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Literature Review

The contribution of primary and community health services

Centre for Health Equity, Training, Research and Evaluation (CHETRE)
Centres for Primary Health Care and Equity, UNSW

This is a summary of a report that reviews the extent and nature of the contribution made by primary and community health care services (P&CHS) to improving health and wellbeing and providing quality services in a cost-effective manner.

Introduction

While there is a growing evidence base to support the role of primary care, there is considerably less evidence on the effectiveness of primary health care and community health services. There are a number of contributing factors. Community health services have not been a major feature of primary care reforms. Research and development has predominantly focused on primary care and building the research capacity within general practice, which has resulted in a growing evidence-base in primary care. Moreover much of the cross-country comparative research has focused on primary care systems.

The complexity of primary health care and community health, with its focus on improving health and wellbeing of communities and an emphasis on the social determinants of health, presents challenges for the development of valid and reliable measurement tools. While indicators of mortality and morbidity are fairly well established, measurements of positive health and well-being are not as well developed. Notwithstanding these cautions, this paper summarises some of the findings from the literature on

a) the areas where P&CHS make the most impact and models that strengthen horizontal integration

b) the contribution of P&CHS in addressing three current issues that are the subjects of much primary health care reform both internationally and within Australia:

- Strengthening integration between P&CHS and the acute sector.
- Strengthening integration between P&CHS and more specialised services, especially in relation to people with chronic and complex conditions.

- Strengthening the population health and prevention role of P&CHS and their collaboration with other sectors to address the determinants of health.

The contribution of P&CHS in addressing these issues, will be the subject of additional fact sheets.

Definitions

Primary care is often used interchangeably with primary medical care as its focus is on clinical services provided predominantly by GPs, as well as by practice nurses, primary/community health care nurses, early childhood nurses and community pharmacists.

Primary health care (PHC) incorporates primary care, but has a broader focus through providing a comprehensive range of generalist services by multi-disciplinary teams that include not only GPs and nurses but also allied health professionals and other health workers such as multicultural health workers and indigenous health workers, health education/promotion and community development workers. In addition to operating at the level of individuals and families, PHC services also operated at the level of communities.

Community health services may share a number of characteristics of primary care and primary health care services, as well as provide more specialised community based health services for defined target groups for example post acute care, mental health, drug and alcohol, sexual assault.

A strong primary and community health system

Primary and community health services (P&CHS) play a pivotal role in the health system. Together they are the first point of contact for the majority of the population and the setting where most health care takes place directly, or in the case of people with more complex conditions, in shared care arrangements with more specialised services.

The contribution that a well functioning and effective primary health care system can make to improving the health of the population and reducing health inequalities is supported by large scale country-level evidence. Primary care has been shown to have an independent effect on improving health status and reducing health inequalities [1, 2]. Other research shows that primary care may mitigate the adverse effect of income inequality on health status [3-5]. Furthermore, countries with strong primary care infrastructure have lower costs and generally healthier populations [3, 4].

Primary care systems and practice characteristics that are thought to contribute to improved population health include:

- geographic regulation of providers and facilities whereby resources are distributed according to need;
- patient enrolment or registration schemes which enable patient-focused care over time;
- coordinated use of other health services through the information sharing between primary care and other levels;
- family/community orientation whereby patients are treated within their larger social context which involves community engagement [1].

Empirical evidence and expert opinion also suggests that integrated primary health care models have the greatest impact on effectiveness, productivity, continuity, equity, and quality of care with primary care models having the greatest impact on improving access to and responsiveness of services for individuals. In the integrated primary health care model, the aim is to improve the health of geographically defined

populations by providing a comprehensive range of medical, health, social and community services through both horizontal and vertical integration with other parts of the health system [6].

In addition to the macro-level evidence for primary care and to a lesser extent for primary health care, there is also a growing body of evidence that supports the contribution of types of P&CHS services and practitioners, the roles they play and integrated ways of working, to achievements in the following five areas:

Improved access to and referral within primary health care services

GPs co-located in community health centres [7]; school-based health centres [8, 9] and generalist community health centres [10] have all been found to improve access, especially for high risk populations including socio-economically disadvantaged and vulnerable groups.

Nurse run services also improve access to primary care services in the absence of readily available GPs, for example in rural areas [11, 12].

Co-location of GPs and primary health care nurses can improve referrals from GPs to nurses [13] and co-location of health and social services in the UK has also improved referrals between these teams [14] and reduced the time-period between referral and assessment [15].

Improved patient satisfaction

Evaluations of community health centres in Canada have consistently found a higher level of consumer satisfaction than for services delivered through hospitals and other institutions, cited in [16].

A number of studies have also found that patients are well satisfied with the care provided by practice nurses, as an alternative to GPs [17-19].

Improved clinical, functional and self reported outcomes

Short term counselling has been found to be significantly more effective than usual GP care in short term reduction of depression and anxiety symptoms [20]. Practice nurses have been shown to be effective in a number of areas of prevention and treatment including systematic health checks for people with learning

disabilities [21], brief risk factor interventions [22], problem solving treatment for depressive disorders [23] and patient education and management strategies for asthma [24].

Improved quality of care

The evidence is most apparent in relation to chronic conditions, where large studies have demonstrated that implementing structured and collaborative care using health oriented approaches (as opposed to disease focused care) in community health services have improved the quality of care [25, 26].

The role of nurses in group GP practices has a positive impact on quality of care for diabetes, asthma, and cancer screening as well as for patient education. Evidence also supports practice nurses in these roles rather than outreach nurses from hospitals [28].

Higher quality of care provided by doctors who work in community health centres as compared to those who work in the private sector has also been demonstrated in Canadian settings cited in [16]. GPs working in Victorian community health centres demonstrated a capacity to meet complex primary health care needs, of especially disadvantaged populations [7].

The structural features and mechanisms of community health centres that foster continuity of care (i.e. one-stop shop and promoting ongoing, long term relationships between patients and providers) are associated with increased levels of preventative care and overall ambulatory care among children and adolescents [28].

Nurses/allied health professionals undertaking home assessment of older people as part of the Australian Enhanced Primary Care (EPC) package also provide an opportunity for more comprehensive assessment of home safety and medications than do practice based assessments which are undertaken by GPs [29]. This evidence suggests that in addition to improving access to care, replacement models can also improve the quality of care.

Effective teams also enhance quality of care. Antenatal care provided by community-based multidisciplinary teams achieved better outcomes and client satisfaction compared with traditional care provided by

GPs and hospital-based teams [30]. Teamwork and a team environment in primary care settings have also been found to be associated with better processes of care for patients with diabetes (Stevenson K et al 2001), and better continuity of care, access to care and patient satisfaction (Campbell SM et al 2001) both cited in [31]. However, the determinants of effective teams remain unclear and most of the research focuses on the process of teamwork [32, 33].

Reduced costs/health service utilisation

Economic evaluations of 12 studies of different approaches to community-based care for people with chronic conditions found that providing comprehensive proactive community health based services is less expensive than providing, on-demand and piece-meal services, and that patients with co-existing risk factors benefited most and at lower cost [26].

Nurse-run primary health care clinics for socio-economically disadvantaged populations may cost less than care provided by physicians at a local community health clinic, general clinics and emergency rooms [34]. However, another study has found that health service costs of nurse practitioners and GPs were similar, with the significantly longer consultation times for nurse practitioners balancing out the lower salaries [36].

Models that strengthen integration across P&CHS

Much of the achievements of P&CHS rely on a well integrated system that is adaptable and flexible and has the capacity to respond to changing needs and new models of care.

The aim of models that strengthen the links amongst primary care and primary health care providers and services are generally to improve coordination and continuity of care for people with chronic and complex conditions and particular population sub groups, (e.g. children and adolescents, and/or disadvantaged and vulnerable groups who have or are at risk of developing complex health problems).

Common themes that run through the literature relating to PHC models include:

1. Creating multi-disciplinary teams.
2. Changing provider roles and extending the range of skills and competencies of PHC team members [35].

Creating multi-disciplinary teams

Models that feature formal or informal structures to promote multidisciplinary teamwork include:

- *Networks/voluntary alliances:*
early stage of development.
- *Regional/local level intermediary organisations:*
early stage of development.
- *Community health centres/school-based health centres:*
long-standing model contributing to improved access, utilisation, quality of care & client satisfaction.
- *Co-location models:*
whereby staff from different professional backgrounds work from a single base on a sessional/part-time/permanent basis and has resulted in improved information sharing, better communication and collaboration and more timely and appropriate referrals.

Changing provider roles

In this model direct provision of primary care by one practitioner, usually a GP, is substituted for or enhanced by provision from another provider such as a nurse, social worker, psychologist or pharmacist. Substitution and enhancement models are becoming increasingly important in the context of declining GP numbers and the development of new models of care. These approaches are effective in improving access to primary health care services and quality of care, and maintaining satisfaction of both patients and providers.

Strengthening integration between P&CHS and hospitals

In recent years an increasing array of models and programs that shift care from hospitals to community-based settings have been developed. The three major approaches are:

- *Preventing acute care*
(eg. through active follow up).
- *Managing the transition between hospital and community care*
(eg. early supported discharge programs).
- *Community-based alternatives to hospitalisation*
(eg. Hospital In The Home [HITH]).

Primary care, community health services and community-care services are all playing an important role in these initiatives through providing clinical care as well as ongoing support and education for clients and their carers. The early evidence suggests that these programs can reduce length of hospital stay, avert hospital admissions/re-admissions and that clients and their carers are well satisfied with their care, provided they are well supported.

Important success factors for these programs include implementing evidence-based and multidisciplinary care (involving both generalist and specialist services); collaboration between providers, especially involving GPs; incorporating self-management strategies; and clinical leadership and governance.

Integrated care for chronic disease

The interface between generalist and specialised services is particularly important for the ongoing management of people with chronic conditions as most of their care is provided in PHC settings. Initiatives to improve integration across generalist/specialist services have been well researched and there is substantial evidence that multifaceted organisational and educational interventions contribute to improved access to

and quality of care, enhanced client satisfaction and improved health. The major contribution of primary and community health services includes their roles in multidisciplinary assessment, ongoing care by GPs, providing short focused interventions, filtering access to more specialised services, case management, patient education and identifying and responding to previously unmet health needs.

Models to integrate generalist and specialist services range from relatively informal to more formal approaches and include:

- *Consultation/liaison:*
well used in mental health involving GPs and specialist mental health services/providers.
- *Shared care:*
a more formalised arrangement where care is defined by protocols and well used for mental health and diabetes. Like the previous model, GPs have an overall management role.
- *Specialist outreach:*
used where there are shortages of specialist services, typically in rural/remote areas.
- *Co-location:*
of generalist and specialist workers to improve access and referrals.
- *Networks:*
voluntary alliances of generalist/specialist providers, where the focus is on providing integrated services for specific population sub groups.

Population health/ prevention

While primary care services play an important role in prevention and early intervention for individuals and increasingly for their practice populations, comprehensive primary and community health services extend this role to a focus on local communities, in collaboration with other sectors, organisations and community groups.

The areas where P&CHS can make the most significant impact in population health is prevention and early intervention in the early years of life (with a fo-

cus on the social determinants of health), early intervention for common risk factors (especially smoking, nutrition/diet, physical activity) and their contribution to collaborative community-wide interventions, especially CVD prevention programs and childhood injury prevention.

The evidence consistently supports the use of multifaceted interventions over time and critical success factors increasingly appear to be using approaches that build the capacity of individuals and communities through the engagement of local communities as key partners in community-level interventions. Core roles for P&CHS that contribute to improved population health outcomes include:

- Home visiting
- Screening
- Pro-active preventive health care
- Brief counselling/motivational interviewing
- Health education, including health literacy
- Providing ongoing social support.

Common themes

The aims of models that strengthen the links amongst primary health care providers and with other health services are generally to improve coordination and continuity of care for especially people with chronic and complex conditions and particular population sub groups, (eg. children and adolescents, disadvantaged and vulnerable groups who have or who are at risk of developing complex health problems).

There are important messages in relation to the organisational capacity of P&CHS to achieve the outcomes:

- Having a well-trained workforce, with access to ongoing education, training and support to develop and implement new skills and competencies and ways of working.
- Maintaining the role of nurses and allied health practitioners in individual/family focused prevention, health education and support.

- The need for collaborative structures as well as communication and information systems to support integration.
- Strengthening and supporting multidisciplinary teamwork, especially in relation to chronic disease
- Incentives/funding models that enable relationships to be built and to support collaboration.
- Visible leadership to bring about cultural changes.
- The importance of multi-disciplinary governance.
- Addressing the challenges associated with workforce shortages and increasing workloads in the development of models to strengthen multi-disciplinary care.

Conclusion

A robust and well functioning primary and community health care system makes an important contribution to improving population health, reducing health inequalities and reducing overall health costs. Areas where P&CHS make the most impact are in improving access to services, providing high quality of care and clinical, functional and self reported outcomes.

This review of the literature indicates that P&CHS have been adaptable and responsive to emerging needs in the development of a) new models of care that address changing patterns of health and illness and b) new ways of working, especially the enhanced role of nurses in the context of a declining GP workforce. The focus of international and Australian reforms indicates that general practice remains a central player and contributor to the achievements. These gains are most evident where there is collaboration with other primary health care and more specialist providers, other health and welfare agencies and in partnership with local communities.

The evidence for multifaceted approaches is clear in relation to prevention, early intervention and management of chronic disease and for improving especially the health and wellbeing of disadvantaged groups. The implementation of multifaceted approaches over time requires a well integrated P&CHS system with a focus

on providing comprehensive of services across the continuum of care.

Areas where further research is still required include the effectiveness of network models to improve service coordination and also understanding more about the specific aspects of multidisciplinary teamwork that contribute to improved outcomes and effective models in the Australian context.

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For further information regarding this report please contact: Julie McDonald
Centre for Health Equity Training
Research and Evaluation
Liverpool Hospital
Locked Bag 7017
Liverpool BC 1871
NSW Australia
Ph: 02 4226 7052
Email: J.McDonald@unsw.edu.au
Website: <http://chetre.med.unsw.edu.au>