



## Australian Primary Health Care Research Institute

---

### A Proposed Conceptual Framework for Performance Assessment in Primary Health Care

#### A Tool for Policy and Practice

Beverly Sibthorpe<sup>1</sup> PhD

2004

[http://www.anu.edu.au/aphcri/Publications/conceptual\\_framework.pdf](http://www.anu.edu.au/aphcri/Publications/conceptual_framework.pdf)

---

#### Introduction

As health systems strive to achieve improvements in quality, equity and efficiency, there is a need for coherent conceptual frameworks to underpin performance assessment. This is as relevant at the level of delivery (programs and services) as of policy.

A conceptual Framework for Performance Assessment in Primary Health Care (FPA\_PHC) has been developed. It is grounded in evaluation theory and explicitly identifies the processes of primary health care articulated in the WHO's *Declaration of Alma Ata* [1] and recent review *Primary Health Care: A Framework for Future Strategic Directions* [2].

It is based on Donabedian's [3] now classic 'structure', 'process', 'outcome' model for assessment of quality of care. This model has also been adapted by others [4] and is in keeping with the approach recommended by the World Bank [5]. Donabedian's model is in turn based on robust theory underpinning program evaluation more generally [6].

FPA\_PHC is objectives based. That is, it recognises that performance must be measured against a defined set of objectives. It specifies that the primary objectives of the primary health care system as a whole, and of the programs and services within it, relate to consumers, rather than to policy makers, programs or providers.

The framework is described below. It is intended to be a practical and useful tool. It has undergone considerable refinement since it was first developed and a number of previous versions are in local circulation as a result of informal field testing in a number of policy settings. This is the fourth version (FPA\_PHC\_v4).

---

<sup>1</sup> Early development of the FPA\_PHC was undertaken by Beverly Sibthorpe, Sandra Eades and Karen Gardner while at the National Centre for Epidemiology and Population Health, ANU (Sibthorpe and Gardner) and the Menzies School for Health Research, Darwin (Eades), as part of a project funded by the Australian Government Office of Aboriginal and Torres Strait Islander Health. Beverly Sibthorpe has subsequently tested and refined the framework.

## Overview of the Framework

FPA\_PHC\_v4 is shown in Figure 1. It has four components:

- Stewardship
- Organisational Structures and Processes
- Processes of Care
- Intermediate Outcomes

Within FPA\_PHC\_v4, the **primary objectives** relate to the **intermediate health outcomes for consumers** that the services or programs are trying to achieve. These would take the form of specified targets for client populations. However, because performance must be assessed across the continuum from stewardship to intermediate outcomes, **sub-objectives** are required for each component in order to operationalise the framework in a coherent way. Thus sub-objectives would need to be specified for stewardship, organisational structures and processes, and processes of care. Performance against the objectives and sub-objectives can be assessed either qualitatively or quantitatively. Qualitative and quantitative measures (indicators) that relate to the objectives (specified population targets) and sub-objectives are developed to assess performance.

### Stewardship

This identifies the functions governments must perform in order for primary health care services and programs to be implemented. These include the development of policies with clear objectives, financing and funding arrangements, contracting (including reporting requirements), workforce development, IT infrastructure support and research and development.

### Organisational Structures and Processes

These equate to Donabedian's 'structures' (see Table 1), or "the attributes of material resources ... human resources and ... organizational structure" [3: p1745]. The sub-headings identify the structures and processes that a primary health care provider would need to establish, implement and maintain in order to operate. These include physical facilities and equipment; staffing including deployment; staff training and development; human resources management; service organisation and management, including development and use of protocols; financial management; information systems; needs assessment; and performance assessment.

Table 1. FPA\_PHC mapped to Donabedian's [3] Model for Assessment of Quality of Care

<b>FPA_PHC</b>	<b>Donabedian's Framework</b>
Stewardship	Not specified
Organisational Structures and Processes	'Structures'
Processes of Care	'Processes'
Intermediate Outcomes	'Outcomes'

### Processes of Care

These equate to Donabedian's 'processes' – the actions taken by providers and patients in care processes. They are derived from the WHO's Declaration of Alma Ata and subsequent review of primary health care [1,2] and the related policy literature [eg 7-9]. They are:

- health promotion
- illness prevention
- sick care
- advocacy
- community development

Processes of care are usefully distinguished from organisational processes, rather than being combined with them, because there are many important organisational processes worthy of identification and monitoring that do not involve direct patient care. The separation also allows a primary health care provider to identify and monitor care processes linked to particular priority health issues and conditions. Such processes of care – eg monitoring HbA1c levels in the management of diabetes - would however, need to be underpinned by organisational processes, such as the establishment and use of evidence-based protocols for the management of chronic diseases. In addition, separating out the processes of care involved in primary health care makes explicit the advocacy and community development roles that characterise care within this model. In this setting these activities are ultimately about improving the health of patients, families and communities.

### **Intermediate Outcomes**

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 measured*” [10: p94]. “Therefore, for performance purposes, health outcomes can be narrowly defined as those changes in health status [that are] strictly attributable to the activities of health systems” [11: p5]. The two principal domains of outcomes are health status and user evaluation [12]. It is recognised that primary health can only be held accountable for intermediate health status outcomes [13]. Within PA\_PHC\_v4, health status objectives and thus measures of performance therefore relate to:

- specified targets for risk behaviours (smoking, exercise, nutrition);
- specified targets for measures of clinical status (blood pressure, HbA1c levels); and
- specified targets for client satisfaction.

### **Quality, Equity and Efficiency**

Consumers, providers and governments are interested in the quality, equity and efficiency of their primary health care services and programs. These are overarching goals for health care systems. How are they addressed in this framework?

#### *Quality*

FPA\_PHC is a framework that allows the monitoring of achievement, across the primary health care system, of specified targets for consumers. It is thus a quality framework.

#### *Efficiency*

“Efficiency measures whether healthcare resources are being used to get the best value for money. ... [It] is concerned with the relation between resource inputs ... and either intermediate outputs ... or final health outcomes...”<sup>2</sup> [14] Efficiency is specified within FPA\_PHC\_v4 as an assessment of the relationships between costs of organisational structures and processes, processes of care, and intermediate outcomes. The efficiency of stewardship functions could also be assessed.

---

<sup>2</sup> This is “micro-determined efficiency”. “Macro-determined efficiency” is efficiency attributable to the setting of the level of public expenditure on health services. [18]

### *Equity*

Within FPA\_PHC\_v4, equity can be assessed following the approach of the National Health Performance Framework by asking of processes of care and intermediate outcomes ‘is it the same for everyone?’

### **National Health Performance Framework**

Performance assessment in primary health care is often operating in the context of wider health performance frameworks such as those being used in Australia [15] and Canada [[www.cihi.ca](http://www.cihi.ca)]. These frameworks encompass ‘health status and outcomes’, ‘determinants of health’ and ‘health system performance’, of which primary health care is but a part. They are not objectives-based however, so they cannot be readily adapted to an objectives-based approach to performance assessment for services and programs. In order to contribute to broader health performance reporting, FPA\_PHC\_v4 measures can be mapped to these frameworks.

### **Practical Application**

How would the framework be used in practice? Table 2 demonstrates this with respect to diabetes management in general practices, supported by Divisions. As part of a broader chronic disease strategy the Australian Government identifies diabetes management as a priority for implementation through Divisions of General Practice. It develops a parsimonious set of **objectives relating to intermediate outcomes for patients**. These are reflected in the *measures of clinical status and patient satisfaction* shown in column 5. Targets could be set for the objectives ie the target for the last HbA1C of 10 or less might be 85% and the target for patient satisfaction very good to excellent might be 90%.

Sub-objectives are developed for Government planning and implementation processes and these are reflected in the *process measures* shown in column 1. Similarly, sub-objectives relating to organisational structures and processes for Divisions and for practices are developed and these are reflected in the *structure and process measures* in columns 2 and 3, respectively. A fourth set of sub-objectives that relate to processes of care are also developed and these are reflected in the *measures of processes of care* shown in column 4.

There would not necessarily be a one-to-one relationship between measures (or objectives and sub-objectives) in one column and measures in subsequent columns. Many organisational structures and processes might be put in place, but only a small number of key measures of intermediate health outcome would be chosen. Further, there may not always be a direct evidence base for the link between the objectives/outcomes developed for each of the players. Rather, it is likely that in many instances sub-objectives relating to organisational structures and processes, and processes of care, are reasonably expected to contribute to achievement of the desired intermediate outcomes.

Equity would be assessed by disaggregating the data on the measures of processes of care and intermediate outcomes to examine differences between groups, for example based on age, ethnicity or socio-economic status.

Efficiency would be assessed by examining the relationships between costs and intermediate outcomes.

## Feedback

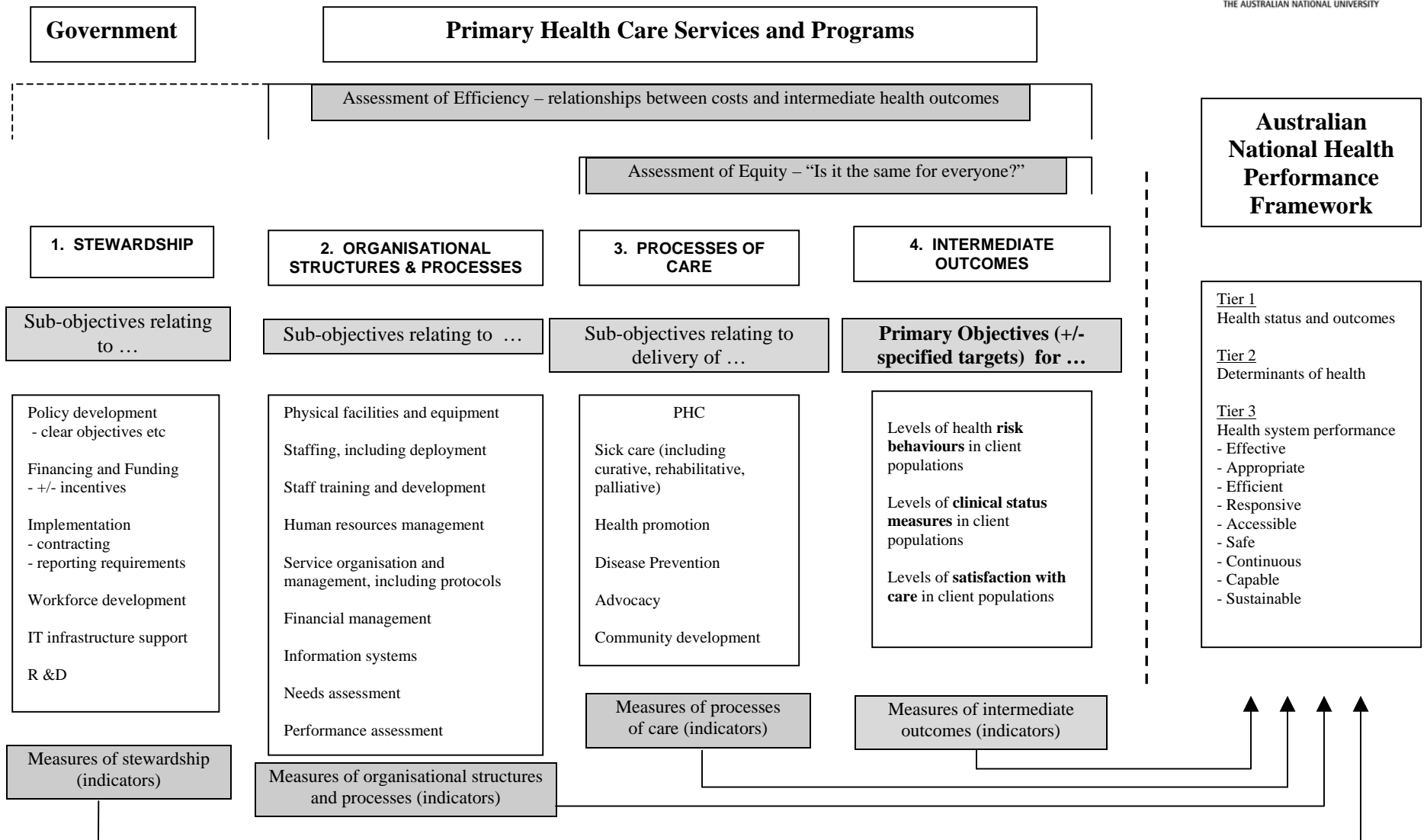
Feedback on the strengths and weaknesses of the framework is welcomed

[beverly.sibthorpe@anu.edu.au](mailto:beverly.sibthorpe@anu.edu.au) and may lead to further refinement and publication of subsequent versions.

## References

1. World Health Organization. *Alma Ata Declaration on Primary Health Care*. Geneva: World Health Organization, 1978.
2. World Health Organization. *Primary Health Care: A Framework for Future Strategic Directions*. Geneva: World Health Organization, 2003.
3. Donabedian A. *The Quality of Care: How can it be assessed?* Journal of the American Medical Association 1988; 260: 743-1748.
4. Campbell SM, Roland MO, Buetow SA. *Defining quality of care*. Social Science and Medicine 2000; 51(11): 1611-25.
5. World Bank. *World Development. Report Investing in Health*. New York: Oxford University Press, 1993.
6. Rossi PH, Freeman HE. *Evaluation: A Systematic Approach*. 5th ed. Newbury Park: Sage, 1993.
7. Australian Health Ministers Advisory Council. Continuing Education for Primary Health Care in Australia, 1998; cited in Fry D, Furler J. General Practice, primary health care and population health interface; in *General Practice in Australia: 2000*. Canberra: Commonwealth Department of Health and Aged Care, 2000.
8. Ministry of Health. *The Primary Health Care Strategy*. New Zealand Government, 2001.
9. Department of Health and Children. *Primary Care - A New Direction*. Government of Ireland, 2001. [http://www.doh.ie/hstrat/primcare/part\\_two.html](http://www.doh.ie/hstrat/primcare/part_two.html)
10. Giuffrida A, Gravelle H, Roland M. *Measuring quality of care with routine data: avoiding confusion between performance indicators and health outcomes*. British Medical Journal 1999; 319(7202): 94-8.
11. 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
12. 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): pp.
13. Van Norren B, Boerma JT, Sempebwa EK. *Simplifying the evaluation of primary health care programmes*. Social Science and Medicine 1989; 28(10): 1091-7.
14. Palmer S, Torgerson D. Definitions of efficiency. British Medical Journal 1999; 318:1136.
15. National Health Performance Committee (NHPC). 2001. National Health Performance Framework Report. Brisbane: Queensland Health.

# Framework for Performance Assessment in Primary Health Care - FPA\_PHC\_v4



**Beverly Sibthorpe, Australian Primary Health Care Research Institute, 2004.** [http://www.anu.edu.au/aphcri/Publications/conceptual\\_framework.pdf](http://www.anu.edu.au/aphcri/Publications/conceptual_framework.pdf)  
 Refined, tested and further refined from early work undertaken by Beverly Sibthorpe, Sandra Eades and Karen Gardner while they were at the National Centre for Epidemiology and Population Health, ANU (Sibthorpe and Gardner) and the Menzies School for Health Research, Darwin (Eades) as part of a project funded by the Australian Government Office of Aboriginal and Torres Strait Islander Health, 2003.

Table 2. Types of Measures in a Hypothetical Framework Relating to Diabetes

<b>Measures of Stewardship</b> Government	<b>Measures of Organisational Structures and Processes</b> Division	<b>Measures of Organisational Structures and Processes</b> Practice(s)	<b>Measures of Processes of Care</b>	<b>Measures of Intermediate Health Outcomes</b>	<b>National Health Performance Framework Domains</b>
Priorities and objectives relating to diabetes clearly specified	Guidelines identified and promulgated; %uptake by practices	Diabetes register established and maintained *	Proportion of patients with diabetes whose notes record BMI in last 12 months *	Proportion of patients with diabetes in whom the last HbA1C is 10 or less in the last 12 months *	Appropriate
Funding identified	CME implemented; % GPs participating; level of GP satisfaction	Guidelines for diabetes management implemented	Proportion of patients with diabetes whose HbA1C has been recorded in the last 12 months *	Proportion of patients with diabetes whose last measured total cholesterol with the previous 12 months is 5mmol/l or less *	Effective
Contractual arrangements with Divisions implemented, including accountability requirements	Data collation, quality assurance, analysis and reporting undertaken; average time taken to deliver quarterly report	Requisite data routinely collected	The proportion of patients with diabetes who have a record of total cholesterol in the last 12 months *	Proportion of patients with diabetes responding to a patient satisfaction questionnaire who rate their care as very good to excellent	Responsive
Minimum data set agreed		Requisite data transferred quarterly to Division			Accessible
			Is it the same for everyone?		Equity
	What is the relationship between costs and intermediate health outcomes?				Efficiency

\* Indicators drawn from NHS Quality and Outcomes Framework [16]