



AUSTRALIAN PRIMARY HEALTH CARE RESEARCH INSTITUTE

ADVICE ON A NATIONAL QUALITY AND PERFORMANCE SYSTEM FOR DIVISIONS

CONSULTANCY REPORT

BEVERLY SIBTHORPE
NICHOLAS GLASGOW
ROBERT WELLS

SEPTEMBER 2004

Introduction and Overview	3
Part 1 – Background	4
1.1 Introduction	4
1.2 Setting the Scene – New Zealand and the United Kingdom	4
1.3 Setting the Scene – Australia	5
1.4 Health System Performance Assessment in Broader Context	6
1.5 Performance Assessment in Primary Health Care	8
1.5.1 What is primary health care?	9
1.5.2 What can primary health care be held accountable for?	9
1.5.3 What makes a good indicator?	11
1.5.4 Indicators for Assessing Performance in Primary Health Care	
-International	11
1.5.5 Indicators for Assessing Performance in Primary Health Care – Australia	16
1.5.6 Issue of the Denominator	18
1.5.7 Potential Hazards in Primary Health Care Performance Assessment	18
Part 2 – National Quality and Performance System for Divisions	20
2.1 Introduction	20
2.2 Principles	20
2.3 Reporting Context	21
2.4 Creating the System	21
2.4.1 Accreditation	21
2.4.2 National Priority Domains	21
2.4.2.1 Conceptual Framework	22
2.4.2.2 Application of the Conceptual Framework	24
2.4.2.3 Focal Areas and Objectives for each Domain	26
2.4.2.4 Selecting Indicators	27
2.4.2.5 Targets and Points	28
2.4.2.6 Specific Populations and Equity	28
2.4.2.7 Exception Reporting	28
2.4.2.8 Mapping to the National Health Performance Framework	29
2.5 Data Collection, Data Quality Assurance, Analysis and Reporting	29
2.6 Incentives for Divisions and Member Practices to Participate in the NQPS	29
References	33
List of Tables and Figures	
Table 1 – What makes a good performance indicator?	11
Table 2 – Indicators for general practice reporting to Primary Care Trusts in the NHS under the new General Medical Services contracts	12
Table 3 – Diabetes mellitus indicators for general practice reporting to Primary Care Trusts in the NHS under the new General Medical Services contracts	13
Table 4 – Mental health indicators for general practice reporting to Primary Care Trusts in the NHS under the new General Medical Services contracts	14
Table 5 – Hypothetical objective and performance indicators for diabetes	25
Figure 1 – National Quality and Performance System for Divisions	23

Executive Summary

The report provides background information (Part 1) and technical advice (Part 2) for one component of a National Quality and Performance System (NQPS) for Divisions.

The establishment of the NQPS takes place within a context of rapidly increasing international and national interest in assessing performance in health systems broadly and in primary health care. The purpose of Divisions is to support general practice to provide high quality primary health care services to patients, families and communities. There has been a great deal of theoretical and technical development in recent years, leading to a better understanding of what constitutes primary health care and what primary health can be held accountable for.

An extensive array of indicators are in use or proposed, both in our comparator countries and in Australia, that are designed for or relevant to assessing performance in primary health care. They pertain both to service providers and to organisations that occupy niches in the health care system similar to that of Divisions – ie one step removed from direct patient care. However, a key challenge for the NQPS will be the issue of a denominator for quantitative indicators relating to patients, since we do not have patient enrollment or registration in Australian general practice. There will be different solutions to the denominator issue depending on the focal areas/indicators selected.

It is envisaged that the NQPS will have two core components:

- accreditation of divisions; and
- performance indicators relating to the national priority domains for Divisions identified in the Government Response to the Divisions Review.

They would be complementary and governed by an overarching principle of continuous improvement, but managed separately. Accreditation would be through approved providers and apply recognised standards for organisational management.

A conceptual framework to underpin the national priority domain component is proposed and its practical application described. It specifies the development of broad objectives relating to the focal areas within each domain, and associated indicators at four Levels relating to: Divisions Organisational Structures and Processes; Organisational Structures and Processes for member practices; processes of care for patients, families and communities; and intermediate health outcomes. Divisions would be able to report at different Levels along this continuum depending on their capability and capacity.

Introduction and Overview

Following the review of Divisions of General Practice (Commonwealth of Australia 2003) the Government released its response: *Divisions of General Practice: Future Directions* ((Commonwealth of Australia 2003). This report identified seven priority domains through which Divisions could play a vital role in strengthening the primary health care system. It also outlined the elements of a new quality and performance system that would underpin the future development of Divisions and result in improved governance and accountability. These elements have been drawn together by the Department of Health and Ageing into a proposed coherent National Quality and Performance System (NQPS) for Divisions.

Our team from the Australian Primary Health Care Research Institute at The Australian National University was contracted by the Department to provide initial technical advice for the proposed NQPS. That is the subject of this report, which is in two parts.

Part 1 covers the background information. It sets the scene nationally and internationally, and examines health system performance assessment broadly and in relation to primary health care. It includes a review of the kinds of indicators being adopted at home and abroad.

Part 2 offers some technical advice for the establishment of the NQPS. It identifies two core components for the proposed system – accreditation and monitoring of performance in relation to the national priority domains for Divisions – then focuses on the priority domains component. For this it proposes a conceptual framework and a process for establishing objectives and indicators to populate the framework.

Part 1 – Background

1.1 Introduction

In this part of the report we set the scene in our comparator countries abroad and in Australia around performance assessment generally, performance assessment in primary health care and the kinds of indicators in the latter that are being used or are proposed. In our comparator countries – New Zealand, the United Kingdom, the United States of America and Canada – we focus more on the first two because they are both establishing system-wide monitoring in primary health care. However, the USA also has primary care-relevant indicators for Health Maintenance Organisations while Canada has a small number of relevant indicators in their set for monitoring health system performance overall. Both also have relevant indicators for their indigenous populations.

We begin by setting the scene in New Zealand, the UK and Australia in terms of system components relevant to performance assessment in primary health care. We then go on to look at health system performance assessment in broader context, what constitutes primary health care, performance assessment in primary health care and what makes a good primary health care indicator. This is followed by a review of relevant indicators in use or proposed. Finally we explore some of the hazards of performance assessment in primary health care that will need to be kept in mind when the NQPS is being designed and implemented.

1.2 Setting the Scene – New Zealand and the United Kingdom

Both New Zealand and the United Kingdom are currently embarked on major programs of reform to their health care systems in which greater emphasis than ever before is being placed on primary health care. In both countries, the purpose and direction of reform is clearly articulated in health strategies. The UK health strategy (The NHS Plan – Web Link # 1) is for the system as a whole, while New Zealand has a separate Primary Health Care Strategy in addition to its National Health Strategy (Web Link # 2). The UK has four political jurisdictions in the NHS while New Zealand has only one, but both have a single payor and both have devolved financial responsibility for all health services to local areas – to Primary Care Trusts in the UK and to District Health Boards in New Zealand. These entities provide or purchase services, including general practice services, for geographically defined populations. In the UK, general medical services will henceforth be purchased from general practices, not individual GPs (as was the case in the past), who have enrolled populations. In New Zealand, general medical and other primary health care services will increasingly be purchased from and by Primary Health Organisations (PHOs) which are coalitions of general practices and other primary health care providers currently being established throughout the country. Independent Practitioner Associations (IPAs) - New Zealand's version of Divisions of General Practice – are becoming

members of PHOs. Like UK general practices, PHOs will have enrolled populations. Enrolment allows primary care providers to know their local populations and provides a denominator for quantitative analysis of client data. Both countries will soon have a single, individual, system-wide health care number for consumers.

In addition to these structural changes, both countries are establishing comprehensive performance frameworks that are linked to funding and have substantial and increasing emphasis on patients. In both countries, the frameworks include clearly defined objectives. In the UK, a star rating system has been established for Primary Care Trusts. Ratings are determined on the basis of achievement against a set of nationally prescribed indicators and are publicly reported. General practices have entered into new General Medical Services (nGMS) contracts with their local Primary Care Trusts. In order to access the substantial quality funds available, they must set targets for and report on their achievement against 146 organisational and clinical indicators, for which they are awarded points (Web Link # 3). A similar target and points system is being implemented for PHOs in New Zealand, though the initial indicator set is more modest in scope.

Cornerstones of the performance systems in both countries are:

- clear priorities and objectives;
- standard indicators;
- substantial new, additional expenditure on primary health care, some of which is tied to performance;
- financial and other support to achieve best practice;
- substantial investment in IT; and
- public accountability.

In both countries, general practices and thus government and the public already operate in much richer information environments than currently exist in general practice and primary health care in Australia.

1.3 Setting the Scene – Australia

Currently Australia has neither a national health strategy nor a national primary health care strategy. It has multiple political jurisdictions and two primary payors - general practice and referred services are funded by the Australian Government while community care is funded by states and territories. There is no single, individual health care number for consumers across the health care system.

Australian Divisions of General Practice are geographically-based voluntary GP networks which are funded by the Australian Government Department of Health and Ageing (and others) to help achieve good primary health care outcomes for patients by providing support to GPs and allowing them to work together and maintain links with other health professionals and organisations. They vary enormously in size and their catchment populations are highly diverse, both within and between Divisions. Unlike their New Zealand cousins the IPAs, which have held funds for pharmaceutical, laboratory and other services, Divisions have had very limited experience with fund-holding. Funding to Divisions is not currently linked to performance.

Though lacking a primary health care strategy, Australia does have a manageable set of national priorities domains for Divisions identified in the *Government's Response to the Report of the Review of the Role of Divisions of General Practice* (Commonwealth of Australia 2004). It also has National Health Priority Areas – cardiovascular diseases, cancers, injuries, mental health problems, diabetes mellitus and asthma. In combination, these provide the scaffolding around which an objectives-based performance framework for Divisions can be established. While there is currently no patient enrollment in Australia, many general practices have disease registers which potentially provide a starting point for the capture of denominator-based, quantitative clinical indicator data.

In terms of performance assessment, Divisions occupy a niche one step removed from direct service delivery. IPAs in New Zealand and Primary Care Trusts in the UK occupy somewhat similar niches, although their roles and responsibilities are quite different from those of Divisions in many ways. In considering what Divisions can be held accountable for, and thus what objectives and indicators need to be developed to monitor their quality and performance, careful consideration needs to be given to where they sit in the system. They are ultimately there to improve health outcomes for patients, families and communities – that is, there is a direct link between what they do and primary health care performance – even though their power is exercised through indirect rather than direct influences on primary health care service delivery.

1.4 Health System Performance Assessment in Broader Context

Improving health system performance is a worldwide goal being driven by growing demands for care, rising costs, constrained resources and evidence of variations in clinical practice (World Health Organisation 2000). Internationally, health system performance assessment has moved away from the more straightforward emphasis on activity and cost that was prevalent throughout the 1990s to a broader agenda of assessing quality with a combined focus on efficiency in the use of resources and effectiveness in the delivery of care (Campbell et al 2000). Growing interest in health system performance has been informed by a concurrent growing international interest in

health inequalities. This has been fuelled by the now very large body of international literature that confirms the persistence of social gradients of health for many diseases, some of which are now increasing, after narrowing in the 1970s and 1980s. In recognition of these dual international concerns with health system performance and health inequalities, the World Health Organisation (2000) has identified two overarching goals of health systems. The first is to improve the health of populations and the second is to reduce inequalities in the distribution of health across subgroups within populations.

It is within this context that Australia is increasingly focused on assessing the performance of its health system. National interest has been further fuelled by the WHO and OECD both signalling their intention to focus on development of performance measures and publish national comparative reports for health systems (Australian Institute of Health and Welfare 2002:343).

Other influential comparative reports have recently been released. For example, in 2004, the New York-based Commonwealth Fund published the results of a five-country study (including Australia) of health system performance focussing on health outcomes. For the five countries, the Working Group has produced performance data on 40 quality indicators, including five-year survival rates for breast, cervical, and colorectal cancers, childhood leukemia and non-Hodgkins lymphoma, and kidney and liver transplants; 30-day case-fatality rates following the incidence of heart attack and stroke; asthma mortality rates; suicide rates; breast and cervical cancer screening rates; vaccination rates; smoking rates; waiting times for primary, emergency, and specialty care and elective surgery; measures of patient–doctor communication and coordination of care; and indicators of financial barriers to care (Web Link # 4).

Increasing national focus on performance assessment is reflected in the development by the National Health Performance Committee of the National Health Performance Framework (NHPF), largely derived from the Canadian framework developed as part of the Canadian Roadmap Initiative (Web Link # 5). The NHPF is intended to be “a new framework to report performance of the Australian *health system* at a national level” (National Health Performance Committee 2001). In reality, it is more a framework for overall health performance assessment, of which *health system* performance assessment is a part.

The framework has three tiers ‘health status and outcomes’, ‘determinants of health’ and ‘health system performance’. Within the ‘health system performance’ tier are nine dimensions: effective, appropriate, efficient, responsive, accessible, safe, continuous, capable and sustainable. Health inequalities are addressed within the framework through the notion of equity, which is an overarching dimension operationalised by asking of indicators in all three tiers, “Is it the same for everyone”? Quality is the other overarching dimension in the framework. Similar high-level

frameworks have been developed in the UK and USA. The NHS High Level Performance Framework identifies a large number of indicators focusing on health improvement (derived from mortality data), fair access, effectiveness, efficiency, patient and carer experience and health outcomes of NHS care. In the USA, The Joint Commission on Accreditation of Health Care Organisations (JAHCO) has begun work on the development of a set of core measures which focus on availability/access, appropriateness, continuity, effectiveness, efficacy, efficiency, prevention/early detection, safety, respect/caring, and timeliness. The JAHCO indicator groups will contain four measurement categories including clinical performance, patient perception (satisfaction), health status and administrative/financial.

Work by the National Health Performance Committee to develop “a parsimonious set of indicators suitable for monitoring key elements of health at a national level” through the NHPF is ongoing (Australian Institute of Health and Welfare 2002:346). Work is most advanced in the acute care sector where measures of efficiency and effectiveness have previously been developed.

While the NHPF is a monitoring framework for national health or health system performance, it is not objectives based – ie it does not contain specific statements of purpose, either for the health system as a whole or for primary health care or general practice, nor identify who or what is *responsible* or *accountable* for performance against the indicators. Performance assessment frameworks that are about responsibility and accountability need clear statements of purpose for those being held responsible and accountable. The NHPF is therefore inappropriate as a framework for monitoring program performance and would not work for the National Quality and Performance System for Divisions (we propose an alternative framework – see Part 2). It is expected however, that the NHPF “will help the integration of other national performance measurement and reporting activities ...” (Australian Institute of Health and Welfare 2002:345). The NQPS could contribute to this national effort by mapping some or all of its indicators to the nine dimensions of health system performance identified in the framework (see below).

1.5 Performance Assessment in Primary Health Care

In Australia, general practice is the major provider of primary health care services and Divisions support general practice. It is likely that Divisions will be the primary organisational platform through which the expansion and enhancement of primary health care services will occur in the coming years. It is therefore worth briefly reviewing what constitutes primary health care and examining the theory and evidence about what primary health care can be held accountable for.

1.5.1 What is Primary Health Care?

Encompassing the WHO's *Declaration of Alma Ata* (World Health Organisation 1978) and recent *Primary Health Care: A Framework for Future Strategic Directions* (World Health Organisation 2003), the Australian Primary Care Research Institute defines primary health care as:

Socially appropriate, universally accessible, scientifically sound first level care provided by a suitably trained workforce supported by integrated referral systems and in a way that gives priority to those most in need, maximises community and individual self-reliance and participation and involves collaboration with other sectors. It includes the following:

- *health promotion*
- *illness prevention*
- *care of the sick*
- *advocacy*
- *community development.*

Primary health care brings together and deploys health resources around the most common health needs and problems in populations by providing services to promote, restore and maintain health and well-being (Starfield 1992). Primary health care is the sector of the health system that is most likely to achieve reductions in inequalities (Keleher 2001). Thus in primary health care there is a greater emphasis on improving the health of the population and reducing inequalities than in the secondary and tertiary care sectors of the health system. This breadth and complexity of claims on primary health care services differentiate them from closed systems like hospitals. Not surprisingly then, the primary health care sector is relatively under-developed in terms of performance assessment.

1.5.2 What Can Primary Health Care be Held Accountable For?

As performance assessment develops, primary health care is being held accountable across three broad domains – health outcomes, processes of care to patients families and communities, and the organisational structures and processes that underpin these processes of care.

Health Outcomes

There has been considerable debate over many years about what health outcomes primary health care can be held accountable for. It is widely recognised that neither the primary health care sector nor the health care system as a whole can be held responsible solely for health outcomes because these are also determined by a range of factors outside health system control (see for example, Guiffrida, Gravelle and Roland 1999). Indeed, health systems make modest contributions to health outcomes. For this reason, providers who serve disadvantaged populations should not be penalised if performance measures show that their clients have poorer outcomes (Naylor et al 2001). Further, outcomes of care are often delayed (Lawrence & Olesen 1997) and therefore difficult to measure.

The limitations of what the health system can do for health mean that health system performance assessment “should relate to those aspects of care which can be altered by [those] whose performance is being assessed” (Guiffrida, Gravelle and Roland 1999; 94). Therefore for performance purposes, health outcomes are defined narrowly as those changes in health status that are strictly attributable to the activities of health systems (Hurst 2001). Performance indicators for the NQPS should likewise be narrowly focused on those changes that Divisions, independently and through their member practices, can alter.

The two principal domains of outcomes are health status and evaluation by users of care (Crampton et al 2004). Aspects of health status amenable to change through primary health care are of two types – risk behaviours and clinical outcomes. Starfield (1998) argues that improvements in personal health practices and behaviours due to primary health care can be expected in relation to:

- smoking
- nutrition
- alcohol consumption
- physical activity
- illicit drug use

Primary health care clinical outcomes are usually proxy or intermediate outcomes eg blood sugar and hypertension levels, for which there is evidence of a link between clinical status and morbidity and/or mortality. Exceptions include birthweight and hospitalisations for vaccine preventable conditions which are generally recognised as more distal health outcomes that are nevertheless primary health care amenable.

Processes of Care

The manifest difficulties with outcomes mean that performance assessment in primary health care translates to a focus on *processes*. Indeed, according to Naylor et al (2001; 13-14):

“the most efficient indicators of health system performance at the micro-level are usually process-based ... [and] ... there are strong epidemiological grounds for this approach. In a nutshell, identification of flawed processes pinpoints where change should occur, rather than generating an acrimonious debate about causes and confounders.”

Ordering appropriate tests and medications, ensuring routine review, assessing risk for chronic disease, immunising children, adolescents and adults, screening for cancer, conducting well-child checks and providing dietary and exercise advice are processes of care captured in primary health care indicators (see below).

Organisational Structures and Processes

Performance measures in this domain are about ensuring that primary health care organisations have good business practices. Performance against these sorts of indicators is commonly assessed through some process of accreditation. The indicators relate to:

- Physical facilities and equipment
- Governance
- Staffing, including deployment
- Staff training and development
- Human resources management
- Service organisation and management
- Financial management
- Integration
- Information systems (IT and data)
- Needs assessment
- Performance assessment

1.5.3 What Makes a Good Indicator?

Performance indicators are the tools by which the components of health system functions are measured and related to key system goals (Murray and Frenk 2000). Over time performance indicators should provide empirical answers to such questions as the relationship between the organisation of health financing and the level and distribution of health and responsiveness (Murray and Frenk 2000). The requirements for good primary care performance indicators are shown in Table 1 (Crampton et al 2004).

Table 1. What makes a good performance indicator?

Requirements	Explanation
Reflect important aspects of health status	
Be attributable to health care	There must be a link between provider actions and the performance indicator that the provider has some control over.
Be linked to health outcomes	There must be evidence that improved indicator values are associated with improved health outcomes.
Be sensitive to change	Performance indicators should detect changes in provider behaviour.
Be sensitive to and discriminate between primary care organisations	
Be based on reliable and valid information	Performance indicators should be evidence based.
Be precisely defined	
Be easily quantifiable	
Reflect a variety of dimensions of care	
Be understood by people who need to act	
Be relevant to policy and practice	
Be feasible to collect and report	
Comply with national processes of data definitions	
Not be vulnerable to random fluctuation associated with rare events	Indicators that reflect rare events might be expected to fluctuate from year to year due to statistical instability, as has been clearly demonstrated empirically with respect to hospital admissions. This difficulty may be reduced by using a three year moving average.
Minimise perverse incentives	Punitive and constructive uses of indicators effect provider behaviour differently.

* Source: Crampton et al 2004.

1.5.4 Indicators for Assessing Performance in Primary Health Care - International

In this section, we provide an overview of primary health care indicators in use in our comparator countries, *focusing on processes of care and intermediate health outcomes*. We reference but do not provide complete lists of the indicators. Our intention is convey a sense of the amount of work that has been done and the kinds of indicators that are in use or proposed. Several things emerge from the review. The first is that there are strong common themes among the indicators,

which probably signals that many of them have proved quite robust in different national and local settings. The second is that the intermediate outcome measures cover all age groups, and a range of risk behaviours and measures of clinical status. There is however, considerable unevenness in the relationship between major causes of primary health care relevant morbidity and numbers of indicators, most glaringly in relation to mental health. This reflects the complex nature of these conditions and the consequent difficulty of identifying appropriate indicators. There are also remarkably few relating to adverse events. This is probably because theory, description and capture of adverse events in primary health care is, compared to hospital adverse events reporting, still in its infancy.

United Kingdom

As noted above the NHS has adopted under the nGMS 146 indicators, with targets, against which practices must report to their PCT. In addition, PCTs, like Divisions one step removed from direct service delivery, are required to report to the NHS against their own set of indicators.

NHS performance indicators for general practices

The nGMS contract for general practitioners identifies 146 quality indicators, of which 76 are for clinical care, 56 are for organisational structures and processes, and 4 are about patient experiences (Web Link # 3) (Table 2). There are also 10 'Additional Services' targets for cervical screening, child health surveillance, maternity services and contraceptive services. Within the clinical group of indicators, most of the indicators relate to organisational structures and processes, and processes of care. There are only a small number that relate to health outcomes and these are for the kind of intermediate health outcomes that primary health care might be held accountable for, such as HbA1C levels and blood pressure control. By way of example, the full set for management of diabetes are shown in Table 3. Exhaustive work has gone on over several years to devise the indicators - the evidence base for each indicator has been summarised and is available in the documentation.

Table 2. Indicators for general practice reporting to Primary Care Trusts in the NHS under the new General Medical Services contracts

Clinical	No of indicators	Organisational	No of indicators
CHD	15	Records and information about patients	19
Stroke	10	Information for patients	8
Hypertension	5	Education and Training	9
Diabetes Mellitus	18	Practice management	10
COPD	8	Medicines management	10
Epilepsy	4	Patient experience	4
Hypothyroidism	2		
Cancer	2	Additional Services	10
Mental health	5		
Asthma	7		
Totals	76		70

The remaining 53% of the indicators are organisational, sub-divided into records and information about patients, information for patients, education and training, practice management, medicines management and patient experience. The targets are shown in the right hand column - note the very wide range, to accommodate existing wide variation in capability and capacity within the sector.

Table 3. Diabetes mellitus indicators for general practice reporting to Primary Care Trusts in the NHS under the new General Medical Services contracts

Indicator	Target
DM 1. The practice can produce a register of all patients with diabetes mellitus	
DM 2. The percentage of patients with diabetes whose notes record BMI in the previous 15 months	25-90%
DM 3. The percentage of patients with diabetes in whom there is a record of smoking status in the previous 15 months, except those who have never smoked where smoking status should be recorded once	25-90%
DM 4. The percentage of patients with diabetes who smoke and whose notes contain a record that smoking cessation advice or referral to a specialist service, where available, has been offered in the last 15 months	25-90%
DM 5. The percentage of diabetic patients who have a record of HbA1c or equivalent in the previous 15 months	25-90%
DM 6. The percentage of patients with diabetes in whom the last HbA1C is 7.4 or less (or equivalent test/reference range depending on local laboratory) in last 15 months	25-50%
DM 7. The percentage of patients with diabetes in whom the last HbA1C is 10 or less (or equivalent test/reference range depending on local laboratory) in last 15 months	25-85%
DM 8. The percentage of patients with diabetes who have a record of retinal screening in the previous 15 months	25-90%
DM 9. The percentage of patients with diabetes with a record of the presence or absence of peripheral pulses in the previous 15 months	25-90%
DM 10. The percentage of patients with diabetes with a record of neuropathy testing in the previous 15 months	25-90%
DM 11. The percentage of patients with diabetes who have a record of the blood pressure in the past 15 months	25-90%
DM 12. The percentage of patients with diabetes in whom the last blood pressure is 145/85 or less	25-55%
DM 13. The percentage of patients with diabetes who have a record of micro-albuminuria testing in the previous 15 months (exception reporting for patients with proteinuria)	25-90%
DM 14. The percentage of patients with diabetes who have a record of serum creatinine testing in the previous 15 months	25-90%
DM 15. The percentage of patients with diabetes with proteinuria or micro-albuminuria who are treated with ACE inhibitors (or A2 antagonists)	25-70%
DM 16. The percentage of patients with diabetes who have a record of total cholesterol in the previous 15 months	25-90%
DM 17. The percentage of patients with diabetes whose last measured total cholesterol within the previous 15 months is 5mmol/l or less	25-60%
DM 18. The percentage of patients with diabetes who have had influenza immunisation in the preceding 1 September to 31 March	25-85%

Where the evidence base is weak for a particularly condition the number of indicators chosen is much more limited. A good example is mental health (see Table 4). It is accepted that over time more indicators will be added to this group, as the evidence base improves.

Table 4. Mental health indicators for general practice reporting to Primary Care Trusts in the NHS under the new General Medical Services contracts

Indicator	Target
MH 1. The practice can produce a register of people with severe long term mental health problems who require and have agreed to regular follow-up	
MH 2. The percentage of patients with severe long-term mental health problems with a review recorded in the preceding 15 months. This review includes a check on the accuracy of prescribed medication, a review of physical health and a review of co-ordination arrangements with secondary care	25-90%
MH 3. The percentage of patients on lithium therapy with a record of lithium levels checked within the previous 6 months	25-90%
MH 4. The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 15 months	25-90%
MH 5. The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range within the previous 6 months	25-70%

NHS Performance indicators for Primary Care Trusts

PCTs have responsibility for primary health care services provided by the general practices and other providers in their 'patch'. It is therefore instructive to look at the primary care related indicators amongst the PCT set (Web Link # 6). These relate to:

- Access to a general practitioner within two working days
- Access to a primary care professional within one working day
- Delayed transfer from hospital
- MMR immunization
- Flu vaccination
- GP practices in shared care for problem drug users
- Number of mental health patients receiving outreach services
- Suicide
- Teenage pregnancy
- Access to services for unintended pregnancy
- Number of women smoking at delivery
- Number of smokers who quit at four-week follow-up with smoking cessation service
- Diabetic retinopathy screening
- Cervical cancer screening
- Patient satisfaction with information, choice, care received, quality of facilities and coordination

New Zealand

With the establishment and rapid uptake of Primary Health Organisations in New Zealand an integrated national performance framework which includes financial, process, referred services (Web Link # 7), clinical (Web Link # 8) and special program indicators, is being established. The indicators are designed to measure performance against national goals. Targets are being set for the indicators and PHOs will be financially rewarded for achieving these targets. The initial small set of clinical and referred services indicators relate to:

- Influenza immunizations in the elderly
- Cervical smears recorded in the past three years
- Breast screening recorded in the last 2 years
- Children fully vaccinated by 2nd birthday
- Inhaled corticosteroid prescribing – ratio of fluticasone;beclomethasone
- Omeprazole dosage
- Investigation of thyroid function – ordering of FT4
- Test ordering – ratio of c-reactive protein:erythrocyte sedimentation rate
- Disease coding for diabetes, asthma, ischaemic heart disease and mental health

Additional indicators to be added in 2005 relate to:

- Rate of adults with smoking status recorded
- Recording of CVD risk
- Diabetics with microalbuminuria on ACE inhibitor
- Recording Chronic disease recorded
- Statins for primary and secondary prevention, including diabetes

In addition to this, IPAs have for many years been reporting on a wide range of clinical indicators for their member practice and geographic catchment populations. Some examples drawn from the Wellington IPA's annual report for 2003 (Web Link # 9) are:

- Registered population by ethnicity and deprivation index
- Diabetes related test costs
- First and repeated visits to WIPA podiatry clinics + annual number of amputations
- Achievement against retinal screening targets
- Pharmaceutical expenditure; Omeprazole dosage strength ratio
- Volume of urine tests performed
- Radiology referrals by type, region and ethnicity
- Immunisation rates
- Take-up of nicotine replacement therapy by ethnicity
- Sexual health consultations
- Use of WIPA school clinics by students

United States of America

The National Committee for Quality Assurance (NCQA) has developed a set of primary care indicators for health care plans, known as the Health Plan Employer Data and Information Set (HEDIS) (Web Link # 10). It contains more than 60 performance indicators covering quality, access to and satisfaction with care, membership and use of services, finance and management. These indicators are used extensively as a tool for purchasers of care and health plans have incorporated these measures into their quality improvement programs. Most of the indicators are process of care based and only two are outcome indicators. These are low birthweight and hospitalisation for patients with asthma. Examples of US indicators across child health, chronic disease management, mental health, cancer screening, substance misuse, and communicable diseases are:

- Ante- and post-natal care
- Low birthweight
- Well child visits in first 15 months of life
- Beta blocker treatment after heart attack
- Cholesterol management after acute cardiovascular events
- Comprehensive diabetes care (HbA1c, eye testing, LDL levels)
- Breast, cervical and colorectal cancer screening
- Osteoporosis management in women who have had a fracture
- Chlamydia screening in women
- Appropriate treatment for children with upper respiratory infection
- Childhood and adolescent immunisation status
- Influenza and pneumonia vaccination for older adults
- Medical assistance with smoking cessation
- Initiation and engagement of alcohol and other drug dependence treatment
- Anti-depressant medication management
- Follow-up after hospitalisation for mental illness

The Indian Health Service also has a comprehensive set of primary health care relevant indicators (Web Link # 11), some of which are captured above but others of which relate to:

- Mothers who drank alcohol during pregnancy, by age of mother
- Mothers who smoked during pregnancy, by age of mother
- Prevention of kidney complications in diabetes patients (through control of hypertension)
- Protection of diabetic patient's kidneys from complications (use of ACE inhibitors)
- Management of overweight diabetic patients (nutrition intervention)
- Early diagnosis of diabetic retinopathy (annual eye exam)

Canada

The Canadian indicators (Web Link # 12) are few in number and are for the whole health system. First Nations and Inuit health services also have a small number of primary health care relevant statistics applicable to processes of care and intermediate outcomes contained in the *Statistical Profile on the Health of First Nations in Canada* (Web Link # 13). These are derived from in-house data from the First Nations and Inuit Health Branch of Health Canada. These relate to:

- Low and high birthweight
- Pertussis, measles, mumps and rubella notifications
- Chlamydia notifications
- Hepatitis C and HIV notifications
- Pneumonia and influenza hospitalisations

1.5.5 Indicators for Assessing Performance in Primary Health Care – Australia

There is strong and increasing interest in the development of health outcome indicators for general practice, reflecting “widespread enthusiasm for the use of health care outcomes to assess and improve quality of care” (Mott, Kidd and Weller 2000; 275). However, performance assessment in general practice and primary health care more broadly is less well-developed in Australia than in our comparator countries. For example, an examination of Divisions annual reports demonstrates that with a few exceptions, the use of robust indicators of performance by Divisions has not progressed very far under Outcomes Based Funding and there are still no core reporting requirements for the Network as a whole.

There is however, a great deal of current activity around indicator development, some of which is very robust and evidence-based. Indicators have been developed for specific Divisions projects and programs. Examples for shared care programs are given by Harris and Powell-Davies (2000; 318). They cover risk behaviours, clinical status and more distal health outcome measures as follows:

Diabetes

Diet, physical activity
HbA1c, body mass index, blood pressure
Hypoglycaemia

Cardiac

Smoking, physical activity, diet
Body mass index, blood pressure
Adverse drug reaction

Mental health

Drug and alcohol abuse
Adverse drug
Para-suicide

Aged Care

Blood pressure
Adverse drug reactions, falls
Activities of daily living

Asthma

Smoking

Peak respiratory flow rate, FEV1

Similarly, indicators are being developed by groups interested in specific conditions such as asthma (by the Australian Centre for Asthma Monitoring).

The Australian Institute of Health and Welfare (2003) was commissioned by the Department of Health and Ageing to develop an information framework and indicators for rural, regional and remote health. Some of the proposed indicators relate to primary health care. These are:

- Proportion of women in the target age group (50-69 years) who have had a mammogram in the past 2 years
- Rates of care planning and case conferencing
- Percentage of males and females who self-report non-safe sexual practices
- Proportion of persons aged 18 years and over with a BMI in the overweight and obese ranges
- Proportion of women in the target age group (20-69 years) who have had pap smear test in the past 2 years

Some of the indicators being reported within the National Health Performance Framework (National Health Performance Committee 2001) are primary health care amenable. These are:

- Patterns of tobacco use
- Percentage of people achieving sufficient physical activity
- Percentage of people overweight or obese
- Breast cancer screening in target age group
- Measles notifications
- Children fully vaccinated at 12 months of age
- GP antibiotic prescribing for presentations of upper respiratory tract infection
- Use of care planning items
- Home and community care hours of service provision
- Separations from hospitals to aged care homes for patients over 70 years

The *Report on Government Services 2003* by the Steering Committee for the Review of Commonwealth/State Service Provision (Commonwealth of Australia 2003) also contains primary health care indicators amongst the health set. These relate to:

- Birthweight
- Immunisation coverage at 12-15 and 24-27 months
- Measles, pertussis and Haemophilus influenza notifications
- Cervical screening
- Hospital separations for diabetes mellitus
- Hospital separations for lower limb amputations
- Antibiotic prescribing for upper respiratory tract infections
- Referrals for diagnostic imaging
- Referrals for pathology tests
- Proportion of PIP general practices using computers for clinical purposes
- Proportion of practices registered for accreditation with AGPAL

There are also reporting frameworks and indicators proposed for Aboriginal and Torres Strait Islander primary health care, such as that developed by the Cooperative Research Centre for Aboriginal and Tropical Health (2003) and Territory Health Services (1997) which relate to:

- Current smoking in over 15s
- Hazardous alcohol consumption
- Body mass index – overweight and obese
- Screening for chronic diseases in over 15s
- Proportion of clients with preventable chronic diseases managed on care plans (by disease)
- HbA1c testing in the last 12 months
- Cervical cancer screening, and appropriate follow-up
- First antenatal visit at or before 13 and 20 weeks gestation
- Immunisation at 1 year and 2 years and 6 years of age
- Proportion of children that have hearing loss at 5 years of age
- Notification rates for measles and pertussis, measles and Hepatitis B
- Notification rates for acute rheumatic fever, acute post-streptococcal glomerular nephritis, invasive pneumococcal disease, tuberculosis
- Pneumococcal vaccination in over 50s

In summary, there are many primary health care indicators proposed in Australia (though much less commonly in routine use). They appear in many different collections and reports. Not surprisingly they are very similar to those being used overseas.

1.5.6 Issue of the Denominator

A key challenge for the NQPS is the issue of the denominator for quantitative indicators relating to services and outcomes for patients. With enrolled (PHOs in NZ and HMOs in the USA) or registered (UK) populations, general practices have non-overlapping populations for whom they are providing care, and everyone living in a particular geographic area will over time appear on a patient list. These lists provide stable denominators for many indicators relating to processes of care and patient outcomes. They also identify populations of responsibility which means that providers cannot achieve high performance simply by providing services to selected sub-sets of the population for whom say, good HbA1c levels, are relatively easy to achieve. This means that in the NQPS context, technical consideration will have to be given to how the denominator issue can be addressed for many indicators in common use. For some indicators – eg notifications of vaccine preventable diseases – census data could be used. For others, patient registers could be used, though these are vulnerable to the selective care hazard described above. Some indicators will simply be inappropriate because the issue cannot be resolved. This is the major caveat on the applicability of current indicators and will be a very important and complex part of the technical work to devise objectives and indicators for the NQPS.

1.5.7 Potential Hazards in Primary Health Care Performance Assessment

Several potential hazards can be anticipated as any set of indicators is defined to assess primary health care performance. The primary health care system contains many different actors, each with a perspective on the system that may be different from another's. Depending where in the system one is, what makes sense as an indicator may vary. For example, number of hits on a web site discussing healthy diet and exercise in children may be very important from a health

promotion perspective, but not directly relevant to the activities of a psychologist working with the morbid obese. Agreeing appropriate indicators across a diverse and complex system poses challenges.

One response may be to have too many indicators – some for everyone. The hazard here is that the system groans under the weight of indicators – measurement of performance displaces delivery of service as the focus of activity.

Indicators are necessarily easily counted. This limits the type of activity that can be chosen to attach indicators too. What is easy to count may not truly count in terms of health system performance. For example, the qualitative aspects of relationships between providers of services and their clients may be very important in terms of health outcomes, but difficult to count.

Finally, indicators are just that – indicators. The data collected must be appropriately interpreted, and this may not be straight forward because indicators are by nature proximal to actual health outcomes.

None of these cautions mean the challenges for performance assessment in primary health care are insurmountable. They simply mean that a sensible, evidence-based approach needs to be taken to the development of parsimonious sets of indicators that do not detract from a focus on the main game (quality care for patients, families and communities) and that the whole process is about quality improvement over time, and therefore necessarily evolutionary.

Part 2 – National Quality and Performance System for Divisions

2.1 Introduction

This part of the report is about the creation of a National Quality and Performance System for Divisions. It is envisaged that the System will have two core components:-

- accreditation of Divisions; and
- a set of indicators relating to the national priority domains for Divisions identified in the Government Response

These components would address different but complementary aspects of quality and performance and be managed separately. In this report, we touch only briefly on the accreditation component and focus on assessment of performance in relation to the national priority domains for Divisions. What we propose in relation to the latter only makes sense if it is taken as given that quality and performance in relation to basic business processes – governance, financial accountability, human resources management etc – are picked up through accreditation.

We begin by suggesting some principles for the System as whole and briefly outlining the reporting context within which Divisions are currently operating. This is followed by an overview and schematic representation of the two core components of the System. We then present a conceptual framework to guide the establishment of objectives and indicators *for the priority domains component* and explore some of the issues that will need to be considered in their development and evolution. We look briefly at how these indicators could be mapped to the National Health Performance Framework. We then canvass some of the issues around data collection, collation, analysis and reporting. Finally we briefly explore possible incentives for Division and member practice participation in the NQPS.

2.2 Principles

It will be important for the National Quality and Performance System and its constituent parts to:

- Make sense to Divisions and have their support
- Be future oriented and evolutionary
- Be about continuous quality improvement, reward for good practice and support for achievement
- Incorporate Divisions reporting requirements in a rational and seamless way
- For national reporting on priority domains, include a parsimonious set of indicators that are a sub-set of what Divisions report overall
- Result in useful, respected information for Divisions, government, and other stakeholders.

2.3 Reporting Context

Divisions are currently funded on a triennial basis and required to produce annual reports against their annual plans. These reports are provided to the Department of Health and Ageing before being posted on the Primary Health Care Research and Information Service (PHCRIS) website. Annual reports for public dissemination are also produced by some Divisions. There are also financial reporting requirements. In addition, some Divisions have sought formal recognition of the quality of their organisational structures and process through QIC or other accreditation mechanisms. There is also an annual survey of Divisions. However, this has always been more about providing a national picture of Divisions activities, than a mechanism for capturing quality or performance information. In addition the data are entirely self-reported and there are no data quality assurance processes.

2.4 Creating the System

As noted above, it is envisaged that the NQPS would have two core components, namely:

- accreditation of Divisions; and
- a set of national indicators relating to the national priority domains for Divisions identified in the Government Response

They would be complementary and governed by an overarching principle of Continuous Quality Improvement (see Figure 1).

2.4.1 Accreditation

Accreditation could be the responsibility of individual Divisions and obtained through one or more providers on the Joint Accreditation Services Australia and New Zealand register (Web Link # 14).

Existing standards, supplemented by some Division-specific standards could be used. As noted above, accreditation would address the requirements for best practice in organisational management in Divisions. Divisions could report their accreditation status in their Annual Report to the Department of Health and Ageing. Summary data on progress towards accreditation across Divisions could be reported nationally, and by state, on an annual basis. A Division's accreditation status could be counted in determining its level of development and eligibility for support or performance funding (see below).

2.4.2 National Priority Domains

This component of the NQPS would be based on the national priority domains identified in the Government Response. It would need to be underpinned by a conceptual framework. We

propose that the conceptual framework for performance assessment in primary health care developed by Sibthorpe (2004 – Web Link # 15)¹ be adopted and adapted for this purpose.

2.4.2.1 Conceptual Framework

The paper describing the conceptual framework, its theoretical basis and its practical application can be found at http://www.anu.edu.au/aphcri/Publications/conceptual_framework.pdf. In summary, the framework is grounded in evaluation theory and explicitly identifies the processes of primary health care articulated by the World Health Organisation (1972, 2003). It is based on Donabedian's (1998) now classic 'structure', 'process', 'outcome' model for assessment of quality of care. This model has also been adapted by others (Campbell et al 200) and is in keeping with the approach recommended by the World Bank (1993). Donabedian's model is in turn based on robust theory underpinning program evaluation more generally (Rossi and Freeman 1993). The framework is objectives based - that is, it recognises that performance must be measured against defined objectives and that the primary objectives of primary health care relate to consumers, not providers or organisations.

According to the framework, there are four levels at which performance indicators for primary health care might generally be specified. These are:

- Stewardship - relating to the roles and functions of government
- Organisational Structures and Processes – relating to service providers/organisations
- Processes of Care – relating to care for patients, families and communities
- Intermediate Outcomes – relating to the effects of that care on (primary health care amenable) health outcomes for patients, families and communities

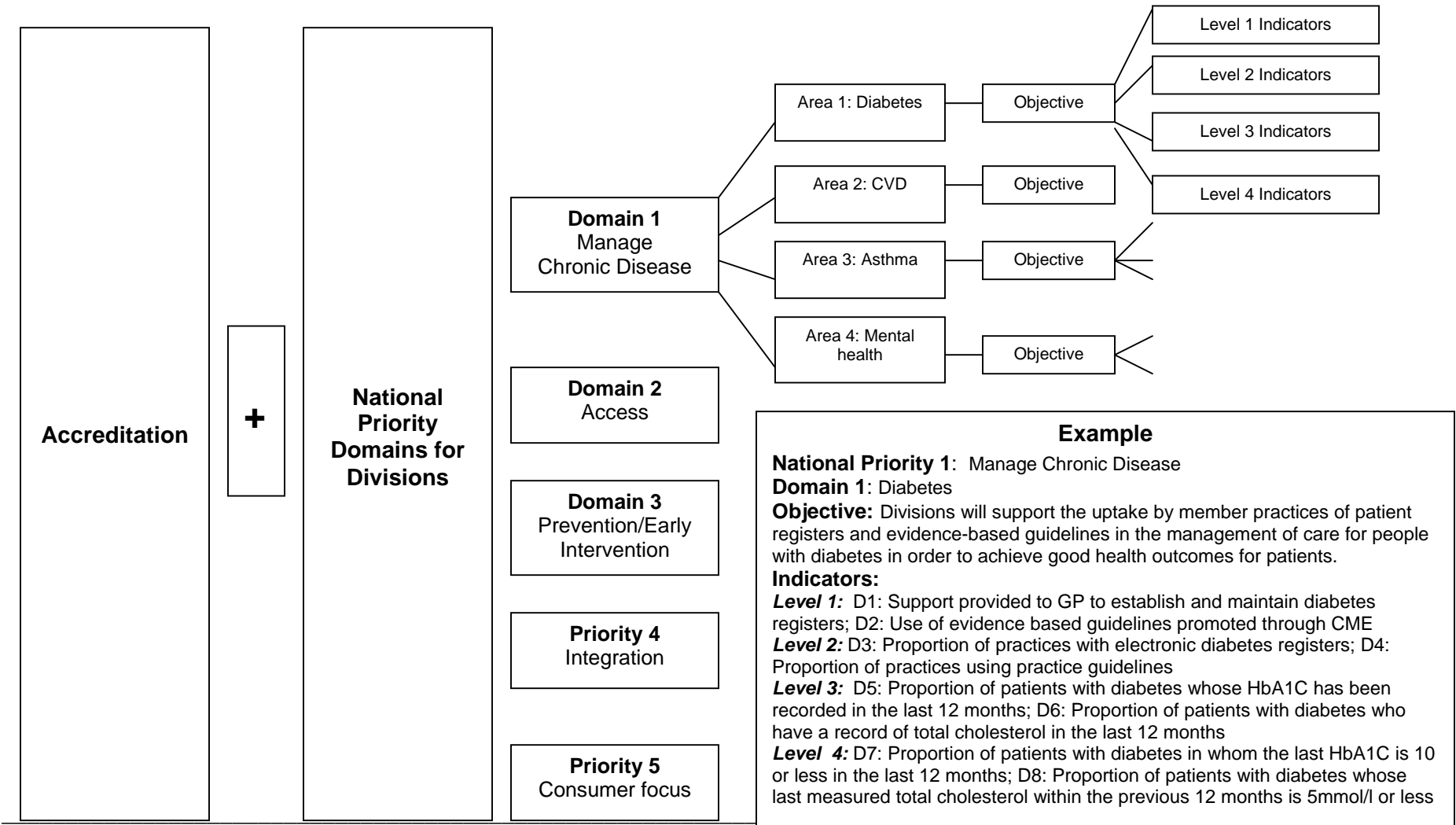
Equity is dealt with in the framework by asking, "Is it the same for everyone?" Efficiency can be assessed by considering the relationship between costs and processes of care and intermediate outcomes.

To adapt the framework for the NQPS the stewardship level would be replaced by a level relating to Divisions – ie "Organisational Structures and Processes" would be relevant to Divisions and to member practices. Thus the four levels for the development of indicators *relating to the priority domains component of the NQPS* would be as follows:

- Organisational Structures and Processes – Divisions (Level 1)
- Organisational Structures and Processes – member practices (Level 2)
- Processes of Care (Level 3)
- Intermediate Outcomes (Level 4)

¹ The framework builds on earlier work with Sandra Eades and Karen Gardner.

Figure 1: National Quality and Performance System for Divisions of General Practice
 Overarching Principle – Continuous Quality Improvement (CQI)



2.4.2.2 Application of the Conceptual Framework

Application of the conceptual framework would involve the following steps:

1. Identifying focal areas for each of the domains identified as a priority for Divisions.
2. Defining one or more broad objectives for each focal area.
3. Identifying appropriate indicators to measure achievement against these objectives, focusing on patient outcomes where possible, but suitable to Divisions in different stages of development.

How this would look in practice is shown in Figure 1 and expanded in Table 5 (below). The example used is the domain “manage chronic disease”.

In step 1, the focal areas for this domain would be determined. These would clearly need to reflect the important primary health care related priorities for the Department of Health and Ageing. By way of example, four of the national health priority areas relating to chronic disease – diabetes, CVD, asthma and mental health – have been identified as *focal areas* within this domain. Primary health care is widely recognised as having a major role to play in each.

In step 2, a broad objective for the focal area of diabetes would then be developed. This might be:

Divisions will support the uptake by member practices of patient registers and evidence-based guidelines in the management of care for people with diabetes in order to achieve good health outcomes for patients.

Step 3 would involve the selection of indicators. First, a small number of evidence-based indicators that reflected “good health outcomes for patients” (Level 4) would be selected. Recognising that there would be very uneven capacity within the Divisions network to report on outcomes for patients, additional indicators would also be developed across the continuum from Division Organisational Structures and Processes (Level 1), member practice Organisational Structures and Processes (Level 2) and Processes of Care (Level 3) (see Table 5). Divisions in very early stages of development/capacity or for whom diabetes is a new program would report on Level 1 indicators while the most advanced Divisions might already be able to report on Level 4 indicators, at least for selected practices. Those that could report at the high end would be able to do this and rewarded for it, while those at the low end would be striving and supported to move

towards the high end over time. This would satisfy the principles of future orientation, continuous quality improvement, reward for achievement and support for improvement.

Table 5. Hypothetical Objective and Performance Indicators for Diabetes

<p>National Priority Domain for Divisions: Primary: Manage chronic disease Secondary: GP and practice support, prevention and early intervention, evidence-based care, consumer focus.</p> <hr/> <p>Objective: Divisions will support the uptake by member practices of patient registers and evidence-based guidelines in the management of care for people with diabetes in order to achieve good health outcomes for patients.</p>			
Level 1 Organisational Structures and Processes Division	Level 2 Organisational Structures and Processes Member Practices	Level 3 Processes of Care	Level 4 Intermediate Outcomes
<p>Support provided to GPs for establishment and maintenance of electronic diabetes registers</p> <p>Evidence-based guidelines identified and promulgated</p> <p>CME on guideline use implemented; % GPs participating; level of GP satisfaction with education provided</p> <p>Data collation, quality assurance and analysis undertaken</p>	<p>Proportion of practices with active, electronic diabetes registers</p> <p>Proportion of practices using identified guidelines</p> <p>Proportion of practices involved in routine data collection</p> <p>Proportion of practices achieving timely transfer of accurate data to Division</p>	<p>Proportion of patients with diabetes whose notes record BMI in last 12 months *</p> <p>Proportion of patients with diabetes whose HbA1C has been recorded in the last 12 months *</p> <p>The proportion of patients with diabetes who have a record of total cholesterol in the last 12 months *</p>	<p>Proportion of patients with diabetes in whom the last HbA1C is 10 or less in the last 12 months *</p> <p>Proportion of patients with diabetes whose last measured total cholesterol within the previous 12 months is 5mmol/l or less *</p> <p>Proportion of patients with diabetes responding to a patient satisfaction questionnaire who rate their care as 'very good' to 'excellent'</p>
<p>* Source: NHS nGMS indicator set</p>		<p>Equity Assessment - 'Is it the same for everyone?'</p>	

There are four important points to be made about the proposed approach to developing objectives and indicators. First, they would not cover all Divisions' activity. Divisions would still have programs, objectives and indicators that lie outside the NQPS. These would be reflected in their Strategic and Annual Plans, and Annual Reports. **The objectives and indicators in the NQPS would be the parsimonious sub-set deemed to be of sufficient importance to warrant a consistent approach to implementation, and national reporting.** They would be the 'headline indicators' for the Divisions network, not a comprehensive statement about everything Divisions are doing or the quality of all their activities.

Second, the further Divisions were able to report to the right of the framework, the less interest there would need to be, *at the national level*, in the indicators further to the left. That is, if indicators relating to patient outcomes or processes of care in relation to diabetes demonstrate good performance, it becomes increasingly less important to count and report nationally on, for example, the proportion of practices with patient registers. Over time then, there would be fewer Divisions reporting in Levels 1 and 2 and more reporting in Levels 3 and 4. Implicit then is the notion that indicators in the NQPS would mature and change over time as the Network matured.

Third, Divisions might legitimately be reporting in Level 4 for one focal area and Level 1 or 2 in another. This might be because they are developing a new program and are therefore effectively starting from scratch, working towards reporting further to the right for that program over time.

Fourth, the objective(s) for each focal area should be directed only as far to the right of the conceptual framework as is reasonable, so not all objectives would have indicators in all four domains. For example, the priority domain “integration and multidisciplinary care” might have two focal areas – one relating to working with pharmacists around the management of polypharmacy among those with complex comorbid conditions (multidisciplinary care) and the other relating to integration with local hospitals. The objective for local hospitals might be about formal engagement around discharge planning and it is unlikely that effectiveness of this could be measured in processes of care or intermediate health outcomes, at least in the short to medium term (there is only one such indicator amongst those we reviewed, relating to re-admission for mental illness). Appropriate indicators would therefore currently relate only to Organisational Structures and Processes for Divisions (Level 1) and Organisational Structures and Processes for member practices (Level 2). It might be that over time indicators for Level 3 (eg duplicate ordering of tests) and Level 4 (eg patient satisfaction) could be added, but it would not make sense to frame an objective in these terms if there is no evidence that discharge planning has a direct influence on such measures.

2.4.2.3 Focal Areas and Objectives for Each Domain

In order to develop the NQPS using this approach, focal areas within each of the national priority domains for Divisions would need to be determined. Initially these should be few in number but they could be added to over time. Next, a concrete, achievable statement of purpose would be developed for each. With respect to “better manage chronic conditions” decisions would need to be made about which chronic conditions were to be the subject of national performance monitoring. With respect to “improve access” and “encourage integration and multi-disciplinary care” decisions would need to be made about “to what”, or “of what” and “for whom” in order to craft the objectives.

The domain “support quality and evidence based care” might not need separate objectives and indicators, because it could be captured in the management of chronic conditions – ie quality and evidenced based care in the management of diabetes or cardiovascular disease; or in evidence-based approaches to immunisation or preventive activities etc. Similarly, “early prevention and intervention” might be partially captured in objectives and indicators relating to chronic disease management. However, there may be also be separate objectives and indicators in this domain relating, for example to immunisation, screening, or well-child monitoring.

It would need to be determined whether “support GPs and practices” was about supporting GPs and practices in relation to access, integration, management of chronic conditions etc, or there were other aspects of this domain area that warranted separate *national performance monitoring*. It is difficult to think, though what these might be. Locum support? – but this is about access. CME? – but this is about quality of care. IT? – but this is also about quality of care. Again, Divisions might still have objectives and indicators relating to GP and practice support that lay outside the priority domains – it would simply mean that those objectives were not of sufficient national importance to be the subject of a nationally consistent approach, and national reporting.

The domain “ensure a growing consumer focus” might have a broadly worded objective along the lines that:

Divisions will ensure effective participation of consumers in planning and service delivery through establishment and support of a consumer reference group.

This would only allow for indicators to the left of the framework, which may make sense even in the long term. Is there evidence to show that such involvement results in better outcomes for patients or communities? If there is, the objective and indicators could accordingly be reframed further towards the right of the framework.

2.4.2.4 Selecting Indicators

As described above, a great deal of work has been done in recent years to develop indicators appropriate for monitoring performance in primary health. It is therefore likely that in many instances, once objectives have been defined, appropriate indicators will be available from some source. Importantly, indicators do not have to remain fixed. The interrogation of indicator data might suggest the need to refine or replace some indicators for existing areas of focus within existing domains, while over time, changing foci and priority domains might necessitate the addition of quite different indicators. In both the United Kingdom and New Zealand this evolution of indicators is accepted as an integral part of the performance monitoring systems being developed.

2.4.2.5 Targets and Points

Over time the NQPS could move to the establishment of targets and the awarding of points for achievement against those targets, as NZ and the UK are doing. However, there is a great deal of work that needs to be done, a great deal of preliminary information that needs to be gathered and a great deal of interrogation of that information that needs to take place before such targets and points could reasonably be developed and endorsed.

2.4.2.6 Specific Populations and Equity

Consideration of equity is built into the National Health Performance Framework by asking the question, “Is it the same for everyone?” We suggest that this approach be adopted for the NQPS. This would mean that where appropriate, there would be a requirement that indicator data be disaggregated, for example by age, sex, Aboriginality or other ethnicity, postcode or SEIFA index. Thus, a Division with an appreciable Aboriginal or Torres Strait Islander population, either in absolute numbers or as a proportion of its total population, would be required to report comparative data for their Indigenous and non-Indigenous populations for specified indicators. Similarly, if particular age groups or those living in remote areas are known to be disadvantaged with respect to particular services or outcomes, disaggregated data could be required. As with targets and points this might need to be introduced gradually, but it should be built into the System at the outset to signal that this is where it is heading, rather than down the road of different indicators for different populations. Some Divisions would already have the capacity to report disaggregated data but most would not. Requiring disaggregated data serves a dual function of promoting *complete, routine capture by general practices of information on Aboriginality/ethnicity* that is central to responsive local planning and service delivery, and it raises awareness of the importance of addressing inequalities as part of routine primary health care. Information about age, sex and postcode should be routinely available anyway in every patient record.

2.4.2.7 Exception Reporting

The NHS has introduced the concept of “exception reporting” to allow practices “... to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contradiction or side-effect.” (NHS Quality and Outcomes Framework; p3 – Web Link #3). It is likely that some form of exception reporting might be needed in the NQPS. For example, a Division whose member practices serve predominantly disadvantaged populations might not be able to achieve the same Processes of Care or Intermediate Outcomes as those with predominantly affluent populations. This would become more of an issue once targets were specified for these types of indicators. However, there may also be instances where Divisions are unable to meet objectives around member practice structures and processes – eg support the establishment of diabetes or other disease

registers because IT infrastructure among member practices is so poor. Such Divisions might need to invoke some form of exception reporting for member practice Organisational Structures and Processes (Level 2) indicators until IT infrastructure became more advanced. This would crystallise understanding of the nature of the problem and significant effort to help rectify it would be expected of the Division in the coming year.

2.4.2.8 Mapping to National Health Performance Framework

As discussed in Part One, Australia has a National Health Performance Framework. From a policy perspective it might be useful to map some or all of the NQPS indicators to the NHFP so that the program can demonstrate its contribution to broader health system reporting. This is captured on page 6 of the FPA_PHC paper.

2.5 Data Collection, Data Quality Assurance, Analysis and Reporting

Once the focal areas have been identified, the objectives defined, and the indicators selected, mechanisms for data collection can be determined. The most appropriate primary source for the national priority domain indicator data is likely to be a revamped Division annual report, though data for some indicators might be derived from national data collections disaggregated to Division level (eg notifications of vaccine-preventable diseases).

Different data collection mechanisms have different consequences for data quality assurance, analysis and reporting. The NQPS will only be credible if the data are trusted to be accurate. Therefore data quality assurance needs to be built into the system. Accreditation has built-in quality auditing processes. Self-reported data from general practices to Divisions, and from Divisions to government would also need data quality controls, including an audit process.

Who collates, analyses and reports on the data would also need to be resolved. The accreditation component of the NQPS would be self-contained and responsibility for it left to individual Divisions to implement through approved providers. For the national priority domain indicator data, an institutional base for collation, quality assurance, analysis and reporting would need to be identified and resourced.

6. Incentives for Participation in the NQPS

The key role of Divisions is to support primary care providers in delivering high quality outcomes from primary care for Australia. Divisions are not themselves care providers. Therefore many of the performance indicators will be process-type measures and incentives will need to be designed accordingly. In this context, there seem to be basically two types of incentives which could be applied to Divisions: financial and structural.

In terms of financial incentives, a fundamental issue for consideration is that there is currently no real sanction on Divisions related to their performance. Essentially Divisions are funded as of right and there is no notion of competition around the services they provide. Under the current funding model, some key areas of consideration would include:

1. Levels of participation in Divisions' activities. If divisions are providing services which are useful to providers, then they should have high rates of participation from providers within their geographic boundaries. An example might be the extent to which member practices are prepared to provide quality data for the Division to report on NQPS indicators. This might depend to a considerable extent on the timeliness and quality of information feedback to practices (practice comparisons etc). A simple incentive would be to have some component of Divisions' funding tied to such market penetration.
2. Efficiency of operation. Overhead costs for Divisions could be benchmarked nationally and penalties applied to those who exceed the established benchmark.
3. Breadth of services. A core range of services which Divisions are expected to provide can be established and funding penalties applied where those services are not provided.

In terms of structural approaches, consideration could be given to different funding models which would allow for more competition. As the market in providing support services to primary care providers becomes more mature, there is no reason why any organisation would have a geographic provider monopoly. Government could tender for services to be provided within determined geographic areas either for all support services or for specified clusters of services. For example some organisations might be able to provide specialised IT support and different organisations specialise in aspects of Continuing Professional Development.

More radically, one might question whether geography is necessarily the best basis of clustering primary care support. Provided the standards and effectiveness are not compromised it seems irrelevant whether primary care providers receive their support services from a local supplier or from a supplier or suppliers physically remote. Conceptually Divisions could be a mix of geographical 'interest' and 'community of interest' – for example, would support for improved performance in dealing with Indigenous communities work better on a 'community of interest' model?

References

Web Links

1. The NHS Plan. URL: <http://www.dh.gov.uk/assetRoot/04/05/57/83/04055783.pdf>
2. The New Zealand Health Strategy and The Primary Health Care Strategy. URL: <Http://www.moh.govt.nz/publications/nzhs>
3. Indicators and targets web address for NHS. URL: http://www.nhsconfed.org/docs/quality_and_outcomes_framework_guidance.pdf
4. Commonwealth Fund five-country study. URL: <http://www.cmwf.org/>.
5. Canadian Roadmap Initiative. URL: www.cihi.ca
6. Performance Indicators for Primary Care Trusts in the NHS. URL: <http://www.nhs.uk/england/aboutTheNHS/starRatings/pctPI.cmsx>
7. New Zealand Ministry of Health. RSM Performance Indicators and Payments, Policy Paper No. 3. URL: [http://www.moh.govt.nz/moh.nsf/0/5C76857F2D013D70CC256DDD007F1DE9/\\$File/RSMperformanceIndicatorsPayments.pdf](http://www.moh.govt.nz/moh.nsf/0/5C76857F2D013D70CC256DDD007F1DE9/$File/RSMperformanceIndicatorsPayments.pdf)
8. New Zealand Ministry of Health. PHO Clinical Performance Indicators Status Report. URL: [http://www.moh.govt.nz/moh.nsf/0/5C76857F2D013D70CC256DDD007F1DE9/\\$File/PHOCPStatusreportApr04.pdf](http://www.moh.govt.nz/moh.nsf/0/5C76857F2D013D70CC256DDD007F1DE9/$File/PHOCPStatusreportApr04.pdf)
9. WIPA Greater Wellington Health Trust. URL: <http://www.wipa.org.nz/Documents/WIPA%202003%20Annual%20Report.pdf>
10. National Committee for Quality Assurance (NCQA). 2003. HEDIS 2004 Summary Table of Measures and Product Lines [online]. NCQA. Accessed 16 October 2003. URL: <http://www.ncqa.org/programs/hedis/Hedis%202004%20Summary%20Table.pdf>
11. Indian Health Service. 2003. Indian Health Performance Evaluation System: Ambulatory Care Indicators [online]. US Department of Health & Human Services. Accessed 28 October 2003. URL: http://www.ihs.gov/misc/links_gateway/download.cfm?doc_id=5591&app_dir_id=4
12. Canadian Institute for Health Information (CIHI). 2003. Health System Performance - Health Indicators, May 2003, Catalogue no. 82-221-XIE [online]. CIHI. Accessed 16 October 2003. URL: <http://secure.cihi.ca/indicators/en/defin3.shtml>
13. Health Canada. 2003. A Statistical Profile on the Health of First Nations in Canada [online]. Health Canada. Accessed 30 October 2003. URL: http://www.hc-sc.gc.ca/fnigb-dgspni/fnihb/sppa/hia/publications/statistical_profile.pdf
14. Joint Accreditation Services Australia and New Zealand register. URL: <http://www.jas-anz.com.au/showpage.php#>).
15. Sibthorpe B. A Proposed Conceptual Framework for Performance Assessment in Primary Health Care. URL: http://www.anu.edu.au/aphcri/Publications/conceptual_framework.pdf

Authored Papers and Reports

- Australian Institute of Health and Welfare. *Australia's Health 2002*. Canberra: Australian Institute of Health and Welfare, 2002.
- Australian Institute of Health and Welfare. Rural, regional and remote health: information framework and indicators. Version 1. Canberra: Australian Institute of Health and Welfare, 2003.
- Campbell, S.M., M.O. Roland, and S.A. Buetow, *Defining quality of care*. Soc Sci Med, 2000. 51(11): p. 1611-25.
- Commonwealth of Australia. *The Future Role of the Divisions Network*. Canberra: Commonwealth of Australia, 2003.
- Commonwealth of Australia. Report on Government Services 2003, Volume 1. Canberra: Commonwealth of Australia, 2003.
- Commonwealth of Australia. *Divisions of General Practice: Future Directions*. Government Response to the Report of the Review of the role of Divisions of General Practice. Canberra: Commonwealth of Australia, 2004.
- Cooperative Research Centre for Aboriginal & Tropical Health (CRCATH). Development of a Performance Reporting System for Indigenous Primary Health Care. Report of a project by the Cooperative Research Centre for the Primary Health Care Access Program Working Group. Casuarina: Cooperative Research Centre for Aboriginal & Tropical Health, 2003
- Crampton P, Perera R, Crengle S, Dowell A, Howden-Chapman P, Kearns R, Love T, Sibthorpe B, Southwick M. *What makes a good performance indicator? Devising primary care performance indicators for New Zealand*. Journal of the Medical Association of New Zealand 2004; 117 (1191):
- Donabedian A. *The Quality of Care: How can it be assessed?* Journal of the American Medical Association 1988; 260: 743-1748.
- Giuffrida, A., H. Gravelle, and M. Roland, *Measuring quality of care with routine data: avoiding confusion between performance indicators and health outcomes*. BMJ, 1999. 319(7202): p. 94-8.
- Harris M, Powell-Davies G. Integration between GPs, hospitals and community health services. In: Commonwealth Department of Health and Aged Care, *General Practice in Australia: 2000*. Canberra: Commonwealth of Australia, 2000.
- Hurst, J. Performance measurement and improvement in OECD Health Systems: Overview of issues and challenges. Paper presented to the OECD Conference: *Measuring Up: Improving Health Systems in OECD Countries*. 2001. Ottawa, Canada.
- Keleher, H., *Why primary health care offers a more comprehensive approach to tackling health inequalities than primary care*. Australian Journal of Primary Health, 2001. 7(2): p. 57-61.
- Lawrence, M. and F. Olesen, *Indicators of quality in health care*. European Journal of General Practice, 1997. 3: p. 103-108.
- Mott K, Kidd M, Weller D. Quality and Outcomes in General Practice. In: Commonwealth Department of Health and Aged Care, *General Practice in Australia: 2000*. Canberra: Commonwealth of Australia, 2000.

Murray, C.J. and J. Frank, *A framework for assessing the performance of health systems*. Bull World Health Organ, 2000. **78**(6): p. 717-31.

Naylor, D., K. Iron, and K. Handa. Measuring health system performance: problems and opportunities in the era of accountability. *Measuring Up: Improving Health Systems in OECD Countries*. 2001. Ottawa, Canada..

National Health Performance Committee. *National Health Performance Framework Report*. Queensland Health, 2001.

Rossi PH, Freeman HE. *Evaluation: A Systematic Approach*. 5th ed. Newbury Park: Sage, 1993.

Starfield B. *Primary Care: Concept, Evaluation and Policy*. New York: Oxford University Press, 1992.

Starfield B. *Primary Care: Balancing Health Needs, Services, and Technology*. Revised Edition. New York: Oxford University Press, 1998, p438.

Territory Health Services. National Aboriginal Health Performance Indicators. Darwin: Aboriginal Health Strategy Unit and Epidemiology Branch, Territory Health Services, 1997.

TVW Telethon Institute for Child Health Research. Preliminary Validation of the Proposed Whole of Government Indicators Addressing Indigenous Disadvantage (Feb 2002): A Report to the Western Australian Department of Indigenous Affairs. Perth: TVW Telethon Institute for Child Health Research, 2002.

World Bank. *World Development. Report Investing in Health*. New York: Oxford University Press, 1993.

World Health Organization. *Alma Ata Declaration on Primary Health Care*. Geneva: World Health Organization, 1978.

World Health Organization. *The World Health Report 2000*. Geneva: World Health Organization, 2000.

World Health Organization. *Primary Health Care: A Framework for Future Strategic Directions*. Geneva: World Health Organization, 2003.