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Organisational development: Building our capacity to act

BUILDING CAPACITY IN RURAL HEALTH

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Capacity building to increase health gains in defined populations is not a new concept. Nevertheless, as interpreted by Penny Hawe and her colleagues,[1] and as developed operationally by the NSW Department of Health,[2,3] enhancing regional capacity to deal more effectively with the health needs and demands of people living in rural and remote Australia offers real promise as a useful approach for improvement. Essentially, capacity building in public health involves:

- delivering high quality services;
- responses to specified situations or problems;
- developing the regional system to solve new problems and respond to unfamiliar circumstances.

This article describes what effective and sustainable infrastructure is needed to achieve this capacity, with an emphasis on recent initiatives in the education and vocational training of rural health professionals.

THE HEALTH NEEDS OF RURAL AUSTRALIANS

Rural health has been on the political agenda for some time now.[4] The poorer health status of rural residents has been well documented; and in particular, that of Aboriginal and Torres Strait Islander peoples.[5]

Around 30 per cent of the Australian population lives outside the metropolitan centres in communities that are geographically distinct and dispersed, ranging from major regional centres, country towns, to small isolated settlements and pastoral stations. The prominence of regional centres in economic and infrastructure terms is somewhat offset by the fact that most (>85 per cent) rural and remote communities are small in size with populations ranging between 200–5,000. Access to health services in these smaller communities is often limited, and is further compounded by difficulties associated with the recruitment and retention of health practitioners.[6]

The context of rural practice, and the capacity to develop services within a specific rural or remote region, is influenced by historical and local circumstances. Nonetheless, the size and location of a rural or remote community are the main determinants of the range of resident health professionals and services being delivered locally. Population can be viewed as a proxy for availability of services, such as health and education, where government has a role in provision, funding or planning.[7] Also, proximity to, or remoteness from, other larger centres influences the accessibility of other services.

The majority of Australians have access to well-resourced urban centres where effective primary health care tends to be taken for granted and the emphasis is on secondary and tertiary levels of service. By contrast, the focus in rural areas is for meeting basic health needs and demands, and for constructing an adequate provision of primary health care supported by transferral arrangements to centres with higher level services. The extent of the challenge for capacity building in remote Aboriginal communities can be illustrated by what several experienced health professionals in remote areas regard as a set of core activities that are required for the delivery of comprehensive primary health care services:[8]

- 24-hour emergency care;
- immunisation;
- a specific program for child health;
- antenatal care;
- a prevention and control program for sexually transmissible and HIV infections;
- referral and evaluation system;
- chronic disease surveillance and treatment;
- health worker training and support programs;
- systematic approaches to staff recruitment, orientation, support and career development;
- data collection on population, interventions and outcomes;
- evaluation of activities;
- targeted and evaluated programs to manage, reduce and prevent substance abuse.

Another set of core environmental health activities has been recommended for maintaining healthy living conditions in remote communities. It all amounts to a huge task for relatively sparse workforces operating across wide areas and consisting of medical clinicians, nurses and Aboriginal health workers; with support from public health and allied health workers, social workers and community mental health workers.

This is where the operational specifics of capacity building become so important, starting with the definition of precise program goals and objectives that constitute the basis for agreed-upon protocols for clinical care and public health system management. Then follows the creation of essential linkages, networks, multiskilling of health workers and other process requirements for focused primary health care delivery that makes optimal use of available resources. Competent and professional management is, of course, essential for program development, implementation and service delivery.

Until recently, the lack of accessible and relevant education and vocational training had long been a major concern for health professionals considering taking up rural practice, and for those already in rural practice. During the 1990s, improved regional access to education and training was established through a network of Rural Health Training Units.[9] These initial units operated on discipline-specific lines with a strong emphasis on training rural general practitioners. Subsequent units were required to provide multi-disciplinary training under a single management structure. Some units took a further step by forming inter-disciplinary teams to provide education to different professional groups using an integrated educational curriculum.[10]

The location of rural health training units in major regional centres in all states and the Northern Territory still left a number of rural and remote regions without easy access to the new educational infrastructure formed as part of this initiative. The establishment of a training unit at Broken Hill in 1995, and the subsequent unveiling of a Commonwealth government funded program to develop a network of academic Departments of Rural Health and Rural Clinical Schools represented the next phase of building educational capacity in both rural and remote areas.

For the first time both rural and remote regional centres were being targeted for development.[11] These academic units were to be responsible for ensuring that health professionals in defined regions, including those residing in the smaller settlements, have access to the new educational and support services. These services include

- library and health information facilities;
- traditional academic teaching at the undergraduate and postgraduate level;
- support for vocational education and ongoing professional development.

The latter role will link with the existing educational service providers to facilitate the integration of educational effort from undergraduate to vocational training and ongoing professional development.

Advances with information technology have obvious implications for capacity building especially with the development of new linkages and networked activities. Sustained utilisation depends, however, on the capabilities of rural and remote telecommunications infrastructure, and on the willingness of governments to maintain effective systems of information technology.

Another prospect for the new rural academic units is to provide on-site bases for research, particularly on the specific health needs of rural communities and the effectiveness of interventions and the resources in the different regions. Introduction of rural research capabilities will facilitate an important aspect of rural health capacity building, which is to identify such matters as how best to sustain an effective interventional program or to measure the result of efforts to engage a community's willingness to participate in a health improvement strategy.

The capacity of the rural sector is being enhanced through these educational initiatives. It reflects on a general point that where significant gaps exist in education or professional services and support, investment may be required to create new facilities, services and relationships that provide support to rural practitioners. Thus, university departments of rural health—as new infrastructure—fill a gap by attracting experienced academics to work in the bush, and through those institutions provide educational opportunities and support to rural practitioners that were not previously available.

The capacity for rural health is increased when effective collaboration occurs among individuals and organisations to provide new or enhanced services. In fact, progress with capacity building in rural health will depend on encouraging a strong level of participation among rural health workers to look beyond the limits of their established activities and to engage in constructive discussion on improving capacity. In rural areas this has the potential to combine local expertise and networks to achieve greater capacity, self-reliance and sustainability of effort. Both commonwealth and state government incentives and funding have been successful in forging collaborative ventures in local communities (for example: multipurpose services such as is planned for communities like Collarenebri, Lightning Ridge, Brewarrina, and Wilcannia in far western NSW) and at the regional level, as indicated by the recent move to establish regional models of general practice training.

In the broader context, greater regional capacity—and collaboration among rural practitioners and organisations—will enable the rural areas to become more effective in defining and then negotiating the support they require from outside the region. These links are now resulting in strategic alliances between some rural and metropolitan based health services to provide specialist outreach and referral services (such as the eye program in Bourke between the Far West Area Health Service and the Prince of Wales Hospital in Sydney). Regional units of major institutions such as university departments of rural health are also joining with their academic colleagues on main campus to establish new educational courses for rural practitioners. For those providing services and support from a non-rural setting, there is the opportunity to develop a greater awareness, understanding, and regard for the work of rural practitioners.

The three pillars of the public health system are:

- service delivery;
- teaching;
- research.

In rural areas the capacity to carry out all three of these functions has been limited due to inadequate regional infrastructure and human resources. While it is too early to determine what will be achieved with the most recent investment in rural education and training, when considered alongside other investments aimed at building capacity in service delivery and research, it should be the cause for greater optimism about the future of rural health.

REFERENCES

1. Hawe P, King L, Noort M, Gifford SM, Lloyd B, Working invisibly: health workers talk about capacity building in health promotion. *Health Promotion International* 1998; 13: 285–295.
2. Building Capacity for Public Health. *NSW Public Health Bulletin* 2000; 11: 21–34.
3. A Capacity Building Web Site. *NSW Public Health Bulletin* 2000; 11:123. www.health.nsw.gov.au/public-health/healthpromotion.
4. Australian Health Ministers' Conference. *National Rural Health Strategy 1994*. Canberra: Australian Government Publishing Service, 1994.
5. Australian Institute of Health and Welfare. *Health in rural and remote Australia*. Canberra: AIHW, 1998.
6. Best J. *Rural Health Stocktake*. Canberra: Commonwealth of Australia, 2000.
7. Information and Research Branch (Commonwealth Department of Health and Aged Care) and National Centre for Social Applications of Geographical Information Systems (University of Adelaide). *Measuring Remoteness: Accessibility–Remoteness Index of Australia (ARIA)*. Canberra: Commonwealth of Australia, 1999.
8. Flick B, Miller P, Torzillo P, Wilson J. Aboriginal health services delivery in remote Australia. *Issues Facing Australian Families.* Weeks W and Quinn M (editors). Melbourne: Longmans, 2000; 343–359.
9. Australian Health Ministers Advisory Council. *A National Framework for Education and Training Arrangements for Rural Health Services*. Canberra: Commonwealth Department of Health and Aged Care, 1995.
10. Cox V. *Final Report: Implementing the resolution of recommendations from the National Association of Rural Health Training Units Workshop*. Canberra: Department of Health and Aged Care, 1996.
11. Humphreys J, Lyle D, Wakerman J, Chalmers E, Wilkinson D, Walker J, Simmons D, Larson A. The Roles and Activities of the Commonwealth Government University Departments of Rural Health. *Aust J Rural Health* 2000; 8: 120–133.

CURRENT THINKING AND ISSUES IN THE DEVELOPMENT OF HEALTH IMPACT ASSESSMENT IN AUSTRALIA

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Health Impact Assessment (HIA) offers a prospective method of:

- ensuring that government health policies improve the position of disadvantaged people;
- assessing the differential impact of health policies across the whole population;
- identifying potential impacts of health policies on specific groups within a population.

Despite there being no agreement on the significance of this process—and the process still needs to be evaluated—HIA is being extensively trialled in many other countries as a way of informing the policy-making processes of government. This article describes some of the discussion around these three applications of HIA. It draws on the findings of a recently-completed study for the Commonwealth Department of Health and Ageing on the potential application of HIA to population health and to the reduction of health inequalities in Australia.[1]

THE AUSTRALIAN HIA STUDY

The Australian HIA study sought to understand HIA as a tool for the development of health policy—its strengths and weaknesses, obstacles and limitations, the lessons learned from overseas, appropriate applications, and the training and capacity building needs of health professionals. It involved extensive overseas consultations with key informants working with HIA, a review of the literature, an appraisal of the institutionalisation of HIA in selected countries, and a consultation process within Australia.

THE 'WHY', 'WHO', 'WHEN', 'WHAT', AND 'HOW' OF HIA

HIA has its origins in Environmental Impact Assessment (EIA), which has been used to varying degrees of effectiveness around the world to determine the effects of developments on the environment and specifically on the health of people. In recent years there has been considerable international interest in the specialist application of HIA to policies and programs as they affect health. This application is more akin to Strategic Environment Assessment, which is the policy arm of EIA. Given Australia's extensive history of HIA within EIA processes,[2] it is important to consider this new application of HIA as a means of increasing population health gains through more evidence-based public health policies.

Impetus can be linked to a number of initiatives including: the WHO European Centre for Health Policy, especially the Gothenburg Consensus Document on HIA;[3] the European Union commitment to monitoring the impacts of integration and the effects of policies on population health; commitment to HIA through policy initiatives in each of the individual countries of the United Kingdom; activities in the Republic of Ireland, New Zealand, and some provinces of Canada; and, the ongoing commitment to HIA in Scandinavian countries and the Netherlands.

HIA is defined as 'a combination of procedures, methods, and tools by which a policy, program, or project may be assessed and judged for its potential, and often unanticipated, effects on the health of the population, and the distribution of those effects within the population'.[3,4] It builds on the notion that a community's health is not only determined by its health services but is also governed by a range of economic, social, psychological, and environmental influences. Health impacts refer to both positive and negative changes that occur to individual and community health, which are attributable to a development or policy. HIA can provide knowledge about the potential impact of a policy or program, inform decision-makers and affected people, and facilitate adjustment of the policy or program in order to mitigate the negative and maximize the positive impacts.[3] The term 'policy' is very broad; it can exist at a range of levels and in a range of settings both inside and outside government. 'Policy' also includes actions (such as service plans and advice),[5] and is often described using alternative titles such as 'strategy', 'plan', 'program', or 'project'.

HIA is underpinned by the desire to create a more inclusive and evidence-based approach to the formation of public health policy. Conventionally, policy-makers draw on policy analysis and evaluation to determine whether policies are meeting their objectives. HIA complements this process by applying tools that provide information on the unintended consequences and side effects of a policy on health, before and after a policy's implementation. Additionally, the application of HIA to the policies of other related sectors such as transport, housing, education, or immigration, provide a mechanism to legitimise health outcomes as important goals for governments alongside other social and economic outcomes.

Macintyre acknowledges that most of the major drivers of population health and of the distribution of health lie outside formal national health services and health structures. When describing the United Kingdom, she states: 'Health ministers have acknowledged the importance of air pollution, unemployment, crime and

disorder, poor housing, poverty, limited educational achievement, the general environment, and other forms of social exclusion. These influences on health are only rarely under the control of the doctors, nurses, or managers who are described as being the key architects in drawing up the plan for a new National Health Service'.[6]

Policy directly affects people's lives; it is a value-driven activity. These values include the desire for democracy, equity, sustainable development, and ethical use of evidence.[3] In addition, the goal of HIA is to add value to the decision-making process so the procedures used must display how HIA will lead to better decisions than would otherwise have been made. HIA may add value through, for instance, quantifying the magnitude of effects, clarifying the nature of trade-offs, increasing transparency of decision-making, and changing organisational culture towards health across government.[7]

Process is crucial to outcome in HIA,[7,11] so aspects such as rigour, inclusivity, thoroughness, and predictive accuracy, are essential features. Another perceived benefit of HIA is through the opportunities it creates to build alliances both across sectors of government and with the community. Consequently, HIA can be used to improve the quality and openness of public policy decision-making.[8]

The review of overseas case studies shows two main types of HIA being used:

- full or comprehensive HIAs;
- rapid appraisals of health impacts.

Full HIAs are based on traditional impact assessment methods including screening, scoping, impact appraisal, decision-making, monitoring, and evaluation. Rapid appraisal uses an audit or checklist method of determining impacts such as an equity audit, or an inequalities impact assessment. Generally, but not exclusively, rapid appraisals are based on expert consultation and are commonly used in situations where evidence is available but has not been applied to a specific context or proposal for action.

WHAT IS HEALTH INEQUALITIES IMPACT ASSESSMENT (HIIA)?

For HIA to help tackle health inequalities, it is essential that the different impacts borne by different groups are made explicit. Recommendations can then be made that seek to reduce any health inequalities. Acheson, in the *Independent inquiry into inequalities in health* (1998), recommended the application of specialist Health Inequality Impact Assessment (HIIA).[9] He argued that specific attention is required within HIA to inequalities, citing immunisation and cervical screening as two policies that have widened inequalities.[10] A well-intended policy that improves average health in a population may have no effect on inequalities; therefore, HIIA is a specific application of HIA. It seeks to make explicit not only the ways that a proposal will affect health but also the ways in which groups in the population will bear these health impacts.

Scott-Samuel defines HIIA as a decision-making tool that can be used for 'the estimation of the effects of a specified action on the health of a defined population'.[11] However, many practitioners argue on the relative merits of two different approaches: should HIA always include an assessment of the impact on inequalities, or should two discrete types of impact assessment be retained—HIA and HIIA? Additionally, regardless of the answer to this question, should an assessment of the impact on inequalities focus on the most disadvantaged groups or should it look at all groups? Essentially this second question focuses on whether the policy has an effect only on the most disadvantaged group(s) or on inequalities in the whole population.

At the *Equity and HIA Conference* in 2000,[12] participants concluded that all HIAs (and the methods and procedures adopted within each such as screening, community profiling, and consultation processes) should focus on health inequalities, explicitly considering both impacts on disadvantaged groups and the distribution of impacts across the population. The advantages were seen to be: that there would be an increased awareness of inequalities in health and of their causes; that an improvement in decision-making that sought to prevent inequalities would occur; and that decision-making would be more transparent and accountable. However, there is still no widespread agreement on which is the best option.

IMPORTANT LESSONS

There is potential within HIA that the process itself might inadvertently compound health problems. As the appraisal process involves identification and characterisation of impacts on specific population groups, it is possible that trade-offs will occur when impacts are mapped and weighted. This may compound existing health problems—there may be trade offs between improving average health, improving the health of the most disadvantaged people, and reducing inequalities in health.[13]

Barnes, who has worked extensively on the application of HIA to regeneration programs in the UK, states that issues about equity and inequalities are similar, whatever the level of HIA.[14] She identifies three important considerations arising from her work. First, disadvantage does not equal inequality and there are inequalities and inequities within other social groups rather than just in the most disadvantaged. In defining the scope of the HIA it is important to consider the question: inequalities between whom?[14] Second, despite the focus of the HIA in a disadvantaged area being on inequalities, and despite

equity being a core value of HIA, the HIA undertaken may not explicitly focus on equity. Third, in an HIA focused on a disadvantaged area, it is important to understand whether the focus is on the impacts of a proposal on the current population of the area or on the area itself and its future residents. Unless this is clear, the HIA can potentially compound inequalities by making recommendations to introduce schemes that result in residents moving away. This compounds the disadvantage in the area or drives residents away because of the increasing cost of living that is a direct consequence of the development. The result is that the disadvantage is simply moved elsewhere.

HIA itself can assist in addressing inequalities through community participation. If HIA is truly participatory—allowing people who have little opportunity to express their views—then self-esteem can be raised. Social exclusion infers exclusion from power structures; HIA and HIIA can reduce this. Finally, transparency of the process is essential if the community is to believe that they have an active and long-term role in the development of policies that affect their health and wellbeing.

CONCLUSION

With the increased understanding of the influence of 'upstream factors', such as social or fiscal policies, on population health and inequalities in health outcomes, Australia needs to be actively engaged in processes that will change these factors. HIA is one of the many important mechanisms available to policy-makers and will enable Australia to be part of an international development about the factors that impact on population health. There is indeed considerable scope for this to occur; it is heartening to see incorporation of HIA in the NSW Health and Equity Statement.

USEFUL WEB SITES

- European Centre for Health Policy at www.who.dk/eprise/main/WHO/Progs/HPA/Home;
- International Health Impact Assessment Consortium (IMPACT) at www.ihia.org.uk/links.html;
- London's Health at www.londonshealth.gov.uk; Netherlands School of Public Health, Health Impact Assessment Database at www.hiadatabase.net;
- Deakin University HIA at www.hbs.deakin.edu.au/HealthSci/Research/HIA.

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REFERENCES

1. Mahoney M, Durham G. *Health Impact Assessment: A tool for policy development in Australia.* Report for the Australian Department of Health and Ageing, Public Health Education and Research Program Innovations Grant. Canberra: Deakin University, 2002. www.hbs.deakin.edu.au/HealthSci/Research/HIA.
2. enHEALTH Council. *National Environmental Health Strategy*, Canberra: Environmental Health Section, Australian Department of Health and Ageing 2000.
3. Leho J, and Ritsatakis A. *Health Impact Assessment: Main Concepts and Suggested Approach—The Gothenburg Consensus Paper*. Brussels: WHO European Centre for Health Policy, 1999.
4. Mahoney M, Morgan R. Health Impact Assessment in Australia and New Zealand: An exploration of methodological concerns. *International Journal of Health Promotion and Education* 2001; 8(1): 8–11.
5. Aldrich, R, Mahoney M, Harris E, Lowe J, Stewart Williams J. *Health Inequalities Impact Assessment: Working collaboratively to develop a strategic framework.* Public Health Education and Research Program, Innovations Grant (Round 2), Canberra: Australian Department of Health and Ageing 2001.
6. Macintyre S. Modernising the National Health Service: Prevention and the reduction of health inequalities *BMJ* 2001; 320(7546): 1399.
7. Kemm J. Can health impact assessment fulfil the expectations it raises? *Public Health* 2000; 114: 431.
8. Murphy E. Forward *Health Impact Assessment for Regeneration Projects, Volume 1: A Practical Guide.* Cave B. and Curtis S. London: East London and the City Health Action Zone with Queen Mary University of London, 2001.
9. Acheson D. Independent Inquiry into Inequalities in Health. London: Her Majesty's Stationery Office, 1998.
10 Acheson D. Health inequalities impact assessment. *Bulletin of the World Health Organization* 2000; 78 (1): 75.
11. Scott-Samuel A. What's in an I?—Health Inequalities Impact assessment. Health Impact Assessment—Report of the Second Methodological Conference. London: UK Department of Health, 2000.
12. Barnes R. Health *Impact assessment and inequalities: A population focus or an area based approach? (Draft Report)*. Brussels: WHO, 2001.
13. Douglas M, Scott-Samuel A. Addressing health inequalities in health impact assessment. *J Epidemiol Community Health* 2001; 55: 450–451.
14. Barnes R. Equity and HIA—Practical experiences. Barnes R (editor). *Equity and Health Impact Assessment Seminar* Manchester: Liverpool Public Health Observatory, 2000.