers, who are focused more on process. In this context you need to think of the different audiences and to keep in mind that there needs to be a clear link between outcomes and process. An outcome is relevant only if there is some way that a process can be changed in order to improve that outcome. A process is relevant only if it can change outcomes.

Similarly, it is also important to order indicators so that cause and effect relationships are identified, particularly if some indicators are likely to show change before others (lead and lag indicators) and to note correlation between indicators. For example, population health measures like DALYs are difficult to change over a short period of time. Population health oriented measures are problematic unless one can identify key strategies to influence these population health measures and then use completion of these strategies as proxy measures in addition to the underlying population health measures.

The approach to measurement should not be based on the limitations of existing data sources. In the short term you may have to rely on existing data even though those data are flawed. However, from the very beginning there should be a clear commitment to developing and investing in better data.

Qualitative versus quantitative assessment

We had a lot of trouble with the distinction between qualitative and quantitative measures. Most of the qualitative measures were similar to our sets of learning and change indicators. These are lead measures of performance. However, our experience with reporting these measures suggests that soft indicators still need hard definitions although units of measurement may vary by sector of the health care system or by region. Too much reliance on soft data however is problematic and susceptible to gaming.

Selection criteria

It is not apparent that there is a consistent framework to drive the selection process. Such a framework has been very important to our work and a key message from a number of our stakeholders as been to be clear about what phenomenon are to be measured and why. A process that involves a group of stakeholders voting on their favorite measures will almost inevitably produce a set of unrelated and ultimately useless measures. Get people to agree on the principles of the framework and then pick measures that fit the framework. At a theoretical level do not be put off by a lack of existing data. If you do not have the data now, but the measure is important to the framework, do not eliminate the measure. Rather, make development of the data source a priority.

For our processes, feasibility, scientific soundness as adapted to each type of measure and a clear link between process (best practices) and outcomes were important

criteria. Linking measures to goals was also important, but in the absence of good benchmark data it was also important to link measures to ideas about improvement.

Standardization is also an important issue. If health systems provide a defense against poverty then ethnic differences should be brought to the fore to better direct health care resources to where they can make the best difference. If there are specific differences in risk of disease or outcome based on genetic or cultural (non-economic or educational) differences in outcome, then these should be accounted for when evaluating system performance, but not when using data for planning or management as adjustment for these differences will eliminate important differences.

What about linking measures to trials, for example using trials of pilot projects to improve Maori health status as a source of process and outcome measures?

Ex ante and ex post accountability processes

The feedback only helps improvement when there is support for improvement. This probably requires as much planning as the actual evaluation process. Evidence from regions such as New York state suggests that improvements due to publicly available evaluation have been minimal at best and likely result from the exit from practice of a small number of providers. Market and non-market systems, however, respond to evaluations differently. Introducing evaluation data into a non-market system may throw the system further into dis-equilibrium unless there are opportunities for remedial action

The key element that needs to be developed is a process for linking publicly reported measures, which will tend to be outcomes focused, to improvement measures that will be more process focused. Measurement will be most useful if it can be used on a more frequent basis (not just yearly feedback). Not all measures will be suitable for such a process. It is important that measures that are unlikely to respond to improvements in the short term (e.g., life expectancy, socio-economic related disparities in mortality rates) should be recognized as such. These measures should be used to help focus planning efforts with the understanding that change will not be noticed in outcomes for years in the future.

Professional leadership is key and within the Ontario process, work with large panels of clinicians has helped us to maintain good relationships with the professional associations. Clinicians need to be involved but to date there is no process to do this at the national level in Canada and unfortunately, the first set of publicly reported national performance measures are being developed with little or no input from providers.

Consultation processes about plans

Expert consultation works better when structured. We have used a nomination system whereby hospitals nominate practicing clinicians (doctors, nurses, and therapists) and managers to sit on expert panels to define indicators, improvement strategies, and to provide input into general research direction for the Ontario Hospital Reports.

In the ideal world there needs to be thought put into consultation, this has not yet occurred at an organized level in Canada. The audience for the measures involved in an accountability framework could include the public, funders, managers and providers. Each group may want different perspectives on the same times of measures. Focus group work in Canada shows that the public is interested in access to services and in outcomes, they assume that the right processes are in place. Funders may have issues about efficiency, managers about utilization, and providers about outcomes and process. Consultation may provide one opportunity for resolving these differences. We have seen successful integration of the public into District Health Council Boards here in Ontario. However, these appointees represent the public but they do not function as representatives, rather they are appointed and generally serve without pay.

The issue of indigenous peoples is complex. In Canada I would argue that the main cause of the huge disparities between mortality rates for indigenous and non-indigenous peoples is the broader determinants of health not health care. In Canada you need to look at the health of indigenous people through a very different lens than for other people. It may be reasonable to argue that the framework for accountability for indigenous people should be very different than for the rest of the population. That is not to say that other cultural or socio-economic groups are free of problems related to the broader determinants of health, but that these determinants are so much more important in indigenous peoples that they need to be dealt with separately.

At least one of us was concerned that some of the questions around this section suggested worries about micro-management and a true absence of regional autonomy or provider autonomy. These issues will need to be addressed if the provider groups and regional boards sense this concern as well.

Use of legislation and regulations

We have one province that requires hospitals by legislation, to maintain balanced budgets (Quebec), but we have little other use for regulation outside of licensure of physicians and other care-givers. Most accountability policies that receive government support are announced or supported through announcements made in parliament or at ministerial meetings

Legislation and its attendant regulations have to be structured in such a way that they are vague and adaptable, this means that any organization, if it wants, can avoid the true intent of the legislation. What are truly needed in Canada is a framework and a process for developing that framework that changes the culture of accountability. It has to provide benefits to all those involved. Accountability cannot be imposed it must develop out of mutually shared goals. Likewise, the regulatory or legislative environment for accountability should be include enough incentives and leeway to encourage innovation.

Information management systems

In Canada due to the nature of the system (i.e., public payment and private delivery) there are reasonably good data on health care transactions (hospital admissions, doctor visits, prescriptions dispensed). However, it is important to make the distinction

between data and information. Information that is relevant to accountability and improvement is distinct from data that are collected for monitoring reimbursement. Canada has invested funds in repeated national health surveys and some provinces have data that can provide reasonable information on health at the level of public health units (about 100,000 people). There is no organized national effort to collect primary data on the quality of care.

It is clear that any successful accountability and improvement initiative will require the design, development and testing of information systems. The good news is that health care is data rich (medical records contain a great deal of useful data) the bad news is that there is currently little investment in turning that data into relevant and timely information for accountability or improvement. Any effort to improve information systems must recognize that the central role for medical records is to help in the provision of direct care.

It may also be useful to examine the perspective of information use in the financial industry. The financial services industry was able to make great leaps in its ability to make decisions based on routinely collected and reported data because of the adoption of a single-system, open-platform approach to information systems. In Ontario we have moved somewhat towards such an approach. The Hospital Report covers all hospitals and because we publicly disclose all methods, it is becoming something of the system. It will be important to open up the black box on any methodological issues so that people may use and adapt the methods used in a performance measurement system.

Operating costs

Estimating the marginal (add on) costs of an accountability system will be difficult. First, neither accountability nor improvement are new or add on roles for government. They should have been part of existing structures and organizations. Second, data can be used for multiple information purposes. Data for performance indicators should be part of managing and providing care. Third, costs should be placed within a health policy framework that considers both costs and benefits. A good body of work suggests that good quality of care is cheaper because it reduces the risk of complications and other costly adverse events such as readmissions. It will also be important to measure the direct and indirect costs to providers if they have to spend more time with information generation or analysis.

For Ontario Hospital Reports, our budget this year is \$2.5 million and the costs to complete the current development cycle. Coverage of the entire system will require at least as much again.

Multiple uses of information

You seem to be on the right track conceptually in New Zealand – data should serve multiple purposes. We have yet to be that explicit in Canada. We are about to make a huge investment in what is called a health information highway but we have not really thought through what the traffic on that highway should be and where the highway is going. Strategic investment in information systems could help patients, providers,

managers and funders. You need the physical support (information systems) for the accountability framework.

Underlying Performance Management Model

There will always be a need for a well defined administrative system to deal with the clearly incompetent or dangerous practitioner. The notion of an overall CQI approach with everybody moving towards better care is appealing. However, it is clear from work in many jurisdictions that there are not just two categories of doctors – bad apples and good apples – but that there is a range. There is a substantial proportion of providers that have a great deal of room to improve. Accountability and improvement are concepts that can bring quality of care to the forefront and that will help focus our efforts. Though we do not want to limit ourselves to bad apples it is also important to focus improvement efforts on those that need the most help.

We have not used an explicit model across all quadrants of the Ontario Hospital Reports for performance improvement, except for the clinical outcomes indicators where indicator definition is based on a relationship to best practices. Because of problems with evidence, we have defined best practices through reference to the literature, to data mining, and through specially convened expert panels using a modified Delphi technique.

Behavioural Responses

Alignment of incentives

Diagnostic indicators

Balanced approach

Use of providers and data managers from the start

Focus on success stories in care as well as success stories in data generation (something we are just starting to do, much to our chagrin)

Any system can be subverted. The key challenge is to start a cultural change within the system so that the new paradigm of accountability and improvement is not seen as a threat but rather is seen as useful tool by all the stakeholders. There will be tensions. Every effort must be made to resolve those tensions. There is a need to identify “champions” for the initiative in all sectors. It is possible to reduce gaming by trying to make the indicator set as useful as possible locally and to maximize the consequences of good citizenship (recognition for high scores) while continuing background validity checks and audits (gaming behaviors will become evident in patterns of performance). At the same time, changing, refining, and shifting measures on a multi-year basis can help balance continuity and the need to reduce manipulation.

On a larger scale, we have started to speak with the professional associations to see if they can encourage their members to record better data. Within Ontario, this has meant a large amount of political as well as academic work. Although it is rewarding and important to communicate our mission and vision to stakeholders across the province, it is also important to budget for this type of work as it is very time consuming.

Completeness

Although there need to be a regular and well defined planning cycle, this initiative is not going to work from the top down – it needs to be embraced by all the relevant stakeholders. We have just started the process in Canada and do not have much by way of successes to share with you. In the best of worlds there will be agreement between all the relevant players, I am sure there will be many setback and delays as we try to get there.

Behavior decision-making theory would suggest that trying to measure everything is defeating, since there will be no way to maximize all outcomes. Instead pick key goals and strategies and measure on them, with higher population and delivery statistics as background.

Performance management techniques

In Canada providers (i.e, hospitals and doctors) are relatively autonomous. Most behaviour change strategies have focused on voluntary things such as CME or accreditation. These have not been entirely successful – like any other country we have cost and quality of care problems. We may eventually shift to financial incentives or administrative tools. Ultimately it is my belief that providers want to provide high quality care and that what the system needs to do is to provide them with the organizational and information environment to do that.

None of the listed strategies is really used to regulate accountability measures (except accreditation, but that has been largely non-numerical). It may be better to reduce the scope of the measures and associated performance measurement techniques in the system. Instead, start small, create a limited set of core measures that can be influenced by local actions in a reasonable time period, and add in other measures based on feedback and experience. Too much design will result in a complex and unworkable system.

Sanctions and incentives

The federal government and the provinces have agreed to a national public reporting system that will produce its first public report in the fall of 2002. Several provincial governments are involved in public reporting exercises of their own. In Ontario we have tried to link the public hospital report card to more detailed data that is presented to each hospital (called a private report) and to a series of educational efforts that are designed to help hospitals to understand and respond to report cards. This has involved a set of partnerships between researchers, CME and CQI experts and the hospital association.

We have not yet worked out a strategy for rewarding or sanctioning providers on the basis of their performance. There has been little or no evaluation of the impact of public reporting. What seems to be clear is that the development of a useful public reporting system requires input from methodologists, managers and providers and that it should involve partnerships between those who measure and those who can help with improvement efforts.

The key for us has been to get people to buy into the system as a useful set of tools, not a stick to beat others with. Think about performance measurement as a way to disseminate strategy and to monitor performance. Kaplan and Norton's new book on the Strategy-Focused Organization is good on these topics, but they recommend focussing on the benefits of better measurement and reward good performance not sanction bad performance.

Annexe 4. Description of US HEDIS Framework

HEDIS: A Brief Outline

Introduction

This paper provides information on the HEDIS (Health Plan Employer Data and Information Set) performance measurement measures used to compare the performance of managed health care plans in the United States.

1. Purpose and goals

HEDIS is a set of standardised performance measures ‘designed to ensure that purchasers and consumers have the information they need to reliably compare the performance of managed health care plans’ (NCQA 1998). It was developed during the 1990s by the National Committee for Quality Assurance, now a not-for-profit organisation, independent of government and private agencies.

HEDIS is clearly a product of the health care system in which it has developed. The United States health care system differs substantially from that in New Zealand. Its features include:

- individuals mostly have responsibility for organising their own health care funding, with many employers arranging health care coverage for their employees
- key government programmes include the federally-funded Medicare (for those over 65 years of age, those with permanent disabilities, those with kidney failure); joint federal and state funded Medicaid (for those on low incomes), as well as a number of other programmes run by the federal and state governments
- competition between health care plans is a key feature of the system, even within the government programmes. Thus employers and consumers in government programmes often have a choice of plans from which to obtain coverage (called a ‘carrier’ or ‘intermediary’). Plans can be indemnity insurance plans or managed health care plans.

HEDIS currently measures quality of care in managed care plans, managed behavioural health care plans, and now, preferred provider organisations.

Thus, HEDIS has an important role to play in providing information to employers and consumers who are able to use that information to decide whether to remain with their current health plan or to move to another plan. The NCQA (though not-for-profit) operates commercially, and hence must recover its costs from HEDIS. Health plans choose whether to work with the NCQA to have quality of care measurement data collected, and whether to have the results published (NCQA 2000).

HEDIS is not the only quality measurement tool in use in the USA; and the NCQA is not the only quality commission which works with plans to monitor and enhance quality of care. As with the United States system more generally, there is competition between organisations to measure quality of care.

HEDIS measures are used by the NCQA to accredit health care plans; but other tools are also used in the accreditation process. Accreditation also acts as a signal to purchasers and consumers, providing them with information that plans do engage in certain quality control and improvement measures. It is then up to purchasers and consumers to decide whether to sign up with accredited or non-accredited plans.

2. Organisations

HEDIS is overseen by the National Committee for Quality Assurance (NCQA), which is a not-for-profit organisation, whose aims are to evaluate and publicly report on the quality of managed health care plans.

HEDIS is managed by a committee which has members reflecting ‘the diversity of constituencies that performance measurement must serve: purchasers, both private and public...; consumers; organized labor; medical providers; public health officials and health plans’ (NCQA 1998). It has established a number of sub-committees to work on measures for specific populations (eg, Medicare and Medicaid populations), made a public call for measures, and has undertaken focus groups to get consumer comment on possible HEDIS measures. Significant technical support has been used to develop and improve measures over time. Since the mid-1990s, the NCQA has brought together, into one set, measures developed for commercial enrollees with the Medicaid HEDIS and expanded it to include the Medicare risk population (ie those Medicare beneficiaries able to choose a managed care plan as their carrier).

NCQA appears to have begun by measuring performance in Health Maintenance Organisations, pre-paid health care plans in the United States. It has now moved onto measuring performance in managed behavioural health care plans and preferred provider organisations.

3. Indicators

The OECD review by Hurst and Jee-Hughes lists the HEDIS measures. The list is given at the end of this Annexe.

The NCQA notes that performance measurement is becoming increasingly sophisticated, including for example some medical record review and analysis. Thus the NCQA is also using a measure rotation strategy to allow plans to focus on new measures and allow time over which improvement on more established measures can occur (NCQA 2000).

The categories on which health care plans are measured are:

- effectiveness of care
- access/availability of care
- satisfaction with the experience of care
- health plan stability
- use of services
- cost of care
- informed health care choices
- health plan descriptive information.

Many of the health care measures focus on health care outputs as opposed to health outcomes. The most likely reason for this is that HEDIS focuses on measuring those things which health care plans can control; broader health outcomes may well be the product of a much wider set of policies and interventions than just health care.

4. Qualitative vs quantitative assessment

In undertaking accreditation, the NCQA also appears to have used qualitative information in its review processes. Little information is available on this qualitative approach, however.

5. Selection criteria

The criteria which guide HEDIS measures are:

- relevance – to purchasers and consumers; by addressing issues known to significantly affect health outcomes, which are controllable or significantly influenced by the health plan; and where there was evidence that purchasers or consumers would use such information in selecting a health plan
- scientific soundness – reproducible (producing the same results when repeated with the same population and setting); valid (make sense logically and relate to other measures looking at the same aspect of care); and accurate (measure what is actually happening). They also had to have sufficient statistical power to detect differences of the magnitude expected between health plans and had to have a strategy to adjust results for other factors (eg characteristics of the population)
- feasibility – starting with measures that were easy to produce, including precisely defined so that data were collected in the same way; possible to be produced at reasonable cost; and which did not threaten confidentiality of any patient information. Improvement in information systems was a key goal of HEDIS (NCQA 1998).

Significant development of HEDIS appears to have occurred during the 1990s, when a single set of measures has been developed covering both private and public information needs. The NCQA has also gradually developed the set by for example using Testing Sets to test feasibility.

Consultation on the suitability of measures also appears to be a key part of the quality measurement process.

6. Ex ante and ex post accountability processes

The main purpose of HEDIS is to provide information to purchasers and consumers on health plan performance. Purchasers and consumers then make their own choices with respect to health plan. Both are represented in decision making on HEDIS indicators for the future.

7. Consultation processes about plans

See under 2.

8. Use of legislation and regulations

Information on this is partially available from the Health Care Financing Administration (HCFA) which manages federal requirements for Medicare and Medicaid plans.

HCFA now requires that risk or cost managed care plans report to the HCFA on a number of HEDIS measures, and participate in the Consumer Assessment of Health Plan Study (CAHPS) survey.

In all likelihood, individual states may also require HEDIS information to be provided as part of choosing which range of plans to offer to consumers in each state (ie consumers may have the ability to choose from only a selected list of plans). Similarly, some states now state legislature mandates to report on hospital quality of care.

9. Information management systems

Early problems with HEDIS included problems with different definitions and data collection methods. An early United States General Accounting Office (GAO) report suggested the following potential problems:

- administrative data bases in HMOs may not have been complete because plans were pre-paid and did not always accurately record encounter data; also administrative data bases did not always use clear clinical definitions and codes
- collecting data from medical records is expensive (estimated at \$US 16 per record in 1994) and such records may not always be complete
- it was not always clear that the measures included did indeed measure quality (eg, number of board certified physicians on staff)
- adjustments made to health care outcomes may not adequately take into account factors outside a health care plan's control
- standardised methods for calculating results are crucial
- report card results need to be verified by an independent party (GAO 1994).

There can also be prolonged delays in the data being released; problems with the small number of cases and resultant statistical limitations, especially once particular diagnoses are considered individually; and on-going concerns about the costs associated with initiatives (Iezzoni & Greenberg, 1994).

With HEDIS, considerable effort has been expended in ensuring that standardised measures are used in order to compare performance. Five volumes of material are now produced by NCQA to support health plans who wish to have their performance measured. This includes a technical specification manual; a manual setting out requirements for survey measures; and a manual to assist in improving information systems. In addition, there is a HEDIS compliance audit, aimed at validating the data collected and reported by plans.

A 1998 GAO report notes that purchasers continue to have mixed views on the use of HEDIS, and are reluctant to release information to their employees. This seems to relate to the use of self-reported data (a problem which may have been mitigated by audits), and that 'many health plans are struggling to provide data on all of the measures and some fail to produce any data' (GAO 1998). This seems to suggest concern that plans with good quality care unable to produce data may be penalised if purchasers and consumers choose a different plan because no data has been produced.

10. Operating costs

No information available.

11. Multiple uses of information

HEDIS measures are now used as part of a process of accreditation of health plans by NCQA. Accreditation is used as a signalling device for purchasers and consumers and possibly also by state governments.

12. Underlying performance management model

The system is designed to provide information to purchasers and consumers who then are able to choose which plan to offer to employees or members or to choose which plan to join. Good quality plans should be rewarded by more enrolments.

The system also provides information to purchasers (especially employers) who are able to work with plans to improve performance.

Public reporting of quality measurements is seen as a key part of its success in improving quality of care. NCQA argues that there have been quite significant improvements in quality of care as measured by HEDIS since reporting on particular quality of care measures. Moreover the NCQA argues that accredited plans provide better care than non-accredited plans; that plans reporting HEDIS information publicly have better quality of care on some measures; that health plans who have historically performed poorly are among those plans with the best improvements; and that health care plans scoring in the top 25% of organisations on a range of measures are those more likely to have higher consumer satisfaction levels (NCQA 2000).

This view is backed up by research in a small number of purchasing co-operatives, who have used public reporting on quality of care to identify problems in quality of care and to work with plans to improve performance. In some case, this has translated into more enrolments for higher quality plans (GAO 1998)

13. Behavioural responses

As HEDIS is a voluntary system, health plans fearful of poor performance may not choose to participate. On the other hand, there are incentives to being included if purchasers and consumers choose not even to consider enrolling with plans whose performance is not measured by HEDIS.

Plans whose performance is measured by HEDIS may also choose not to report on new measures until they are sure of performing reasonably well.

(Also, see 12 above).

14. Completeness

The lack of strategic direction overall for the United States health care system means that strategic priorities for health care do not exist at the system level. Individual plans, purchasers and consumers may however have priorities for improving measurement based on key gaps in information on health plan performance. For example, NCQA has recently completed the Managed Care Behavioural Plan measurement system.

15. Performance management techniques

See 12.

16. Sanctions and incentives

See 12.

17. Overall assessment

Unlike the other systems considered in the Review, the HEDIS system does not focus on particular indicators as key indicators; this is left up to individual purchasers and consumers to do.

The importance of standardised measures is a recurring theme in HEDIS documents. Auditing of measures is also considered important in ensuring accuracy.

Involvement of key stakeholder groups is a feature of the process; as is the fact that the NCQA is an independent agency.

As the main aim of HEDIS is to provide information for purchasers and consumers, considerable attention is paid to dissemination. This now includes an annual “State of Managed Care Quality Report” (NCQA 2000), and an interactive web site where purchasers and consumers can view the performance of their current health plan as

well as other health plans which operate in their region. This includes a rating system on performance on access and service; qualified providers; staying healthy; getting better; living with illness; and accreditation outcome.

18. Comments/lessons for New Zealand

- A tool such as HEDIS is of greater use in health care delivery systems which are integrated, as they collect information across a range of services. As DHBs have responsibility for managing the health care of a population, a tool such as HEDIS is more viable than in a system with fragmented responsibilities.
- A strong framework for organising indicators would appear to be useful in getting a complete picture of performance. A longer term approach to building up a set of key indicators also appears useful.
- Participation by key players (including consumers) is a key feature of HEDIS. Having an independent agency involved in managing review may also have benefits in terms of not being seen to favour any one particular perspective.
- The environment in which performance measurement of health plans takes place in the United States is very different from that of New Zealand. Accountability is based on a market-based system; performance measurement provides to inform purchasers' and consumers' choices over health care plans. Plans have incentives to participate and to improve quality, or they risk losing enrolments. Purchasers do appear to use information to work with plans to improve performance.
- Publication of results is seen as important part of the accountability process. NCQA argues that interest in participation has increased with publication of results.
- Considerable technical challenges have been involved in developing a robust set of indicators across a number of domains of interest. Clear specifications and auditing are important features of the HEDIS processes.

References

General Accounting Office (1994). Report cards are useful but significant issues need to be addressed. Washington D.C., General Accounting Office.

General Accounting Office (1998). Health care quality: Implications of Purchasers' experiences for HCFA. Washington, D.C., General Accounting Office.

Iezzoni, L. and L. Greenberg (1994). Risk adjustment and current health policy debates. Risk adjustment for measuring health care outcomes. L. Iezzoni. Michigan, Health Administration Press: 347-408.

National Committee for Quality Assurance (1998). HEDIS 3.0 Executive Summary.

National Committee for Quality Assurance (2000). NCQA's State of Managed Care Quality Report. Washington, D.C., National Committee for Quality Assurance.

United States' National Committee Quality Assurance's HEDIS measures

(Sourced from OECD review by Hurst and Jee-Hughes, 2001. Annex 9)

Effectiveness of Care

- Advising smokers to quit (in Member Satisfaction Survey)
- Beta blocker treatment after a heart attack
- The health of seniors
- Eye exams for people with diabetes
- Flu shots for older adults
- Cervical cancer screening
- Breast cancer screening
- Childhood immunisation status
- Adolescent immunisation status
- Treating children's ear infections
- Prenatal care in the first trimester
- Low birth-weight babies
- Check-ups after delivery
- Follow up after hospitalisation for mental illness

Access/Availability of Care

- Availability of primary care providers
- Children's access to primary care providers
- *Availability of mental health/chemical dependency providers (phased in)*
- Annual dental visit
- Availability of dentists
- Adults' access to preventive/ambulatory health services
- *Initiation of prenatal care (phased in)*
- *Availability of obstetrical/prenatal care providers (phased in)*
- Low birth-weight deliveries at facilities for high-risk deliveries and neonates
- Availability of language interpretation services

Satisfaction with the Experience of Care

- The Member Satisfaction Survey (numerous measures)
- Survey descriptive information

Health Plan Stability

- Disenrollment
- Provider turnover
- Narrative information on rate trends, financial stability and insolvency protection
- Indicators of financial stability
- Years in business/total membership

Use of Services

- Well-child visits in the first 15 months of life (phased in)
- Well-child visits in the third, fourth, fifth and sixth year of life (phased in)
- Adolescent well-care visit (phased in)
- Frequency of selected procedures
- Inpatient utilisation -- non-acute care
- Inpatient utilisation -- general hospital/acute care
- Ambulatory care
- Caesarean section and vaginal birth after caesarean rate (VBAC - rate)
- Discharge and average length of stay for females in maternity care
- Births and average length of stay, newborns
- Frequency of ongoing prenatal care
- Mental health utilisation -- percentage of members receiving inpatient day/night and ambulatory services
- Readmissions for specified mental health disorders
- Chemical dependency utilisation -- inpatient discharges and average length of stay
- Chemical dependency utilisation -- percentage of members receiving inpatient, day/night care and ambulatory services
- Mental health utilisation - inpatient discharges and average length of stay
- Readmission for chemical dependency
- Outpatient drug utilisation

Cost of Care

- High-occurrence/high-cost DRGs
- Rate trends

Informed Health Care Choices

- Language translation services
- New member orientation/education

Health Plan Descriptive Information

- Board certification/residency completion
- Provider compensation
- Physicians under capitation
- Recredentialing
- Paediatric mental health network
- Chemical dependency services
- Arrangements with public health, educational and social service organisations
- Weeks of pregnancy at time of enrolment
- Family planning services
- Preventive care and health promotion
- Quality assessment and improvement
- Case management
- Utilisation management

- Risk management
- Diversity of Medicaid membership
- Unduplicated Count of Medicaid members
- Enrolment by payer (member years/months)
- Total Enrolment

Annexe 5. Saskatchewan Framework for Health Service and Outcome Indicators

Bridget Allan

This annexe, drawing on publicly-available material, is given to illustrate the approach used in another Canadian province, Saskatchewan, for the provincial health system as a whole.

Purpose and Goals

The framework and indicators have been developed to support the Saskatchewan district health boards in their tasks, in particular:

- Reporting on the health status of their resident populations
- Reporting on the effectiveness of their programs and services
- Supporting needs assessment and strategic [planning
- Guiding resource allocation, programme development and program management
- Facilitating evidence-based planning and decision making.

The framework builds on significant earlier work on the dimensions of quality within a client-centred health system. The components of the framework are:

- Steps to Good Care, covering both inputs to care and processes of care
- Satisfaction, covering the empowerment of people, the use of information to lead healthier lives, as well as accessibility and convenience. It includes the views of current users, current non-users and health professionals.
- Results, examining both outputs (e.g. the effects of the health system in detecting disease, and the effectiveness of medical treatment regimes and preventive actions) and outcomes (e.g. the impact on population health, health risk, client quality-of-life).

The Saskatchewan framework recognises that health services are only one element that contribute to the health, well-being and quality of life for people and communities. It categorises the type of influence or control that the health system can exercise as threefold:

- ACTION where the health system has sole responsibility
- ACTION/VOICE where the health system share responsibility with others in the community
- VOICE where responsibility rests exclusively with others in the community.

The framework relies on a circular process, where the assessment of client needs has the opportunity to influence programs and services, which in turn impacts on population outcomes and satisfaction with the system, which ultimately serves as a vehicle for refinement and further change.

Organisations

The Saskatchewan provincial health system is led by the Saskatchewan Department of Health which establishes policy direction, establishes the management and regulatory framework, sets and monitors standards, provides funding, provides some province-

wide programs and services, and supports the 32 health districts and one northern health authority. It ensures that the accountability requirements as set out in the Accountability Framework Document and in the service agreements between the Minister of Health and the District Health Boards are carried out. It facilitates intersectoral links and planning.

The health districts and health authority were largely established in 1992 and 1993 (with a few being added later). They are accountable for the overall health of their district's residents. They have authority and responsibility for:

- assessing the health needs of their residents
- planning, managing, delivering and integrating the provision of health services (hospitals, health centres, emergency services, supportive care, long-term care, day programs, respite, palliative care, programs for people with multiple disabilities, home care, public health services, dental health, mental health, rehabilitation)
- Promoting health and wellness.

The district health boards (DHBs) are able to make agreements with other district health boards to provide services on a regional basis. They are also able to enter into agreement with Indian bands, the Metis Nation of Saskatchewan and others for the provision of health services.

Indicators

The Saskatchewan framework is developing a concise network of health indicators to track health system impacts, identify opportunities for improvement and demonstrate effective performance. The indicators:

- Provide baseline data on which to establish planning priorities and operational targets;
- Assess progress towards the achievement of goals and targets;
- Flag areas requiring attention;
- Focus on quality improvement activities;
- Monitor effects of implementing changes.

The client/patient focus is carried through for four population groups:

- Mothers and Infants (focusing on children under one year)
- Children and Youth (1 to 19 years)
- Adults (20 to 64 years)
- Seniors (65 years and older).

Consideration is also being given to the development of a set of indicators for global (overall) health of a community, including health determinant indicators, and process measures for how communities structure and organise themselves to become and stay healthy.

For each population group, there are optional indicators that may assist in assessing delivery and utilization of services, and health status.

Work to date has focused on the Steps to Good Care and Results dimensions of the framework. The need for standardized tools and techniques for the evaluation of the Satisfaction dimension is recognised.

Qualitative and quantitative assessment

The set of indicators consists of quantitative measures.

Selection criteria

The core indicators:

- should be regarded as the minimum set of information required by the DHBs for their activities, and for inter-district and intra-district comparisons
- should not be prescriptions for programme delivery
- should be subjected to in-depth analysis, disaggregating data for sub-groups within the population
- should change over time in response to major issues facing a population group.

Key criteria for indicator selection were:

- Usefulness
 - Does it represent an important contribution to the health of the population group?
 - Does it represent an important health issue or problem (number of people affected, impact on future health status, severity of impact)?
 - Can something be done to improve care or outcome?
 - Is there an existing or potential impact on DHB resources?
- Feasibility
 - Are data availability? If not, what is feasibility and cost of collecting?
 - Are data of acceptable quality and quantity?
- Validity and reliability
 - Can data be used at different levels of aggregation?
 - Does the indicator measure what it purports to measure?
 - Is there potential for error?
 - Is it reliable?
- Overall
 - Does the set of indicators span the continuum of care, representing the full spectrum of health services?

Several of the indicators identified as meeting the criteria above were not available at the outset, and development work has been required.

Consultation

The earlier processes aimed at defining quality were highly consultative, including representatives from health care provider and health stakeholder groups. This style was continued in the indicator project, with a widely-based working group and consultation with health districts, affiliates and chiefs of staff.

Information management systems

It was recognised that the DHBs would require support to implement the health indicator system (especially where provincial systems are involved in data collection for physician billing and hospital discharges). Further support was required to transfer skills in collecting, analysing and interpreting the health indicator results.

Several of the indicators rely on the Saskatchewan Population Health and Dynamics Survey, which explores issues of disease and injury, risk factors and conditions and other factors that influence health. The 2000 survey interviewed 7,000 residents.