# ‘Making a difference’—the impact of sustainable primary health care on rural health

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## Background

Australia has more than 1,500 small rural and remote communities in Australia with populations less than 5,000 residents. Many of these rural communities are struggling to maintain viable and comprehensive primary health care services to their inhabitants.[1,2] As a result they are facing significant health disadvantages compared with urban regions. Because many urban models of medical care provision are not viable, it is necessary to investigate alternative models of primary health care in order to ensure equitable access to care.[3]

Despite the espoused success of the many ‘innovative pilot’ health services that have been trialled in rural and remote areas over recent years, little effort has been made to systematise them over time or transfer them to other jurisdictions. Indeed few have been the subject of comprehensive evaluation to assess their sustainability and impact on the health status of the communities they serve.[4] One exception has been recent research undertaken by Monash and Flinders Universities into what constitutes a sustainable primary health care service.[4] The resultant framework has been used to undertake a three-year evaluation funded by the Australian Rotary Health. This paper outlines how this methodology is being applied.

## The Elmore Primary Health Service

The Elmore Primary Health Service is an innovative comprehensive primary health care service built around the “need for a seamless, locally co-ordinated model of service delivery”.[5] It is located at Elmore in Central Victoria, 46 kilometres northeast of Bendigo and 170 kilometres (by road) from Melbourne. While Elmore’s postal district population was only 880 in 2006 Census, the service now delivers primary health care to 5,405 patients from the surrounding districts.

Following state government rationalisation of rural health services during the “Kennett era”, Elmore hospital was closed in 1994 and the town lost its sole medical practitioner soon after. From 1994 to 1998 the absence of local medical care resulted in residents travelling 30 minutes by car to the nearest town. In 1998, a solo medical practice was established. In 1999, a state government review of gaps in services and barriers to accessing primary health care in the Elmore region was conducted. This review, including needs assessment and consultation with local community, was a catalyst for the development of a new single-entry point primary health care model creating a partnership between the Elmore Medical Practice and the Bendigo Community Health Services.

The model combines health care, community coordination and outreach services financed by public and private funding and implemented by a growing multidisciplinary team. The medical practitioner is commonly the first point of contact for patients and is the source of coordination and mobilisation of services around the patient with the support of a service coordination manager, practice nurse and the provision of community health programs.

In recent years, the service has expanded to include the communities of Boort (125 kilometres north-west of Elmore), Lockington (30 kilometres north of Elmore) and Rochester (16 kilometres north of Elmore). The Elmore Primary Health Service aims to:

- provide holistic health care from prevention to rehabilitation;
- actively provide a broad range of accessible health services;
- avoid service duplication, "loss to follow-up" and inefficient use of funds; and
- reduce isolation and provide peer, professional and transitional support to health professionals working in small rural communities.[5]

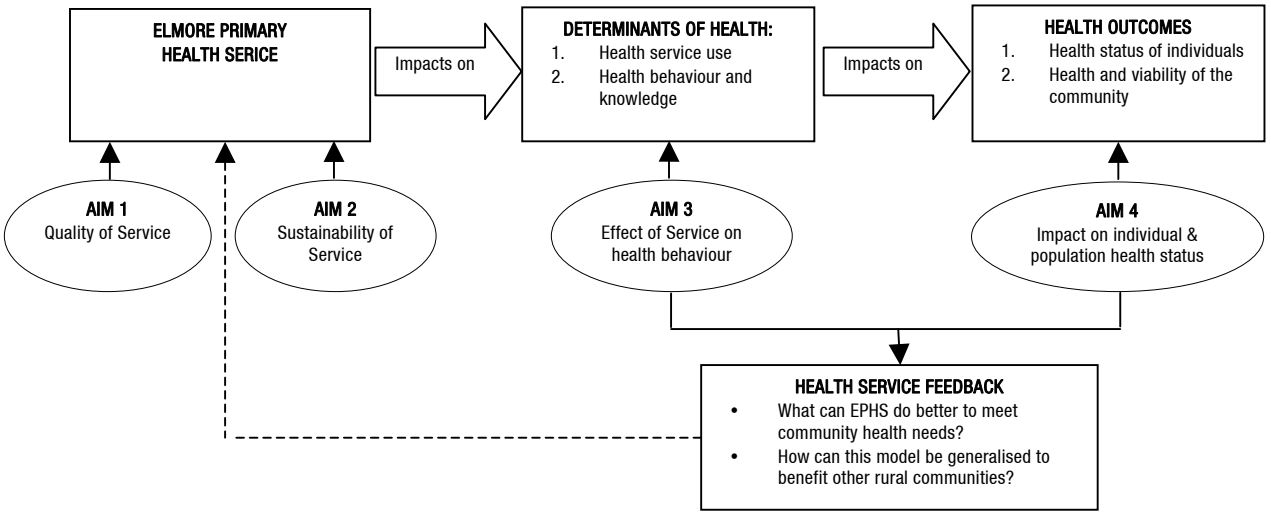
Recent recognition of the Elmore Primary Health Service as an example of 'Innovation in Access to Healthcare' came from the 'highly commended' status awarded in the 2007 Victorian Public Healthcare Awards. The service was cited as an innovative model of rural primary health care that formed a "unique collaboration" between the community, the general practitioner and a community health services provider "to determine priorities for local action that maximise community health outcomes, strengthen relationships and build community connectedness".[6] This particular service model could become an exemplar for other rural communities if it is shown to be sustainable over time and responsive to changing community needs and health system requirements.

## Study aims

The Elmore Primary Health Service appears to fulfil the requirements for sustainable provision of medical and health services to residents of a small rural community. This study involves a comprehensive evaluation of the role and impact of this health service on the health status of its catchment (see Figure 1) over a three-year period. The specific study objectives are:

- to assess the quality of care provided to its community in terms of accessibility, appropriateness, efficiency, safety, capability, effectiveness, continuity, sustainability and responsiveness.[7]
- to determine the sustainability of comprehensive primary health care in relation to health workforce availability, infrastructure, funding, management, and linkages between services.[8]
- to measure the effect of the service on patterns of health service use, health behaviour and health outcomes of community residents.
- to investigate the impact of the service on community viability and satisfaction in Elmore and the surrounding region.

Figure 1: The Elmore Primary Health Service Evaluation Framework




Knowledge of these key issues provides a platform of evidence on which other small rural and remote communities can model their own health services as a means of maximising access to vital comprehensive primary health care and thereby bringing about improved health outcomes through health promotion, prevention of ill-health and early intervention.

## Methods

Critical to this research is the development of sentinel indicators by which the Elmore Primary Health Service can be monitored over time. While the criteria for a "successful" primary health service can be relatively easily identified at the conceptual level, it is far more difficult to operationalise them in the form of indicators for which data can be collected relatively consistently, easily and unobtrusively. Following an extensive review of the literature, sentinel indicators for measuring and monitoring health service performance, sustainability and impact on health outcomes of the community over three years have been developed (see Table 1).[7,9]

Clinical and service utilisation data are obtained through existing health service records and interviews with key stakeholders. Concurrently, interviews, focus groups and a comprehensive community survey with the Elmore and Lockington communities are providing data on consumer needs, perceptions and satisfaction with existing primary health care services.

**Table 1 Sentinel indicators for measuring health performance, sustainability and impact on health outcomes of the community**

| SERVICE PERFORMANCE INDICATORS | | | | | |
|---|---|---|---|---|---|
| Accessible | Appropriate | Effective | Responsive | Continuous | Efficient |
| • Accessing routine primary health care<br>• Accessing emergency appointments<br>• After-hours service<br>• Bulkbilling<br>• Service location<br>• Repeat prescriptions | • Scope of service<br>• Availability of:<br>– female GPs;<br>– allied health services<br>• Chronic health conditions:<br>– Registry;<br>– Monitoring and management;<br>– Referral to primary health care programs | Service reach:<br>• Immunisation coverage<br>• Cervical screening coverage<br>• 45-year old health check coverage | • Service responsive to cultural and other specific needs of people<br>• Community input into service planning | • Use of health needs assessments and/or care plans<br>• Use of recall and reminder systems | • Locally available Medicare claim system<br>• Electronic medical records system |
| SERVICE SUSTAINABILITY INDICATORS | | | | | |
| Workforce | Linkages | Infrastructure | Funding | Governance, management and leadership | |
| • Staff profile<br>• Vocational registration<br>• Rural retention measures<br>• Length of stay<br>• Workforce succession planning<br>• CPD | • Internal linkages<br>• Linkages with external services<br>• Maximum integration into mainstream programs | • Uptake of information and communication technology<br>• IT backup systems | • Funding streams<br>• Service provider remuneration method<br>• Service co-payments | • Service organisation: governance, management, and leadership<br>• Strategic plan<br>• Accreditation | |
| SERVICE QUALITY INDICATORS | | | | | |
| Prevention | | | | | |
| Primary | Secondary | | Safety | Treatment goals and outcomes | |
| • Cervical cancer screening<br>• Immunisation coverage:<br>– <27 months;<br>– 65+ years;<br>– ATSI | • Recording of modifiable risk factors in medical records:<br>– Smoking;<br>– BMI;<br>– Alcohol use;<br>– Blood pressure<br>• Prevalence of high blood pressure | | • Use of medication alerts | • Management of diabetes mellitus<br>• Mental health promotion<br>• Youth health promotion | |

## Results

It is too early in the evaluation to present conclusive results. Nonetheless, we have been able to obtain baseline data in relation to health service performance, sustainability and community health outcomes utilising the sentinel indicators that underpin the evaluation framework.

A critical component has been data that emerged from the comprehensive community survey conducted in the Elmore town and the surrounding areas. This survey provided baseline data in relation to consumer health needs, perceptions and satisfaction with existing health services. Such surveys can be very contentious, especially in communities that have experienced loss of services. For this reason, a delivery and collection methodology was utilised in the Elmore and Lockington townships, and excellent response rates of approximately 87% and 70%, respectively were achieved with those whom face-to-face contact was made. Because of resource limitation, surveys were delivered to the outlying areas (15km radius) around Elmore utilising the Australia Post Unaddressed Mail Service. Disappointingly, responses were received from only 20% of the 140 eligible dwellings. These data are currently being analysed.

## Discussion

This evaluation proposal is timely, comprehensive, and already generating significant interest among small isolated rural communities that are experiencing similar difficulties in servicing the health needs of their populations. The study is already providing important feedback to the health service for the further improvement of locally available health care. Most importantly of all, the study will provide comprehensive evidence upon which a successful health service model can be generalised to benefit the provision of health care to other small rural communities.

For health authorities and providers of health care services, the sparsely distributed settlements in rural and remote Australia pose particular problems. The dilemma is one of satisfactorily resolving the conflict between ensuring operational efficiency and cost minimisation and at the same time ensuring effective and equitable provision of accessible services. For small communities in particular, the issue of how best to deliver, and enable access to, health services lies at the heart of the provision of effective health care.

Research has shown that there is no “one-size-fits-all” solution to meeting the diverse health needs of residents of rural Australia.[8] The range of ‘innovative’ service models is likely to vary from community to community. Nonetheless, there is considerable scope for rural communities to learn from each other how best to deliver accessible and appropriate care efficiently and effectively to meet the primary health care needs of the residents of areas characterised by small, dispersed populations with diverse health needs, and for the translation and generalisation of health service models that can be demonstrated to be sustainable, responsive to the needs of their local inhabitants, and deliver quality health care at the local level.

## Policy recommendation

This project highlights the importance of comprehensive evaluation of rural health services as integral to ensuring that all rural Australians, regardless of geographic location, can be assured of equitable access to quality primary health care. Funding should be made available to health services and researchers for the rigorous systematic evaluation of health service models and to facilitate the dissemination of their findings in order to inform their development and implementation more broadly. Knowing what works well, where,

and why is the basis for evidence to inform rural health policy and funding and ultimately to improve rural population health outcomes.

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## Presenter

**Rachel Tham** is a Research Fellow in the School of Rural Health at Monash University, Bendigo. Rachel has extensive clinical, outreach, research and management experience as a dentist within metropolitan and rural areas in Australia, UK and New Zealand. In addition, she is a graduate of the Victorian Public Health Training Scheme. Rachel's research areas include rural oral health (older people, workforce, service delivery models, special needs groups, community capacity building), primary health care, health workforce issues, health service evaluation, access and equity, building effective collaborations, the impact of ecosystem change on public health, and international health.