

Suitability of the Multi-Purpose Service Model for Rural and Remote Communities of Australia

J Anderson and L Malone

Abstract

Context: Multi-purpose services (MPS) as healthcare delivery models have been in existence in rural and remote areas of Australia for over 15 years. The services are designed to specifically address the needs of small rural and remote areas which are unable to sustain stand alone acute and aged care services due to small populations.

Issues: The objectives of the MPS model are to provide improved coordination and flexibility of health and aged care services which are responsive to community needs in a cost effective and efficient manner. This article provides an overview of the issues identified from the available literature that address the question of the MPS models' suitability to rural and remote communities. In order to achieve this, a literature review of 38 relevant articles was conducted. Common themes were extracted and major issues were identified. This article will then

discuss significant aspects of the model in relation to its suitability and provide a critical opinion as to the successful implementation of this model.

Conclusions: The literature available demonstrates that the MPS model is responsive to community needs and much needed flexibility of services. One of the benefits of the MPS is the ability to tailor it to individual community needs. Although small rural health services will struggle to remain financially viable the MPS model allows sharing of staff among services and some ability to gain economies of scale through the amalgamation of acute and aged care services.

Abbreviation: Multi-purpose service (MPS).

Key words: Multi-purpose service; rural and remote; acute and aged care services; rural healthcare model; staffing model; flexible services.

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Introduction

Multi-purpose services (MPS) as a healthcare delivery model have been in existence in rural and remote areas of Australia for over 15 years. What makes the MPS model of healthcare the right model for small rural and remote communities? In order to explore the ability of the MPS model to address the healthcare needs of rural and remote areas this article will critically discuss significant aspects of the model in relation to its suitability and to provide a critical opinion as to the successful implementation of this model. With this in mind, a search of the literature was conducted of published work in relation to MPS in Australia to extrapolate common themes and issues in relation to the appropriateness of the model.

Background

Reports found within the grey literature indicate that the health of people living in rural Australia is generally worse than that of their metropolitan counterparts. [1-3] It is acknowledged within the literature that poor rural health can be related to socio-economic disadvantage, Indigenous status, shortage of healthcare providers, poor personal health management, greater exposure to injury risks, lack of public transport, poor road quality and geographic isolation. [3-6] The MPS Program was developed over a decade ago to implement the MPS model as a joint initiative between the Commonwealth and State Governments of Australia to address these rural health problems. [7,8] Currently across Australia, there are 134 MPS in operation distributed throughout the states with more to be developed in the future. [9]

Despite an 'enormous demand' to develop MPS, [10] there is commentary within the literature that suggests that this type of health service is not suitable for all rural and remote communities, based on population size and geographical location. In an evaluation of five Victorian MPS, Sach and Associates [11] found that the following criteria supported some communities as being suitable for an MPS. These criteria included communities that had a population which was too small to sustain separate services [1000–4000 people]; isolation from mainstream services; similar service boundaries for core existing services; a single set of services; existing service providers and a community that was supportive of the MPS concept. The first two of these conditions were also identified by the earlier national evaluation of the Pilot Multi-purpose Services Program (involving eleven sites) by Andrews et al. [12]

Method

A database search of EBSCOhost Health (including CINAHL, Academic Search Complete, Health Business Full Text Elite, Health Source, Psychology and Behavioural Sciences Collection and SocINDEX) was undertaken, followed by a search of the grey literature (limited to conference presentations, government documents and reports) which was identified in the reference lists of the relevant articles from the database search. The search terms: 'multi-purpose health service', 'MPS health' were used for the database searches with no limits on date of publication. Preliminary results of the search identified 240 potential articles. Duplicates of articles identified through the database search were removed and an initial screening was undertaken of titles and abstracts. Following this the full text articles which remained were assessed for eligibility. The inclusion criteria

were that the article was related to MPS in Australia. The search yielded 38 relevant articles; these were then reviewed and grouped into the following common themes: flexibility of services, financial viability of MPS, coordination of health and aged care services and responsiveness to identified community needs.

Flexibility of services

The literature reported that the model of health service delivery in an MPS has a strong focus on meeting community needs. [10-12, 17-20] This focus acknowledges the unique nature of the communities involved, leading to a flexible range of services being combined in a unique mix for each community. The majority of MPS aim to function on one site as a 'one stop shop' for healthcare within that particular community. However, being on one site is not essential, with several MPS operating over multiple sites. [11,17] This in turn leads to challenges for the health service managers to run services in an efficient and effective manner in relation to staffing, economies of scale and resource management.

The flexibility which the model provides to meet individual community needs provides little guidance to managers or community members about what services an MPS should include. In progressing the development of an MPS, a steering group is usually formed comprising health representatives and community members. [17,20] Community members may not necessarily be experts in health or aged care, and staff members are frequently alienated by policies which do not acknowledge them as members of the community despite many having lived within these small rural communities for many years. [20] The difficulty in developing functional layouts of buildings is particularly prominent when existing buildings are adapted due to limited capital funding resulting in renovation of existing buildings rather than beginning a new development on a 'green field' site. For example when recently constructed buildings have been developed prior to the implementation of an MPS, communities are often unwilling to relocate these facilities to a greenfield site as this is seen to be a waste of financial resources. [20]

Within the literature, it was also noted that a community's perspective often focused on the acute care services which they felt were essential for their safety; however, community utilisation of those services did not reflect the high value which communities placed upon them. [19,21,22] The determination for the development and location of a MPS facility was often politically driven and prioritised rather

than objectively determined through available data and health information. [20] A mismatch between community perceived needs and the availability of government resources often led to conflict and community dissatisfaction with the end result being a service that was a compromise and not necessarily what the local population required. For example the structure and design of some multipurpose services in the early days of development did not necessarily match the requirements of the population and have not been sustainable or effective for workflows, security of staff and aged care friendly. [20,21]

Financial viability of MPS

In Australia healthcare services are provided by a complex combination of Commonwealth and State Government funding. This system has created a division of government responsibilities where the Commonwealth manages the welfare budget (including aged pensions, nursing home subsidies, Medicare) while the State is responsible for the public hospital system. [14,23,24] This arrangement inhibits movement of funds across program boundaries, creating service fragmentation and duplication. [1,25,26] The MPS model is designed to allow pooling of funds across program boundaries in order to streamline healthcare services in small rural communities.

In Australia, economic rationalism has led to activity-based funding for acute care services in the belief that it is a better way to manage health services in a financial framework. [21,24,27] Although the MPS model contains acute care services, low levels of patient activity make these sites inappropriate for this funding model leading to difficulties in rationalisation of funding allocation. [27] These policies have resulted in reduced choice of, and tenuous funding for, services for the rural population which frequently leads to public cynicism and distrust. [24,28] The viability of a small rural community often hinges on its health service as a major employer within that community. Possible loss of employment within health services could have a destabilising effect on entire communities. [29,30,31] Despite these policies, healthcare costs continue to rise [1,32] and as demonstrated in New South Wales, access to health services for people in rural and remote communities has not improved. [33]

The formation of a merger between existing services creates the expectation of a reduction in management and administrative costs. The MPS model attempts to address some of these issues by merging services which would otherwise be unsustainable. Managers may perceive these

as advantages of economies of scale but employees may perceive them to be disadvantages as they can be associated with a loss of jobs. [34] The literature provides little advice to health service managers in this area, with no studies of cost effectiveness having been published.

Flexible funding in the form of pooling is not always problem free. In MPS the Commonwealth Government provides average funding levels for residential aged care regardless of the acuity or dependency needs of the clients. [35] Existing aged care facilities found average funding levels to be a disincentive to merge with the health service as the income they were capable of attracting for each client would be reduced. Some existing aged care facilities also feared that funds would be drained from aged care to meet acute care needs which were often perceived to require more immediate resolution than those of aged care needs. [5,11,12] Despite MPS featuring a range of services, some small rural hospitals merely converted their existing acute care beds which were occupied by nursing home type patients into residential aged care beds to meet these requirements of nomenclature and to assist in securing their financial viability for their future. [20]

Coordination of health and aged care services

The combination of health and aged care services, which include community developed services, under a single model as in an MPS, can lead to an improved coordination of these services. [36] This combination of unique services which have developed historically rather than being driven by need can then lead to discrepancies between services within the same health districts. This presents challenges for ongoing education, staff development and sharing of human resources across the service.

Staff members, particularly nurses, are required to be multi-skilled because their roles are broader as more services are provided in an MPS. [20,37-40] The literature describes health professionals employed in small rural health services as having a 'specialist generalist' role: they are required to be multi-skilled and competent in a wide range of skills. [20, 37-40] Multi-skilling can provide needed flexibility in the provision of healthcare services in small rural communities which are unable to sustain the employment of several specialists. [20,37-40] Other authors [41-43] agree that many rural health professionals feel social and professional isolation which is compounded by the perception of limited access to ongoing education and peer support.

Many MPS have minimal staffing of two nurses per shift. This creates angst amongst staff that they are leaving acute and

aged care clients unattended when called into the emergency department to deal with unexpected presentations requiring various levels of care. [38] In some instances these patients require intense medical intervention for long periods of time, whereas in others they are minor situations but still require assessment and intervention drawing nursing staff away from providing care to their acute and aged care clients. [20] This can also create security issues for patients and residents who may be left unattended and also for nursing staff who are required to care for any emergency presentation including patients with mental health issues.

In small rural and remote areas the difficulty in attracting and recruiting staff is well known. [44,45] The difficulties in attracting staff to work in rural MPS can be attributed to the need to be multi skilled and at times the requirement to work in isolation without onsite medical coverage which detracts from the ability to recruit staff. Another complicating factor is the ability to release staff to attend professional development activities when the priority is to maintain service delivery. [20]

Responsiveness to identified community needs

The Australian population is ageing [3,13] and most people prefer to age in their own home or at least within their own community. [14] This desire to age within one's own community is reflected in the requirement for a residential care service and also in the *Aged Care Act (1997)* which includes a requirement to facilitate access to aged care regardless of geographical location. [5,15,16] The Commonwealth, with its responsibility for aged care, determines bed allocations for hostels and nursing homes. In the past some of these allocations, particularly in rural areas, were in numbers now considered to be unviable. [5] These low bed allocations have placed additional pressure on many small rural communities which built hostels and nursing homes that they believed would be sustainable and capable of addressing the future needs of their respective communities. The MPS model which integrates aged care services with acute care services, through economies of scale enhances the viability of these pre-existing services and provides additional services which can be tailored to meet community needs. [20,37]

Conclusion

The interaction of the rural context, an innovative model of health service delivery and complex financial viability issues all impact upon the development of multi-purpose services in rural Australia. The health issues of rural Australia need to be addressed and the MPS model with its focus

on integration of acute, aged care services and primary healthcare attempts to do so. The need for further research is indicated by the absence of current literature on this topic. In order to support the aims of MPS, further research would need to take into account rural community needs rather than being totally focused on cost benefit analysis. The authors therefore conclude that the multi-purpose service remains the most appropriate model for the delivery of healthcare services in many rural and remote communities; however the challenge for future planners is to provide the most appropriate model of care which balances community desires and the reality of funding limitations.

Competing interests

The authors declare that they have no competing interests.

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