

Primary Health Care and General Practice

A scoping report

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Executive summary

Primary health care (PHC) is a term which has come to have many different meanings to different people. Recognising the complexities behind the term, and the relationships between PHC, population health and general practice are important steps in addressing any possible shift in emphasis from general practice to PHC.

The philosophy behind PHC is based upon:

- holistic understanding and recognition of the multiple determinants of health
- equity in health care
- community participation and control over health services
- focus on health promotion and disease prevention
- accessible, affordable, acceptable technology
- health services based upon research methods.

These philosophical ideals have been variously interpreted into strategies and services which further the ideals. Primary health care strategies include needs based planning and decentralised management, education, intersectoral cooperation, multi-disciplinary health workers and a balance between health promotion, disease prevention and treatment. Services to provide primary health care should be locally based, affordable and acceptable, well integrated and offer a multi-disciplinary range of care from health promotion to rehabilitation.

This original ideal of primary health care has become known as comprehensive PHC. This is in contrast to selective primary health care which is more medically focused with a reliance upon medical interventions and doctors for provision of and control over health services. Despite significant philosophical differences, comprehensive and selective primary health care may appear to offer similar services.

Population health shares many principles with comprehensive primary health care, in particular the focus upon equity, community participation, integration, intersectoral collaboration, multi-disciplinary teams and health promotion.

How does general practice fit with primary health care? There are currently areas of philosophical overlap, such as an holistic view of health, use of research-based methods, and some provision of health promotion and preventive services. There are some areas of significant difference; general practice does not address equity in health care, the acceptability of technology, or community control over health services. At a service level,

general practice may closely resemble PHC services in being locally based, largely affordable and providing a range of preventive and treatment options.

However, to achieve a significant change from a general practice model to a primary health care model will require changes in both policy and organisation. In particular, achieving intersectoral collaboration and local planning and management of primary health care services requires an explicit commitment to equity in health care and strategic planning across all levels of government as well as across traditional departmental barriers.

Possible organisational changes to strengthen primary health care in Australia include the creation of formal structures to support community and consumer involvement, the organisation of health care services to decrease competition between providers, and the creation of primary health care teams as functional units.

At a practical level, changes in research, programs and conferences may all contribute towards this shift. In particular, innovations in research funding, such as the development and implementation of a PHC framework for assessing research proposals is an effective way of achieving change.

Introduction

The relationship between general practice and primary health care is complex, and often difficult to clearly define. This report aims to clarify some of the issues by: describing areas of similarity and difference between primary health care and general practice; identifying issues to be addressed in any shift from general practice towards primary health care; and by providing case studies of research and programs both with and without a primary health care focus.

The first section of the report describes and defines both primary health care and general practice, highlighting the areas of overlap and the major philosophical and strategic differences.

The second section builds upon existent Australian work in identifying issues to be addressed in strengthening primary health care in Australia. These issues fall into two main areas of policy objectives and organisational changes.

Section Three consists of brief case studies giving examples of both research and programs in the categories of medical model, selective primary health care and comprehensive primary health care.

Section 1

Primary health care and general practice

The aims of this section are to define and describe general practice and primary health care, and to identify areas of overlap and difference.

Introduction

The term 'primary health care' (PHC) gained widespread currency following the 1978 International Conference on Primary Health Care held by the World Health Organisation (WHO) and UNICEF at Alma-Ata. Since that time, PHC has meant many different things to many different groups. In this section we wish to briefly summarise the key characteristics of PHC and draw attention to those elements of PHC which are most relevant to this report. In particular, we need to pay attention to the relationship between PHC and population health.

1.1 Primary health care: the Declaration of Alma-Ata

The Declaration of Alma-Ata is a ten point statement calling for:

urgent and effective national and international action to develop and implement primary health care throughout the world. (WHO 1978)

The Declaration identifies health as a fundamental human right for which national governments and the international community should be responsible, citing inequalities in health between nations as a matter for the utmost concern. Primary health care is described as the key to attaining health for all by the year 2000.

Section seven of the Declaration defines PHC in detail. This definition is summarised in box 1.

Box 1: Features of primary health care

- Offers research-based health care reflecting national economic, political and socio-cultural characteristics
- addresses community needs through provision of promotive, preventive, curative and rehabilitative services
- focuses on population health approaches
- requires multi-sectoral cooperation and coordination in national and community development
- requires and promotes individual and community participation and self-reliance
- supported by integrated, comprehensive and equitable health care systems

- provided by multi-disciplinary teams of health workers.

1.2 Primary health care: philosophy, strategy or services?

It is possible to identify three elements within the WHO description of primary health care. First, PHC represents a philosophical approach to health and health care. This approach is characterised by an holistic understanding of health as wellbeing, rather than the absence of disease. The presence of good health is dependent upon multiple determinants; health services are important but so too are housing, education, public works, industry, agriculture, communication and other services. The health status of communities is both a function of and a reflection of development in those communities. The locus of control is important in PHC; health services should reflect local needs and involve communities and individuals at all levels of planning and provision of services. Services and technology should be affordable and acceptable to communities. Through health promotion and preventive care, PHC aims to eliminate causes of ill health. Equity is a crucial part of PHC; health services must strive to address inequity and prioritise services to the most needy. Finally, PHC should be based upon social, biomedical and health services research in order to provide effective health care.

Box 2: Primary health care philosophy

- Holistic understanding of health
- recognition of multiple determinants of health
- community control over health services
- health promotion and disease prevention
- equity in health care
- research-based methods
- accessible, acceptable, affordable technology.

The second element of PHC is strategic: PHC involves a set of strategies aimed at creating health care which is consistent with the underlying philosophy. These strategies include needs based planning of decentralised health services, offering management to local communities. Education is a key strategy in PHC; through education communities and individuals gain understanding of and control over health problems. Intersectoral cooperation and coordination is a significant part of PHC. This requires cooperation at all levels, from government planning through to local implementation, across traditional departmental boundaries. Primary health care services require balance between health promotion, preventive care and illness treatment. This is best achieved through the use of a team drawn from a variety of disciplines, not only including medical, and nursing health professionals but

also including community workers, population health professionals, health promotion workers, and educators.

Box 3: Primary health care strategies

- Needs-based planning
- decentralised management
- education
- intersectoral coordination and cooperation
- balance between health promotion, prevention and treatment
- multi-disciplinary health workers.

The third element of PHC describes the kind of services provided by PHC, both as a set of activities and as a level or model of service provision. Primary health care is the first level of health care, that which is directly accessible to individuals and communities. This means that effective PHC must be locally based, in proximity to the places where people live and work. Geographic barriers may be overcome by locally situated services; to be universally accessible, PHC services must also be free from financial barriers. As the first level of health care services, PHC services need to be well integrated with the secondary and tertiary health care sectors, in order to provide continuity of care for people throughout all levels of the health care system. This involves attention to cooperation and communication. Primary health care services require cooperative efforts from a team of health care providers drawn from a range of disciplines. Finally, PHC should offer a range of services in health promotion, preventive care, illness treatment and rehabilitation.

Box 4: Primary health care services

- Locally based
- affordable and accessible
- well integrated
- health care teams
- health promotion
- disease prevention
- illness treatment
- rehabilitation services.

1.3 Comprehensive and selective primary health care

Primary health care, as defined in the Alma-Ata Declaration, sets a very demanding standard for health care. This has led to various changes and modifications of the original ideal,

resulting in what is known as selective primary health care (Wass 1995; Baum 1998). Wass describes the debate between proponents of selective primary health care and the original (comprehensive primary health care), arguing that selective PHC does not espouse the philosophical principles of comprehensive PHC. The differences between the two approaches are summarised in box 5.

Box 5: Differences between comprehensive and selective primary health care

	Comprehensive PHC	Selective PHC
View of health	Positive wellbeing	Absence of disease
Locus of control over health	Communities and individuals	Health professionals
Major focus	Health through equity and community empowerment	Medical solutions for disease eradication
Health care providers	Multi-disciplinary teams	Medical doctors
Strategies for health	Multi-sectoral collaboration	Medical interventions

The significance of this debate lies in the possible confusion between these two approaches; different people may mean vastly different kinds of health care and yet both are known as primary health care. In addition, the actual services provided by selective or comprehensive PHC may not differ greatly in practice; it is therefore important to identify the underlying values of any primary health care service as it is these which will determine the nature and overall aims of the service.

1.4 Primary health care and population health

As with primary health care, terminology and definitions are potentially problematic when discussing population health. We use the term “population health” to describe population based approaches to health care which are based upon the principles of the Ottawa Charter (WHO 1986). The Ottawa Charter is seen as the beginning of the new public health movement, which differs from traditional public health in its recognition of:

- the intersectoral nature of health promotion
- the need for community participation
- the importance of peoples’ environment in determining health (Wass 1995, 15).

Our use of ‘population health’ incorporates this understanding of the new public health.

The relationship between primary health care and population health is complex. The Ottawa Charter for Health Promotion builds upon the principles of primary health care, applying these in the area of health promotion. The similarities between the philosophical foundations of the

two movements are striking. The Ottawa Charter describes five areas for health promotion action:

- *Build healthy policy*, through legislation, fiscal measures, taxation and organisational change leading to policies which foster equity
- *Create supportive environments* which provide safe, stimulating, satisfying and enjoyable living and working conditions
- *Strengthen community action* in setting priorities and planning and implementing strategies
- *Develop personal skills* through providing education and enhancing opportunities for healthy choices
- *Reorient health services* towards the promotion and pursuit of health, using research-based methods.

The principles of the Ottawa Charter have become widely accepted in contemporary population health, creating a great deal of commonality between population health and primary health care services.¹

Box 6: Shared principles of PHC and population health

- Holistic understanding of health
- commitment to equity in health care
- commitment to community empowerment
- use of multiple strategies and intersectoral collaboration
- focus on preventive health care
- provision of integrated health and illness services
- use of multi-disciplinary methods and teams
- emphasis upon research and evidence-based practice.

In addition to sharing similar principles, population health is an integral component of primary health care. The reorientation from disease treatment towards maximization of health involves population health approaches. Thus any move towards primary health care will necessarily involve a significant emphasis upon population health.

Despite the shared ground and overlapping aims of PHC and population health, we feel that it is important to maintain the distinction: the two terms are not synonymous, and by collapsing them together, there are risks of ignoring important elements of both.

¹ See for example Sainsbury (1999), who describes a population health perspective based largely upon primary health care principles.

1.5 Primary health care in Australia

Since the 1970s, there have been various primary health care initiatives in Australia. These have been well documented in *Improving Australia's Health: the role of primary health care* (NCEPH 1992) and *Best Practice in Primary health Care* (Legge et al 1996). In addition to these, other authors give comprehensive summaries of field (Wass 1995; Baum 1998). Both the 1992 National Centre for Epidemiology and Population Health (NCEPH) report and the Legge et al (1996) research define PHC as a policy model, with the following features: 'The primary health care policy model comprises a set of structures, a set of principles and a set of projections' (NCEPH 1992, 1).

Box 7: Australian-defined principles of PHC

- Consumer and community participation
- collaborative local networking
- integration with secondary and tertiary sectors
- balancing of health care needs between micro (short term, illness-based) and macro (long term, health-based) issues.

This Australian interpretation of PHC falls short of the ideals of Alma-Ata, yet is more robust than selective PHC as discussed above. The main deficits in this interpretation are the lack of intersectoral collaboration, lack of an explicit commitment to equity, and absence of emphasis upon population health methods and approaches as a major tool of PHC.

The NCEPH review found that prevailing primary health care practice did not conform closely to these four principles. Structures and processes for supporting community and consumer participation were variable and generally poor. Barriers to local collaborative work included economic and professional competition between providers. Integration and partnerships between the primary sector and the rest of the health services were rare, with many problems identified, especially in the area of communication. The macro/micro balance was heavily weighted towards treatment of illness episodes with little focus on the social context of health and the underlying determinants of ill health.

Both of these reports identified specific areas for change and made a number of recommendations. Underlying system issues included competitiveness within the primary health care sector; rigidities associated with government involvements in health care; and differences of opinion regarding methodologies. Recommendations included a national primary health care policy and implementation plan and two policy initiatives: general practice reform and reshaping of Commonwealth-State/Territory relations in health.

Since that time we have had major reforms in general practice through the GP Strategy and subsequent review. However, of the three initiatives identified by NCEPH as contributing to the wider implementation of PHC in Australia, only the third has been addressed to any extent. The three initiatives are:

- provision of sessional payment for non-fee earning activities²
- development of voluntary enrolment arrangements with a capitation component to facilitate anticipatory care and greater involvement by general practitioners in population health
- funding support for research, quality assurance and continuing education in relation to general practitioner involvement in population health care

The report by Legge et al (1996) identified eight strategies of primary health care, shown in box 8.

Box 8: Australian-identified strategies of primary health care

- Consumer and community involvement
- collaborative local networking
- strong vertical partnerships
- intersectoral collaboration
- integration of macro and micro health issues
- organisational learning
- policy participation
- good management.

1.6 General practice

General practice is that part of medical practice which:

provides initial, continuing, comprehensive and coordinated medical care for all individuals, families and communities and which integrates current biomedical, psychological and social understandings of health
(RACGP, cited in Murtagh 1998).

There are many other definitions of general practice; however, this RACGP definition captures what are considered to be the crucial, distinguishing features of general practice:

- initial or primary care
- continuing care
- comprehensive care

² This is also one of the recommendations of the Towler Report (1999).

- coordinated care
- care for individuals, families and communities
- broad understanding of health.

These kind of descriptions of general practice define key characteristics, but say nothing about the organisation of general practice. However, general practice in Australia has been well described in the CDHFS publication *General Practice in Australia: 1996*. Together with the report of the General Practice Strategy Review Group, these two publications describe in detail contemporary Australian general practice, current initiatives of the GP Strategy,³ and analysis of the effects of those initiatives. For the purposes of this report, the remuneration structure of general practice is of significance: general practice services are largely provided on a fee-for-service (FFS) basis by independent practitioners. There are some exceptions to this, (for example salaried medical officers working in community health centres); and one of the key features of the GP Strategy has been to provide a mechanism for blended payments in a move away from FFS, but for the most part Australian general practice remains FFS.

The General Practice Strategy Review Group made many recommendations. Some of these are relevant for a primary health care approach. These are listed as broad themes, extracted from the summary of Strategy Review Group's recommendations:

- creating partnerships
- consumer and community involvement
- expanded role in public health for GPs
- quality initiatives, including research and use of evidence-based methods
- organisational changes
- development of the Divisions Program
- support for general practice at the state, territory and national level.

The Divisions Program is potentially extremely significant in any move towards a greater PHC focus. Initially Divisions specifically addressed issues of integration, resulting in many improvements particularly in the area of hospital-GP liaison. Divisions received dedicated funding for community liaison officers, and many Divisions formed community reference groups.⁴ Divisions are already working in areas of health promotion and disease prevention and assisting GPs to use population health approaches in their practice. Many Divisional projects use multi-disciplinary teams and have involved varying degrees of local networking

³ Key elements of the Strategy comprise: Divisions and Project Grants Program; Rural Incentives Program; Practice Incentive Program (formerly Better Practices Program); General Practice Evaluation Program; Relative Values Study; and quality and training initiatives with the RACGP.

⁴ There are concerns that the move to outcomes based funding may jeopardize continuing community involvement. See Rogers and Veale (1999).

and intersectoral collaboration.⁵ The current outcomes-based funding model for Divisions is linked to needs assessments, (although there are some reservations about the standard of these, Rogers and Veale 1999).

1.7 Differences between various aspects of general practice

The above discussion has not distinguished between three important components of general practice. These are:

- activities of general practitioners
- activities which occur in general practices
- activities which occur in Divisions of general practice.

The differences between these are important, because each component represents a different level of organisation and each component will have a different role in primary health care.

1.8 Areas of overlap and difference between primary health care and general practice

Using the definitions and discussions recorded above, it is possible to identify areas of overlap and difference between PHC and general practice.⁶

Box 9: Comparison of PHC philosophy with general practice

Principle	PHC	GP
Holistic understanding of health	Explicitly espoused	Explicitly espoused
Recognition of multiple determinants of health	Explicitly espoused	Not explicitly addressed
Community control over health services	Explicitly espoused	Variable recognition
Health promotion and disease prevention	Explicitly espoused	Becoming explicitly espoused
Equity in health care	Explicitly espoused	Not explicitly addressed
Research-based methods	Explicitly espoused	Explicitly espoused
Accessible, acceptable, affordable technology	Explicitly espoused	Not addressed

⁵ Examples of Divisional projects utilising PHC are given in Legge et al (1996) and RACGP (1999)

⁶ For this section we are using the summary of the philosophical principles of PHC, summarised in box 2, as it seems most reasonable to make initial comparisons at this fundamental level.

This box draws attention to some of the philosophical similarities and differences between general practice and PHC. Both share an holistic understanding of health and a commitment to the use of research based methods. However, general practice is not philosophically committed to equity, to a recognition of the multiple determinants of ill health, nor to affordable technology.

If we now examine the common points between primary health care and general practice strategies, a fuller picture starts to emerge.

Box 10: Comparison of primary health care strategies with general practice

Strategy	PHC	General Practice
Needs-based planning	Explicitly espoused	Not addressed at population level
Decentralised management	Explicitly espoused	Occurs in practice
Education	Explicitly espoused	Not addressed
Intersectoral coordination and cooperation	Explicitly espoused	Not addressed
Balance between health promotion, prevention and treatment	Explicitly espoused	Variably addressed: major focus on treatment
Multi-disciplinary health workers	Explicitly espoused	In practice limited to GPs plus nurses

The similarities become more pronounced as we move towards services. At the level of service provision, there are many similarities between general practice and primary health care.

Box 11: Comparison of PHC services with general practice

Service	PHC	GP
Locally based	Yes	Yes (with some exceptions)
Affordable and accessible	Yes	Yes
Well integrated	Yes	Variable
Health care teams	Yes	Variable
Health promotion	Yes	Very limited
Disease prevention	Yes	Variable
Illness treatment	Yes	Yes
Rehabilitation services	Yes	Variable

Herein lies the danger: through general practice it is possible to provide a health care service which may be indistinguishable from primary health care, yet these similarities mask significant philosophical and strategic differences.

To achieve greater PHC orientation in Australian general practice would require changes in the following areas.

- **Policy changes:**
 - explicit commitment to equity in health care, with subsequent changes in resource allocation
 - explicit commitment to community empowerment
 - explicit commitment to intersectoral cooperation
 - explicit commitment to review of technology for accessibility, affordability and acceptability.
- **Practical changes:**
 - community involvement in service organisation and provision
 - organisation of GPs within multi-disciplinary health care teams
 - greater focus on health promotion and disease prevention.

Further discussion of these issues follows in section two.

Section 2

Issues to be addressed in any shift from GP model to PHC model

Previous researchers have identified issues to be addressed in strengthening primary health care in Australia (NCEPH 1992; Legge et al 1996). In this section we draw upon their work in addition to the conclusions of the previous section. The issues fall into two main areas: policy objectives and organisational changes.

Policy objectives for strengthening PHC in Australia:

- support coordination and planning capacity at local level
- involve local government in population health planning: intersectoral collaboration
- create mandated structures to support community and consumer involvement in decision making
- strengthen advocacy for primary health care
- provide educational and consultative support
- provide information resources for primary health care
- engage in strategic planning by government
- support evaluation, innovation and development, including review of technology for accessibility, affordability and acceptability
- fund development of primary health care infrastructure.

Organisational changes to strengthen PHC in Australia:

- create formal structures to support community and consumer involvement in service organisation and provision
- create primary health care teams as functional units
- organise health care services to decrease competitiveness between providers
- support structures which facilitate greater health promotion and disease prevention in addition to the provision of illness services.

Issues to do with the organisation and provision of primary health care in Aboriginal communities has been comprehensively addressed in Couzos and Murray (1999). There are also a number of member services discussion papers available from NACCHO on various aspects of Aboriginal primary health care provision.

In addition to these policy and organisation changes, Legge et al (1996) identified three further preconditions for best practice in primary health care. These are:

- clarity of need
- strength of community

- inspirational leadership

These are very broad guides to strengthening primary health care in Australia.

With regard to shifting the emphasis from general practice to primary health care, we need to consider some of these issues more closely with regard to:

- research
- programs
- conferences.

Research

A primary health care perspective applied to general practice research might engage with the following issues:

- priorities for research to reflect the primary health care agenda: for example this might include a focus on issues to do with equity in health care
- development of a PHC framework to specify requirements for research projects. This might include requirements for:
 - topics for research driven by community identified need
 - collaboration in research– local networks, intersectoral
 - steering committees with consumer/community involvement
 - multidisciplinary research teams
 - compulsory elements of population health and/or health promotion
 - greater focus on implications of research for PHC.

Programs

We understand programs to include all of the activities undertaken by general practice in the broadest sense. That is programs include:

- national initiatives such as the programs of the National Public Health Partnership (NPHP)
- state initiatives such as breast screening
- Divisional programs
- activities at the level of the practice

Program issues include building greater links with general practice; consideration of the implications of PHC perspective for organisational aspects (including funding) and for practitioners; and multi-sector cooperation.

A possible approach here might involve developing a set of guidelines to increase the PHC elements in existing programs. This would require some evaluation of existing programs together with identification of strategies to alter the focus towards PHC.

Existent material on collaboration (for example Legge et al and RACGP 1999) would be of use here, both as case examples and in developing strategies for increasing collaborative partnerships.

Conferences

Although there is no national forum specifically dedicated to primary health care practitioners, the Public Health Association of Australia Conference has a strong focus on primary health care. In addition, there have been a number of ad hoc conferences in recent times including the primary health care conference in Brisbane in 1997 and the 1999 Adelaide conference organised by SACHRU.

A decision to fund an annual, national PHC would require consideration of the following issues:

- nature of invited speakers (disciplinary background)
- use of a PHC framework for papers
- implications for various practitioners, eg GPs, nurses, physiotherapists

If the GPEP conference was altered to a PHC conference, with a subsequent decrease in emphasis upon clinical issues, it would be important to encourage the continued attendance and participation of GP researchers. It may be possible to dedicate sections of a PHC conference to professional practice issues, thus creating space for all professional groups to address issues specific to their practice.

Section 3

Case studies of medical, selective and comprehensive primary health care research and programs

In this section we provide brief case studies of examples of both research and programs which fall into the categories of medical model, selective primary health care or comprehensive primary health care.

The divisions between these categories are not always clear cut; however it is possible to make distinctions as outlined in the box below (adapted from Wass 1995). The differences between selective PHC and the medical model are less marked than those between selective PHC and comprehensive PHC. Despite the similarities between selective PHC and the medical model, we feel it is worthwhile to distinguish between them as they have different major foci and locus of control.

Box 12: Differences between comprehensive and selective primary health care

	Comprehensive PHC	Selective PHC	Medical Model
View of health	Positive wellbeing	Absence of disease	Absence of disease
Locus of control over health	Communities and individuals	Health professionals	Medical Practitioners
Major focus	Health through equity and community empowerment	Health through medical interventions	Disease eradication through medical interventions
Health care providers	Multi-disciplinary teams	Medical doctors plus other health professionals	Medical doctors
Strategies for health	Multi-sectoral collaboration	Medical interventions	Medical interventions

3.1 Case studies of types of practice: research

Medical model research

GPEP 173: Cost-effectiveness analysis of a cardiovascular risk reduction program in general practice

The aim of this study was to investigate whether GP-administered lifestyle interventions are more cost-effective than routine care in the management of patients at risk of cardiovascular disease (CVD).

The efficacy of the CVD Risk Reduction Program was measured by a three-group randomised controlled trial with general practices as the unit of randomisation. The three intervention groups were: routine care; a video-based lifestyle change program; and a video-based lifestyle program with patient self-instructional materials. The program covered three aspects of CVD risk reduction: smoking cessation, healthy eating, and physical activity. Changes in cardiovascular risk factors, diastolic blood pressure, serum cholesterol and smoking status over twelve months were extrapolated (using Framingham risk equations based upon US epidemiological data) to long term changes in CVD morbidity and mortality effects.

Analysis of the data suggested that lifestyle interventions offered no additional benefit over routine care (which included drug therapy) in terms of CVD risk factor status over the entire study population. Whilst there appeared to be no relative benefit in the intervention groups, there was a small absolute benefit which varied according to risk factor status. This was not distributed evenly across the groups or between males and females, suggesting that lifestyle interventions aimed at high risk groups are more cost-effective than population-based interventions.

The study raised a number of methodological issues, including the validity of using risk equations based on US data to predict either absolute or relative risk of CVD; whether or not indirect costs should be included in the economic evaluation; and difficulties raised by confounding factors such as changes in drug therapy in the control group.

Commentary

This research is placed squarely within the medical model of disease treatment. The GP administers the intervention and assesses its effectiveness through monitoring physiological parameters.

The efficacy of the intervention is not addressed; the authors note that the intervention is taking place in general practice which inevitably decreases control of variables.

Cost-effectiveness is investigated through comparison of this intervention versus routine (medical) care; however, this study does not address wider issues of efficiency in terms of comparing this intervention versus alternatives such as a non-medical population health education campaign.

This study meets none of the primary health care criteria of Legge et al (1996)(see table 1).

However, as a self contained piece of research investigating application of interventions in general practice, there is little call for engagement with PHC criteria.

This study is of value in highlighting the problems associated with trying to determine the effectiveness and cost of GP administered interventions designed to decrease the risk of cardiovascular disease. The problems include short assessment time frames for what is a long term health issue, and uncontrolled variables including changing routine care (especially changes in prescribed drugs) in the control group.

Selective PHC research

GPEP 334: Yarrowonga home assessment of elderly

The aim of this study was to initiate research into the benefits of home assessment for the elderly, and to investigate whether the British experience of this assessment can be adapted to the Australian situation.

Using an age-sex register of people aged over 75 years living in a Victorian country town, a random sample of 37 people were selected and accepted a functional assessment. During the interviews, 55 previously unrecognised major problems were uncovered in 25 of the participants. The problems included:

- 16 participants at high nutritional risk
- 16 participants with mobility problems and obvious hazards in the home
- 6 participants with drug interactions or omissions
- 6 participants with significant and progressive impairment of memory
- 6 participants with Barthel Activities of Daily living scores of less than 80
- 4 participants with hearing impairment without functional hearing aid
- 1 participant with cataract

Two focus groups with a total of 27 participants explored the needs and concerns of the elderly population in terms of supports necessary to keep them living independently at home.

The authors found that the most useful facility to allow the elderly to remain living independently is a daily visit from a relative. The authors concluded that functional home assessments for elderly patients may be a cost-effective way of identifying previously unrecognised functional problems, but that evaluation is required to determine the benefits of identifying previously unrecognised medical problems. In addition, this study highlighted the importance of carers in maintaining the independence of the elderly.

Commentary

This project is an example of selective primary health care research. The researchers (a team comprising two general practitioners and a nurse) used a functional assessment to determine the health status of a selected group of people aged over 75 years. Health is implicitly defined as absence of functional deficits.

The authors discuss the conflicting international literature on the effectiveness and efficiency of health assessments in the elderly. The functional health assessment, administered at home by a trained nurse, is both efficacious and effective in terms of identifying previously unknown health problems (as documented by participants' GPs). However, it is not clear from the international literature whether these findings translate into decreased morbidity and mortality amongst the screened population. There is little data to date on the Australian situation.

The efficiency of home functional assessments has not been assessed. However, this may be expected in the near future given the recent introduction extended primary care package with MBS items for health assessments in the homes of patients aged 75 years and over. The authors present a detailed cost analysis for home assessments performed by a nurse.

This study involved the community through two focus groups which had the aim of seeking the views of the local elderly community on their service needs. The study did not involve collaboration with other services or integration with health providers other than providing information to the participants' GPs.

This study provides a useful model for home functional assessments of the elderly, and contributes to Australian data on the cost and effects of such assessments. Further research is required to determine the effectiveness and efficiency, particularly in comparison to similar assessments performed by GPs.

Comprehensive PHC research

The Campbelltown asthma project (incorporating GPEP 133: An evaluation of the effectiveness of intensive GP training upon asthma management)

This project represented a community-wide asthma education research project. Among its aims were:

- 1 To measure the prevalence of asthma in children in the Campbelltown region
- 2 To identify the levels of, and quality of management of asthma in children in the area
- 3 To identify the needs, barriers, and perceptions of health and education professionals regarding asthma management
- 4 To develop an intervention focused upon improving GPs' management of asthma and
- 5 To develop post-intervention monitoring and surveillance systems that would assess the impact and maintenance of the community-wide asthma education program. (Aim five was that part of the project funded by GPEP).

The project was divided into three phases. The first phase comprised comprehensive studies of the prevalence of asthma in children, together with an extensive series of needs assessments of key groups involved in asthma management, including GPs, nurses, school teachers and other early child care workers. The second phase involved a series of interventions targeted at all key asthma-oriented professional groups. Educational activities were also developed for the general community. The third phase consisted of impact and outcome evaluation using serial population surveys.

The results indicated that, during and following the intervention, there was a significant increase in the proportion of children who monitored their asthma, used preventive medication, and had their lung function assessed by their GPs. These changes in management by GPs and in self-monitoring by patients appear to have been maintained at three and four years post-intervention, using the most recent monitoring data.

Commentary

Despite its focus on a specific disease (asthma), this project is an example of comprehensive primary health care research into multi-disciplinary and collaborative ways of controlling asthma as part of achieving good health. The project took a "New Public Health" approach maintained across various sectors of the community over time.

The quantitative evaluation outcomes of the project related to asthma management and morbidity. Rates of preventive therapy prescription, asthma monitoring (including lung function measurement by GPs) and self management practices were consistently higher in

the study area compared with national data and data collected elsewhere in Sydney. This indicates that the interventions were effective in achieving these changes.

However, the study report did not describe the basis for the choice of interventions, nor was any kind of efficiency assessment available.

This study meets the majority of PHC criteria (Legge et al, 1996) for best practice primary health care. The project grew from community perceptions that asthma was a significant local health issue. Collection of epidemiological data occurred in tandem with community consultations. Collaboration between the health and education sectors was supported by the community, with changes occurring both at the level of individuals and in the structures of health care.

This project provides a blueprint for a comprehensive primary health care approach to addressing a community-identified health problem. In particular, the support of the community and the collaboration between the health and education sectors contributed to the changes achieved.

Final outcome evaluation in terms of decreased morbidity and mortality are necessary in order to make an assessment of the efficiency of this project. However, given the broad scope of the project, it may be difficult to provide accurate assessments.

3.2 Case studies of types of practice: programs

Medical model program

Divisions Project 94-0505.10: The drug and therapeutic information service for general practice (DATIS) project

This project was designed to improve GP use of pharmaceuticals, building upon the successful drug and therapeutics information service established by the Repatriation General Hospital, Daw Park.

The project sought to achieve the following:

- To enhance the opportunities for GPs in Adelaide's Southern, Western and Central and Eastern divisions to maintain and improve the quality of care for patients through the provision of dependable information, support and advice concerning the use of drugs in therapeutics.

- To maintain and further develop the DATIS presently established for GPs at the Repatriation General Hospital, Daw Park, including the maintenance and extension of the evaluation techniques thus far established.
- To maintain links with other quality drug use educational programs for GPs.
- To develop opportunities for Australia-wide expansion of DATIS services.

The project was implemented through discussion at periodic personal visits to individual GPs in their surgeries. Reliable and well researched materials were prepared and provided to GPs for discussion at these visits, by well qualified and experienced hospital-based clinical pharmacists (academic detailing). The emphasis at these visits was upon the provision of useful information which enhances the resources available to the GP to maintain high standards of care for patients.

In addition to the information and interchange provided at surgery visits, a telephone service for GPs was provided, allowing easy access to the resources and advice available through an active teaching hospital pharmacy drug and therapeutics information service.

Commentary

This program for improving GPs' use of pharmaceuticals provides an example of a medical model approach to improving the use of medication in the community. The intervention is for GPs to improve their application of medical treatments to medical problems. The GP remains in control of access to medication.

The details available in the program description (on the NIS Divisions' Projects Database) do not include data on efficacy, effectiveness or efficiency. Audit of prescribing patterns amongst the intervention GPs would provide information on effectiveness. Assessment of efficiency may require comparisons with community-based patient information programs, alternative educational strategies for GPs etc.

This program, as expected, does not explicitly engage with primary health care criteria (Legge et al 1996) with the exception of vertical integration, in that the program involved provision of a hospital-based telephone advisory service.

Selective PHC program

GPEP 217: The evaluation of a diabetic mini-clinic in general practice

This project aimed to establish a diabetes mini-clinic within a general practice in order to identify all diabetic patients in the practice; to monitor those patients regularly; and to

change management as necessary to achieve target goals. Effectiveness of the clinic was assessed through comparisons with first and third clinic visits and with control patients in other practices.

Patient acceptance of the clinic was high; and acceptance by secretarial staff and doctors was considered good. The clinic integrated smoothly within the practice; and the mechanics of the clinic placed only modest demands on secretarial time.

The comparative results showed that there were no significant differences in key diabetic parameters between first and third clinic visits, and between clinic patients and controls. The authors suggest reasons for this including possible bias in the control group. Also it is important to note that the short time frame of the study precluded commenting upon the efficacy of the clinic in the prevention of long-term complications of diabetes.

Commentary

This program in selective primary health care involved a systematic approach to illness care amongst the practice diabetic population. The clinic offered assessment by both nursing and medical staff. The assessments were not described in detail in the program report, however it seems likely that the assessment focussed on control of diabetes through medical management.

Evaluation of this program consisted of comparison of key diabetic parameters in the intervention group at first and third visits and with those in a control group receiving routine care; no significant differences were found. The literature on the efficacy and effectiveness of diabetic clinics in general practice was not addressed in this program. Assessments of efficiency would require specified outcomes comparisons with routine care, care offered by multi-disciplinary health care teams, and, on a wider scale, with primary diabetes prevention programs.

This program does not meet any of the primary health care criteria (Legge et al 1996).

The value of a program such as this lies in demonstrating the difficulties in establishing and assessing short-term interventions in general practice.

Comprehensive PHC program

Western Australian schools health project (National Centre for Research into the prevention of drug abuse)

This project aimed to promote health within the school setting using a comprehensive school health approach which included the whole school environment, its policies and structures and all aspects of school life.

The methods used to achieve these aims were:

- intersectoral collaboration between health and education
- mobilisation of centrally located health promotion expertise
- critical reflection and evaluation
- linking practice with theory and research in school health promotion
- investing in training for participants.

Outcomes achieved from this program were skill enhancement, personal development and increased health literacy of teachers, health workers, parents and students; a contribution to the field of school health promotion; the development of intersectoral links; and progress towards the conditions for better health.

Commentary

This program provides an example of a multi-disciplinary collaborative primary health care program in health promotion.

Issues of efficacy, effectiveness and efficiency are not addressed in the available program summary. Defining and assessing outcomes is notoriously difficult in the area of health promotion, in part due to the problems of ascribing causality, and in part because of the very long lead times before long term changes in health are known.

This program meets the majority of the best practice in primary health care criteria, including local collaboration, consumer and community involvement and achieving a balance between macro and micro changes. The program did not involve vertical integration.

These case studies have provided practical examples of recent Australian work in the areas of medical, selective and comprehensive research projects and programs. This material is summarised in the following tables, in which each project is evaluated against the primary health care criteria developed by Wass (1994), Rogers and Veale (1999) and Legge et al (1996).

Table 1: Six case studies evaluated against primary health criteria of Wass (1994)

Criteria	CVD risk reduction	Home assessment	Asthma	DATIS	Diabetic mini-clinic	WASH
View of health	Absence of disease	Absence of ill health	Control of disease as part of good health	Absence of disease	Control of disease	Holistic
Control over health	GP & patient	Health care team	Individuals and community	GP	Health care team	Individuals and community
Major focus	Disease eradication, medical/ individual intervention	Disease identificatn & medical intervention	Community empowerment	Disease management & medical intervention	Disease management & medical intervention	Community empowerment
Providers	GP	Nurse	Multiple	GP	GP & nurse	Multiple
Strategies	Medical intervention	Health care team intervention	Education & collaboratn	Medical intervention	Health care team intervention	Education and collaboratn

Table 2: Six case studies evaluated against primary health criteria of Legge et al (1996)

Criteria	CVD risk reduction	Home assessment	Asthma	DATIS	Diabetic mini-clinic	WASH
Local collaboration	No	No	Yes	No	No	Yes
Consumer/ community involved	No	Yes	Yes	No	No	Yes
Vertical integration	No	No	Yes	Yes	No	No
Macro/micro balance	No	No	Yes	No	No	Yes
Change awareness	No	No	Yes	No	No	?

These tables show some of the complexities involved in developing and applying criteria to evaluate the primary health care orientation of research projects and programs. However, despite the complexity, it is relatively easy to define projects which do not employ a primary health care perspective.

The table below shows the same six projects evaluated against a population health framework (Rogers and Veale 1999). This provides interesting insights into the areas of overlap

between population health and primary health care. Using this framework, only one project emerges with a strong population health orientation; this is the asthma project which also has a strong primary care focus. Four other projects/programs meet a single population health framework criterion, however only one of these (the WASH program) also has a primary health care focus.

Table 3: Six case studies evaluated against population health framework of Rogers and Veale (1999)

Criteria	CVD risk reduction	Home assessment	Asthma	DATIS	Diabetic mini-clinic	WASH
Health Promotion	-	-	-	-	-	Yes
Screening	Yes	Yes	Yes	-	-	-
Systematic care	-	-	Yes	-	Yes	-
Integration	-	-	Yes	-	-	-
Epidemiological or ethnographic approaches	-	-	-	-	-	-

3.3 Case study of the transition from medical model general practice services to primary health care

The history of community health centres (CHCs) in South Australia provides interesting insights into the transition of medical care from a medical model to a primary health care model. This history has been documented for the first time from oral histories by Baum et al (1996) and has been the subject of two GPEP research projects (GPEP 283 and 505). Here we present a brief summary of their findings which describe in detail the transition from a medical model of health care to a comprehensive primary health care approach.

Women's and Community Health Centres (W&CHCs) in South Australia came into existence following the 1973 'Community Health Program'. This was a federally funded program, however responsibility for policies and funding to W&CHCs moved to the states in 1975.

In the first phase, W&CHCs functioned as extensions of GPs' surgeries. The centres were established by GPs, who acted as medical directors. The role of the doctors was largely confined to traditional medical services, with some centres offering specialised clinics such as ante-natal care. During this early period, the changes which occurred in the services offered by doctors within the centres revolved around increased use of allied health professionals,

acceptance of a multi-disciplinary approach to individual patients, and an increased focus on education and preventive measures. The majority of medical practitioners received fee for service; in centres with salaried doctors, these doctors became more active in areas outside individual treatment services. This early period was characterised by a medical model approach, led by doctors with a focus on care of individual health problems.

The late 70s and early 80s saw changes in the W&CHCs. There was an increase in the number of health professionals with non-medical backgrounds, together with a shift away from treatment of individual health problems towards population approaches to health. Medical practitioners perceived an anti-doctor bias. The medical approach to health care was seen as potentially anachronistic in the move towards a model of social health. In particular, fee for service medicine was seen as focussing on individual treatment in a way that precluded health promotion and community development strategies. Non-medical administrators and/or directors were appointed. The role of community health nurses expanded as they became more self-directed and took on work outside the clinical encounter. In this period, W&CHCs for the most part offered selective primary health care, with control over health care in the hands of health professionals.

In the later 80s, the W&CHCs were influenced by the Ottawa Charter, leading to an examination of direct health care provision in the context of primary health care and a social approach to health. This led to a direct examination of the role of direct care provision within the context of primary health care. In 1988, the South Australian Health Commission produced two reports (*A Social Health Strategy for South Australians* and *Primary Health Care in South Australia: A Discussion Paper*) which provided a framework for community health services. This framework legitimised the place of direct care within the range of primary health care strategies. Medical practitioners moved from fee for service to salaried positions. Despite this shift, the relatively high cost of medical services remained an issue for some centres. In addition, some medical practitioners felt the pressure of being the main income-generating source for their centre, which hampered involvement in non-income generating activities such as health screening, arthritis self-management courses and service planning.

A recent review of one South Australian CHC comments upon the benefits of medical practice within a community health centre setting (Baum et al 1999). The study identified the benefits of salaried practice to include longer appointment times, better communication, more time for preventive health care, participating in a multi-disciplinary team and having time to take action to change the health service and influence government health policy. Examples of the latter activities include speaking at a Federal Government Committee on

drug strategies; contributing to the State Drug and Alcohol Services review; and encouraging community debate on difficult health issues.

In summary, this historical work shows that it is possible for general practice care to shift from a medical model to comprehensive primary health care. However, this process is slow, occurring over a 20+ year period, and has required extensive negotiation with stakeholders over the transition. In addition, the high cost of medical services remains an issue.

Conclusion

Primary health care is a term which encompasses a variety of meanings for different people in varying circumstances. This report discusses different ways of defining of primary health care, and contrasts these with features of Australian general practice. In the report we identify a number of practical and policy changes which may contribute towards a greater PHC orientation in Australian general practice.

At a policy level, explicit commitment to equity in health care, community empowerment, intersectoral collaboration and review of the accessibility, affordability and acceptability of technology will encourage a primary health care orientation.

At a practical level, changes in research, programs and conferences may all contribute towards this shift. In particular, innovations in research funding, such as the development and implementation of a PHC framework for assessing research proposals is an effective way of achieving change.

The case studies in section three demonstrate the nature of current research and programs with a PHC orientation, and contrast these with examples of activities in the medical model. Further examination of specific areas identified in this report may be of value in developing specific guidelines and recommendations.

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