

A framework for place based health planning

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Abstract

Place based health planning is an effective approach to health planning with enormous benefits including the use of local characteristics, organisations and partnerships to effectively and efficiently identify and prioritise needs, and develop and deliver programs and services. Despite its inherent advantages, place based health planning has not been extensively used by health professionals, neither has it been given adequate attention in the literature. This article provides a framework to guide and encourage health professionals to use place based health planning. The framework has three main parts, namely needs assessment, program planning and implementation, and covers most aspects of the identification of needs, and the development and delivery of programs and services to address those needs. The article also includes a proposed index of prioritisation to enable health professionals to prioritise needs and improve program and service provision.

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PLACE BASED HEALTH PLANNING, also known as health planning for place, adopts a holistic approach involving local demographic, socioeconomic and environmental factors. Unlike more widely used population based planning, place based health planning involves the use of partnerships including local service providers and other private sector agencies, community groups, local, state/regional and national governments and their relevant agencies to develop and deliver health programs and services.

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What is known about the topic?

Effective planning is important for the development of plans and strategies directed at improving population health status.

What does this paper add?

This paper provides a detailed framework for place based health planning. The framework includes needs assessment, planning and implementation with a strong emphasis on local community partnerships.

What are the implications for practitioners?

Practitioners can use the place based planning framework to ensure a comprehensive approach to health planning.

Place based health planning is an innovative approach to health planning. Indeed the importance of innovation has been noted by many researchers who have found that existing approaches have not been regularly successful.^{1,2} Place based health planning identifies and prioritises local health needs through the collaboration of local community groups and service providers with national public sector agencies to enhance the potential for success. This collaboration enhances the potential for success by improving the articulation of local health needs and the development of localised strategies and programs. In addition, planning for place enhances the sharing of vision, goals and ideas by the groups in the partnership, while the inclusion of relevant or key partners enhances the targeting of programs to the local population needs, although competing interests and conflicts could derail this.

Health is influenced by many factors outside of the health sector, including population characteristics such as size, composition, distribution and dynamics, education, employment, income and other socioeconomic characteristics, as well as the built and natural environments (climate, flora and fauna etc).^{3,4} An inherent advantage of place based health planning is that because it adopts a holistic but localised approach it is able to include informa-

tion on most of the factors which impact on health. Local input into health planning, and especially the development and delivery of programs, has the potential to ensure that health plans and programs address the specific needs of the locality. This means that health plans, programs and services can be linguistically and culturally sensitive and appropriate for local conditions. In addition, place based health planning can draw upon the benefits inherent in population based planning by including local population characteristics, as well as the extent of internal and external migration.⁵

Local partnerships — an important component of place based planning

The establishment of local partnerships creates a sense of ownership at the local level and improves participation in the identification of needs and the development and delivery of programs to address them.⁶⁻⁸ This sense of ownership improves the contribution and willingness of partners to cooperate or collaborate effectively. In other words, local community groups and private and public sector agencies in those communities are usually motivated to contribute to the success of the plan mainly because they are part of, and own, the plan. Indeed, there is a synthesis of evidence to show that higher implementation rates and effective interventions usually occur with bottom-to-top strategies involving the community and their leaders as proposed in this framework.^{1,9}

The advantages of place based health planning include the potential for increased efficiency and improved effectiveness, not only in the planning process, but also in the implementation of the plans. This is because the involvement of the local population and groups could reduce the time usually taken to identify needs and develop plans and programs.

Another benefit is that health planners develop place based plans with the knowledge that there is community and local support for what they are doing, and that the health plans are likely to be accepted by the community, mainly because the community is involved. An example is the Municipal Public Health Plans developed by local governments in Victoria; plans which tend to have wide

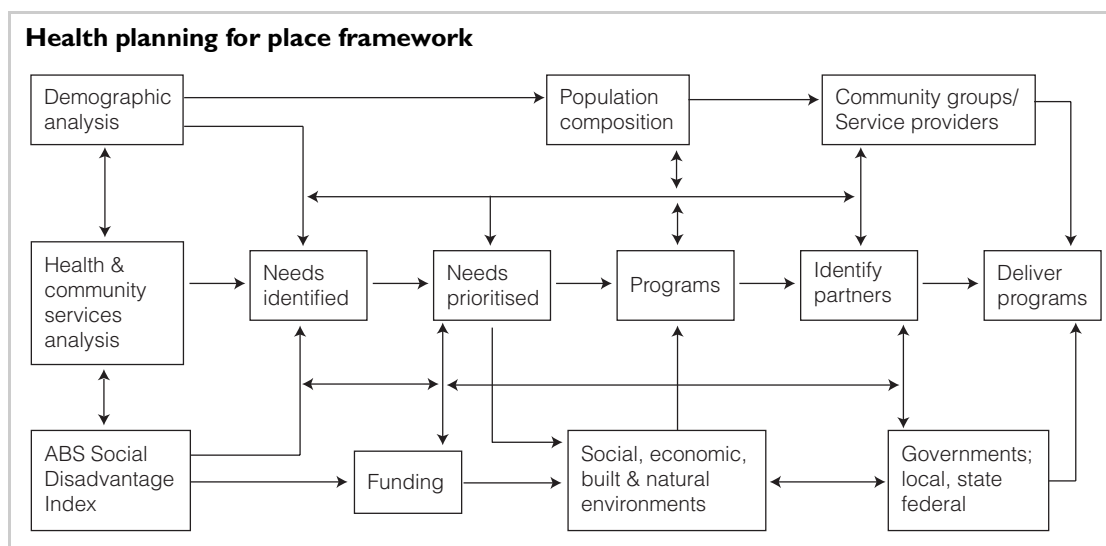
local community involvement and, to some extent, support. Involvement of local service providers (private and public), individuals and the community in all phases of the model (identification and prioritisation of needs, program development and implementation) improves the ability of the plan to target appropriate needs and to develop and deliver community supported programs.

Place based health planning can build on existing community-based research on the transfer of health care planning to a local level, such as in the establishment and implementation of multi-purpose services in rural areas, which were set up to meet the health needs of rural localities.^{6,10}

Place based health planning has its limitations. First, achieving community involvement is not always easy or simple. It involves community trust, and this can be difficult in some localities. Another inherent limitation is the potential difficulty of identifying appropriate and relevant partners. Closely related is the need to reach agreement with potential partners and establish partnerships. Once formed, partnerships must be nurtured continuously, and where partners persistently seek their individual interests, conflicts, biases and related problems may arise.

There is potential for partners to disagree on issues. An example is the disagreement among the community groups, doctors, dentists and the Barwon South West Regional Office of the Department of Human Services in regard to adding fluoride to the drinking water in the region. This is one issue the Public Health Partnership in the region has not been able to resolve.

Even so, the benefits of place based health planning outweigh the potential limitations. However, despite these benefits, place based health planning is not used by many health professionals. There is anecdotal evidence to suggest that many health professionals do not use place based planning because of a lack of adequate understanding of the concept and processes that could be provided by a guiding framework. The purpose of this article is to provide a framework to assist health professionals to use place based health planning to identify and prioritise local needs and follow up with the development and delivery of effective and appropriate health programs and services.



The framework

The diagram in the framework (see Box) provides the proposed framework for place based health planning by highlighting three areas: needs assessment, program planning and implementation. Each broad part covers a number of areas with a logical flow from needs assessment through program and service planning and development to the implementation or delivery of programs and services.

The framework acknowledges the involvement of community groups, various levels of Government and agencies, private sector providers and individual residents at every stage. Various research findings suggest that interventions which involve people connected to the place in identifying and in designing strategies are more likely to result in improved health behaviours.^{6,7,10} Place based health planning as proposed in this framework avoids top-down strategies for health planning and service provision. As noted in the research literature, top-down strategies or approaches have resulted in poor implementation rates and limited success in many areas.²

According to the framework, demographic, health, community services and social disadvantage analyses must be undertaken to identify and prioritise needs. Planning and development of programs is the next stage in the framework, covering a complete analysis of population composition and

relevant factors which impact on health from the social, economic, built and natural environments. The final part of the proposed framework is implementation and includes various strategies that can be used to ensure the successful delivery or implementation of the programs developed in stage two.

The framework requires that local characteristics be analysed together with inputs from local community groups, various levels of government and their agencies, and relevant partners, before needs can be prioritised. Needs identification and prioritisation is then followed by planning and program development, which is also followed by the delivery or implementation of the plans and programs developed in phase two (see framework).

Various types of data would be required for effective analysis, including data on demographic characteristics and health and community services, as well as data on the social, political, natural and built environments. Much of the required data are available in administrative records of regional health authorities and the Australian Bureau of Statistics. Additional information can be obtained from the community through the usual data collection approaches, such as surveys seeking community views on specific topics (eg, household survey to identify the community views on fluoride in drinking water in the Barwon South West Region). Semi-structured interviews with representatives of community groups, and formal and informal discussion

with service providers are other methods of obtaining data for the analysis.

Needs assessment

The importance of needs assessment has been noted in the research literature.¹⁰ This framework proposes three broad analyses in the context of needs assessment — demographic, health and community services, and socioeconomic disadvantage. Demographic analysis is essential to reflect the needs of the local community. This framework, therefore, supports the need for sound knowledge and understanding of the characteristics and dynamics of the local population.¹¹ The framework allows for partners, community groups and individuals who are connected to the area to contribute to needs assessment.¹²

Demographic analysis should not only concentrate on population composition, but also on population change (growth or decline), population size and population movements within, and to and from, the locality (internal and external migration respectively). Also essential is the analysis of the changes in demographic characteristics of the locality, especially potential changes in size, composition and net migration, also known as population dynamics.

In many parts of Australia, population growth and ageing are becoming endemic demographic characteristics, and no demographic analysis for planning for place would be complete without a clear acknowledgement of the impact of population growth and ageing on health planning. An analysis of population dynamics would reveal changes in population size, distribution and composition as well as growth and geographical mobility, all of which impact on the demand for and provision of services. The population of Victoria has been growing and this growth is expected to continue into the future in both metropolitan and many regional areas, with inherent implications for the demand for and provision of health and related services.⁵

In addition, increasing population (among other variables) at the local level in the western suburbs of Melbourne has resulted in a shortage of general practitioners (GPs), with a 2-year queue to see a local GP and a staggering GP–resident population

ratio of 1:2000.¹³ Furthermore, increasing life expectancy at birth has resulted in population ageing and a rising proportion of the population aged over 65 years in Australia as a whole, but more so in Victoria and Queensland, partly due to the fact that retirees are relocating to Victoria and Queensland. The proposed framework, therefore, acknowledges the importance of population characteristics and demographic changes in health planning, and supports and encourages their inclusion in health planning for place.

Health planning and program development are effective and successful when they are preceded by a thorough analysis of health status and the relevance of community services.^{13,14} Place based health planning, like population based health planning, requires an analysis of morbidity, mortality and health status, using indicators such as the incidence and prevalence of diseases, hospitalisation, waiting lists and death rates by cause, age, gender and ethnicity at the local level.

Due to the interrelationships and linkages between health and other sectors (eg, education, housing, and unemployment), health analysis should be complemented by an analysis of community services with emphasis on the availability or lack of community services such as housing and basic infrastructure.¹¹

The final framework category under needs assessment is social disadvantage (which is related to health and community services analysis). Various indices of socioeconomic disadvantage exist, but this article proposes that in Australia the Australian Bureau of Statistics (ABS) Index of Social Disadvantage be used. This is because it is comprehensive, covering a wide variety of social indicators, and is readily available and accessible.¹⁵ The importance of social disadvantage in health planning cannot be overemphasised. People's social and economic circumstances affect health throughout life, so health policy must be linked to the social and economic determinants of health.¹⁶ This is equally true for health planning and service development, and clearly recognised in the proposed framework.

Evidence from the research literature shows that socioeconomic status is positively associated with health status: the higher the socioeconomic status, the higher the health status.^{16,17} This translates into

an inverse relationship between socioeconomic status on the one hand and morbidity and mortality on the other hand. One of the most persistent disease patterns observed in public health research is that people in the lowest socioeconomic groups have the highest rates of morbidity and mortality.¹²

Index of prioritisation

Needs identified as a result of the above analyses would have to be prioritised to allow for effective place based planning, as all needs cannot be addressed at once. Three broad fields are included in this index of prioritisation, namely health needs, service provision or availability, and the ABS Index of Social Disadvantage. The index of prioritisation is computed by awarding scores of 1 to 3 for each of the three fields. Areas with high socioeconomic amenities (that is, high service provision) are given a score of 3 and those with high morbidity and mortality rates as evidenced from epidemiological data are given a score of 1 to denote high needs. The final Index is obtained by summing up the total score as follows:

Health needs

1 = High

2 = Medium

3 = Low

ABS

1 = High

2 = Medium

3 = Low

Service provision/availability

1 = Lack of services (poor service availability/provision)

2 = Moderate provision (some services are available, a few lacking)

3 = High service provision (most services available)

Three categories of total scores are proposed. A score of 3–4 means the place or locality is characterised by low health status, high social disadvantage and a lack of services. A total score in the middle range of 5–7 denotes medium priority (not high and not low), while a score of 8–10 suggests low priority.

3–4 High priority

5–7 Medium priority

8+ Low priority

In addition to these scores, prioritisation may also be determined by funding. The level of funding will influence decisions on the needs to be attended, although sometimes needs may be prioritised and funding sought to address those needs. These two scenarios are represented by the arrows to and from funding to needs prioritised in the framework.

Planning

The second part of place based health planning is the development of programs and services. The framework identifies three broad categories: population composition, program planning and development and the inclusion of socioeconomic and environmental factors that underpin its holistic approach.

Population composition

Population composition is defined following the demographic analysis undertaken in the needs assessment phase. As indicated in the framework, population composition flows directly from the demographic analysis undertaken in the needs assessment phase. For illustrative purposes, a locality with a high concentration of children would generally need more paediatric programs and services than a population with a lower concentration of children. Even so, a place with a high concentration of children where the socioeconomic status of the population is also high may need fewer programs than a locality where poverty and high unemployment are significant.

The number and proportion of females and ethnic populations in the locality should also be considered, so that a locality with a high proportion of Aboriginal and Torres Strait Islander people or non-English speaking background population would accordingly give weight to these population characteristics and strive to develop sensitive, culturally and linguistically appropriate services and programs.

Socioeconomic and environmental factors

The social status, cultural practices and associated attitudes to health, together with local norms and values are essential to, and impact on, the health status of any locality, and this is acknowledged in

the framework. Similarly, the economic status of the locality's population (employment, prevailing industries and occupations) should be considered. Localities with a higher level of unemployment are more likely to have a population which cannot afford basic health care, resulting in a potential lower health status. Some industries and occupations within industries are more prone to accidents, high morbidity and even relatively high mortality (eg, construction and manufacturing). In accordance with the principle of adopting a holistic approach to health planning, planning for place espouses the inclusion of local socioeconomic and environmental factors in health planning.^{16,18} This is based on the synthesis of research evidence in many countries that supports the position that socioeconomic environments impact strongly on health.^{11,12,14,19,20}

There is also some evidence to suggest that recent developments in settlement patterns, including the way new suburbs are designed, are adversely affecting population health. The infiltration of larger food supermarkets and the disappearance of the local small grocers mean that people are now driving to the supermarket instead of walking to the local store. The result is lack of exercise, increasing inactivity and obesity.^{7,21-23}

The impact of the natural environment on health is also acknowledged in the framework. The fauna and flora of a place or locality can and do influence the health of the population of that place and should be considered in place based health planning. For example, the risk of attack from respiratory diseases such as asthma increases with the output of pollen by some plants as well as air pollution.²⁴⁻²⁶ Modern amenities such as aeroplanes and cars create noise pollution which tends to influence health, while the cold conditions of winter tend to exacerbate the incidence of colds, flu and respiratory problems.²⁷

Program planning and development

According to the framework, programs should be developed to address the health needs prioritised during the needs assessment phase, and the instrument for doing so is the health plan. An integral feature of planning for place (or place based plan-

ning) is the active involvement of service providers (public and private), community groups and various levels of government in needs assessment and program planning and development. An effective approach to this involvement is the establishment, nurturing and maintenance of partnerships, comprising various levels of government, community groups, private and public sector agencies and relevant individuals.⁹ Active involvement means that partners must work as equals and regularly participate in and contribute to program planning and development, including regular attendance at meetings and developing and articulating the views of their constituents (community and/or service provider views etc).

In Australia, the Federal Government provides funding for health to the states and territories, which are responsible for most aspects of health within their areas of jurisdiction. Within states and territories, local governments have responsibility for developing and implementing Municipal Health Plans. It is essential to bring the various levels of government, service providers and community groups together in some form of partnership to achieve successful planning for place.

As indicated in the framework, the potential partners from community groups and service providers are determined by the population composition in that locality. Where there is a large concentration of Indigenous or migrant population, the framework proposes that Aboriginal and migrant and/or refugee service providers be identified and included in the partnerships. This will ensure that services developed and delivered in that community meet the needs of that community through the provision of culturally and linguistically sensitive and appropriate services.

Implementation

The final phase is the delivery of programs developed to address the prioritised needs. The framework proposes the active involvement of partners in program delivery to ensure successful implementation.^{10,28} However, as discussed earlier, partnerships do not always work smoothly due to conflicts and potential differences in interests.

Outcomes and conclusion

The objectives of place based planning are to improve program development and delivery, and to improve the health status of the locality. The model aims to identify health needs and priorities and plan appropriate and cost efficient delivery of programs that reflect sustainable health development and successful use of resources within a local context.

Place based health planning has the potential to improve health planning and program development. Further, the benefits of adopting place based planning outweigh the limitations and health planners should be encouraged to adopt it, using the proposed framework.

Competing interests

None identified.

References

- 1 Rogers EM. Diffusion of innovation. 4th ed. New York: Simon and Schuster; 1999.
- 2 Pate RR, Saunders RP, Ward DS, et al. Evaluation of a community based intervention to promote physical activity in youth: lessons from active winners. *Am J Health Promot* 2003; 17: 171-82.
- 3 Lahelma E, Arber S. Health inequalities among men and women in contrasting welfare states. *Eur J Pub Health* 1994; 4: 213-26.
- 4 Australian Institute of Health and Welfare. Australia's health. Canberra: Australian Government Publishing Service; 2002.
- 5 Yeboah DA. Basic demography. London: Minerva Press; 1998.
- 6 Green LW. Health education's contributions to public health in the twentieth century: a glimpse through health promotion's rear-view mirror. *Ann Rev Pub Health* 1999; 20: 67-88.
- 7 Dziewaltowski DA, Estabrooks PA, Johnston JA. Health youth places promoting nutrition and physical activity. *Health Ed Res* 2002; 17: 541-51.
- 8 Dziewaltowski DA, Estabrooks PA, Klesges LM et al. Behavior change research in community settings: how generalised are the results. *Health Promot Int* 2004; 19: 235-45.
- 9 Victorian Department of Human Services. Primary care partnerships: strategic directions 2004-2006. Melbourne: Department of Human Services; 2004.
- 10 Baranowski T, Stables G. Process evaluations of the 5-a-day projects. *Health Ed Behav* 2004; 27: 157-66.
- 11 Jesuit Social Services. Community adversity and resilience. Melbourne: Jesuit Social Services; 2004.
- 12 Syme S. Social determinants of disease. In: Last JM and Wallace, RB editors. Public health and preventative medicine. Norwalk, Connecticut: Appleton and Lange; 1992. p. 953-70.
- 13 Kelly J. Sick list wait. *The Herald Sun* (Melbourne). 2004. June 8. p. 1.
- 14 Yen JH, Syme SL. The social environment and health: a discussion of the epidemiologic research. *Ann Rev Pub Health* 1999; 20: 287-308.
- 15 Australian Bureau of Statistics : Socio economic index for areas. Canberra, Australian Bureau of Statistics, 2001.
- 16 Marmot M. The solid facts: the social determinants of health. *Health Promot J Aust* 1999; 9: 133-9.
- 17 Kitagawa EM, Hauser PM. Differential mortality in the United States. Cambridge, Mass: Harvard University Press; 1973.
- 18 Glasgow RE, Bull SS, Gillette C et al. Behavior change intervention research in health care settings: a review of recent reports with emphasis on external validity. *Am J Prevent Med* 2002; 23: 62-9.
- 19 Townsend P, Phillimore P, Beattie A. Health and deprivation. Inequality and the North. London: Croom Helm; 1988.
- 20 Sloggett A, Joshi H. Higher mortality in deprived areas: community or personal disadvantage. *BMJ* 1994; 309: 1470-4.
- 21 Van Doorslaer E, Wagstaff A, Bleichrodt H et al. Income related inequality in health: some international comparisons. *J Health Ec* 1997; 16: 93-112.
- 22 Bauman AE, Sallis JF, Dziewaltowski DA, Owen N. Towards a better understanding of the influences on physical activity: the role of determinants, correlates, causal variables, mediators, moderators, confounders. *Am J Prev Med* 2002; 23: 5-14.
- 23 National Public Health Partnership. Promoting active transport. Melbourne: National Public Health Partnership; 2001.
- 24 Australian Sport Commission. Participation in exercise, recreation and sport. Canberra: Australian Sport Commission; 2002.
- 25 Dockery DW, Norman LT. An association between air pollution and mortality in six US cities. *N Engl J Med* 1993; 329: 1753-9.
- 26 Pope CA, Boyle D. Particulate air pollution as a predictor of mortality in a retrospective study of US adults. *Am J Resp Crit Care Med* 1995; 151: 669-74.
- 27 Dora C, Phillips M. Transport, environment and health. Copenhagen: World Health Organisation; 2000.
- 28 Ewles L, Simnett I. Promoting health: a practical guide. London: Elsevier Science; 2003.

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