BUILDING CAPACITY FOR PUBLIC HEALTH

GUEST EDITORIAL
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Readers of the NSW Public Health Bulletin will be in no doubt that public health in NSW is at the forefront in meeting the challenges of public health in the twenty-first century. This special edition of the Bulletin, which examines ‘capacity building’, provides an excellent illustration of this.

For many readers the term ‘capacity building’ may appear abstract and even obscure. The articles in this issue will explain the idea, and show its relevance to public health. The idea of ‘building capacity’ is not unique or specific to public health or health promotion. We could equally be discussing Australia’s defence capacity and ways in which it might be strengthened.

It seems that capacity building in relation to public health has come about for two quite distinct reasons. The first is to do with the size and scale of action required to improve the health of the population. The task of improving public health, even with the knowledge currently available, is beyond that which can be achieved by the current workforce and its support systems. We need to expand the resources that are applied to the tasks of public health. For this reason we are interested in workforce development and organisational development as examples of capacity building. The second reason is the recognition that a critical, limiting factor in bringing about sustained changes in people’s behaviour and social and physical environments is the engagement and commitment of people to the issue or goal. Unless our public health goals are understood, accepted and embraced by community members, then there is limited scope for change. Thus, one important focus of capacity building is to build community capacity, usually by developing community structures (social and physical) or developing community members’ skills.

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The first paper in this issue has been written by Penelope Hawe. Penny is not only a leading figure in developing the concept of capacity building in Australia, but is also an international expert in this field. Her article provides a lucid introduction, describing what is meant by capacity building.

One area of application and development of the idea of capacity building is in international health, and the article by Jan Ritchie and her colleagues at the University of New South Wales describes their application of capacity building to consultancy work in the Pacific Islands. Their article describes how an educational approach to improve health in developing countries needs to be extended to encompass a broader capacity building strategy.

Doris Zonta and Andrew Wilson have adopted an organisational perspective, and are concerned with the development of the infrastructure required for an effective public health system. The Health Promotion Strategies and Settings Unit of the NSW Department of Health has been very active over the last few years in fostering a climate of inquiry and investigation about capacity building. A summary of the initiatives that they have undertaken is presented in the article by Shelley Bowen.

Driven by both the need to develop stronger infrastructure and the need for community understanding and acceptance, the newly emerging field of mental health promotion has enthusiastically embraced the concept of capacity building. Kym Scanlon and Beverley Raphael discuss the contributions of organisational capacity, workforce development and community capacity to an overall strategy for promoting mental health.

Different individuals and organisations take up new ideas at different rates. While there is always a small group who enthusiastically takes up new ideas quickly, this by itself is generally insufficient to produce system-wide uptake. To ensure systematic and monitored uptake of capacity building strategies, the Health Promotion Strategies and Settings Unit has embarked on a dissemination strategy. In the final article Linda Cristine describes the grants scheme that is being conducted to test the applicability of the capacity building indicators in a variety of projects and settings throughout NSW.

CAPACITY BUILDING: FOR WHAT?

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The words ‘capacity building’ have spread rapidly throughout the health system, almost like a virus. But what exactly does capacity building mean? How did the term originate? What difference will or should capacity building make to the business of running health services? This article will briefly overview what we expect to achieve by promoting capacity-building as a strategy and how we might measure our success in doing so.

NEW CONCEPT OR NEW JARGON?

The Oxford English Dictionary defines ‘capacity’ as ‘holding-power’, as in a vessel filled to capacity’. In NSW, health workers have spoken about capacity building as helping to realise ‘potential’. These definitions refer to increasing the strength, capability or power of something. But to do what? In the health system capacity building refers to at least two things:

- our capacity to deliver specified, high quality services or responses to particular (familiar) situations or problems, such as in our cancer control capacity;
- capacity of a more generalised nature—the capacity of the system we are working in to solve new problems and respond to unfamiliar situations.

The first type of capacity is defined by set criteria around particular competencies relating most often to specific skills, procedures and structures (such as setting up a Pap screening service). The concern is with how well a particular service is delivered and its appropriateness for population needs. The second type of capacity is defined by more diffuse and complex criteria, such as the characteristics of the work environment, the nature of our team interactions, the quality of leadership, and the way our health organisations are structured. It addresses how adequately the environment we are working in encourages us to think creatively, to adapt to change, to innovate and to solve problems.

So, capacity building is most definitely not new. Words like performance standards, competency assessment, and quality improvement easily cover the first type of capacity; and words like leadership development, service development, team development, workforce development, and organisational development cover the second type. What perhaps is new, given the attention capacity building has at present, is the emphasis on issues of measurement. This has meant that the vagaries of the concept have had to be confronted. In an era where we are heavily focussed on health outcomes, the resources going into achieving those outcomes have come under increased scrutiny. While changes in health outcomes at a population level will ultimately tell us whether or not we have an effective health system, intermediate indicators—indicators of our
success with capacity building—will tell us if we are building a system that is likely to be effective. As changes in health outcomes at a population level are often slow to materialise, changes in more intermediate indicators may suggest where more immediate remedial action is necessary.

WHAT ABOUT COMMUNITY DEVELOPMENT? IS IT THE SAME AS CAPACITY BUILDING AT A COMMUNITY LEVEL?

Again there are two ways capacity building operates at a community level. Where community-level interventions have been proven to be effective, researchers and practitioners have tried to sustain programs, and devise measures to assess how well a program has been sustained. This can be thought of as a way of maximising the benefit of an intervention by ensuring its ongoing capacity to deliver health gains. Trying to conceptualise and then measure how, for example, initiatives in cardiovascular health have been promulgated across local communities and health regions, is the subject of a 10-year program of research and development in Canada.

At a broader level, one would think a community that has been successfully involved in an extensive cardiovascular health initiative may have picked up a few clues about how to work on other issues as well. That is, experience health initiative may have picked up a few clues about being successfully involved in an extensive cardiovascular disease prevention programs. At a broader level, one would think a community that has been successfully involved in an extensive cardiovascular health initiative may have picked up a few clues about how to work on other issues as well. That is, experience health initiative may have picked up a few clues about being successfully involved in an extensive cardiovascular disease prevention programs. This can be thought of as a way of maximising the benefit of an intervention by ensuring its ongoing capacity to deliver health gains. Trying to conceptualise and then measure how, for example, initiatives in cardiovascular health have been promulgated across local communities and health regions, is the subject of a 10-year program of research and development in Canada.

WHERE TO FROM HERE?

Progress depends on a high level of participation and willingness for the diversity of people involved in the health workforce to relate these ideas to their own work and become constructive critics and contributors to the process of making capacity building a concrete, recognised and valued part of our activities. It is a creative task.

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8. Rissel C, Finnegan J, Bracht N. Evaluating quality and sustainability issues: issues and insights from the Minnesota...
INDICATORS TO HELP PLANNING AND EVALUATION OF CAPACITY BUILDING IN HEALTH PROMOTION

The Capacity Building Process and Outcomes Indicator Project, Department of Public Health and Community Medicine, University of Sydney, developed nine checklists for use in planning and evaluation:

- the strength of a coalition
- opportunities to promote incidental learning among other health workers
- opportunities to promote informal learning among other health workers
- whether a program is likely to be sustained
- the learning environment of a team or project group
- capacity for organisational learning
- capacity of a particular organisation to tackle a health issue
- the quality of program planning
- community capacity to address community issues.

Source: Hawe P, King L, Noort M, Jordens C, Lloyd B. *Indicators to help with capacity building in health promotion*. NSW Department of Health and the Australian Centre for Health Promotion, Department of Public Health and Community Medicine, University of Sydney, 2000.

CAPACITY BUILDING FOR INTERNATIONAL HEALTH GAINS

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This article describes the recent experiences of the School of Medical Education, at the University of New South Wales, in working with Pacific Island countries, and draws those experiences together with some lessons from the published literature to propose a set of key principles that relate to capacity building. Capacity building is a key component of international health development and is a primary activity in the School of Medical Education at the University of New South Wales (UNSW), one of three
schools that make up the UNSW Centre for Public Health. The School was established in 1973, when the World Health Organization (WHO) designated it a Regional Training Centre for Health Development to work with the personnel of developing countries to improve the health of those countries. Initially the focus was on improving training, however it soon became obvious that training alone was insufficient to achieve the preferred ends. Cox (1999) has traced the lessons learned over these 26 years showing how the School discovered that education needs to be accompanied by institutional strengthening if goals of positive sustainable change are to be achieved.1

For the purposes of this article, capacity building is defined as creating and expanding desired qualities and features rather than just managing what is already available.2 Training lies at the heart of this approach, but institutional building must also be a focus.2,3,4 Institutional building includes addressing organisational structure and culture, systems and processes, linkages with other sectors and human resource development, such as supervision and incentives. This capacity is, in turn, intended to be used to build the capacity of communities to participate in defining—and acting to solve—public health problems.

BUILDING CAPACITY IN THE PACIFIC ISLANDS

The School currently works with Pacific Island countries to build capacity in two ways. Firstly, it has taken a role to support the training of health workers whose current job descriptions include a partial or total dedication to the implementation of health promotion programs. This has been conducted primarily in-country, with the School going to the learners. From a recent learning needs analysis,5 it appears the skills identified in the Ottawa Charter of:

• enabling communities
• advocating to policymakers
• mediating when working intersectorally,6
are clearly identified by Pacific health promoters as relevant and required. Skills to implement settings approaches are also requested. One of the authors is involved with the development of in-service training along these lines with small teams from eight different countries and varying institutions.

The School has taken a second role to minimise the risk that the educational approach will be unsustainable without supporting structural change. The Western Pacific Regional Office of WHO has commissioned the School to contribute to the development of draft Guidelines for Healthy Islands. A unique situation exists in the Pacific where the health ministers of the region are signatories to a series of agreements committing their countries to become Healthy Islands.7,8,9 This concept is a unifying theme, and all Pacific countries are in the process of developing a coordinating mechanism and a national action plan. The guidelines will ultimately aim to support Departments and Ministries of Health in putting in place appropriate structures for their countries to become Healthy Islands. Monitoring and evaluation of the implementation of these processes is taking place on a case study basis, but with plans to use regional indicators.

KEY PRINCIPLES FOR SUSTAINABLE CAPACITY BUILDING

The following principles do not represent an exhaustive list, but highlight some key learnings we have drawn from the published literature and the School’s experiences to date.

Matching the system and the people
Capacity building efforts must create a culture whereby people support and develop the system while the system supports and develops the people to achieve organisational outcomes. The system includes all the procedures, protocols, structures and processes in an organisation, and the wider context that can support or hinder people’s ability to achieve health goals. People therefore need to have the skills to understand and develop the appropriate systems, such as clear internal procedures and incentives for performance. In turn, the system can support and further develop their skills.1,2,3,4,10

Paying attention to the demand side
Capacity building should not have a pure supply orientation; it should pay special attention to the task of understanding, creating and stimulating demand to use the capacity generated.2 If people are trained for tasks for which there is little demand then their capacity to perform will diminish over time.1,11

Working within the local context
A careful assessment of the local context, a partnership approach and consultations with potential users of the proposed capacity should be central to any capacity building activity.1,2

Creating linkages between different people and institutions
Partnerships and collaboration between different people and institutions are important in creating the conditions for sustainability.3 For example, providing training for individuals from different agencies can create natural support networks.

Training people as agents of change
Training and education needs to create a readiness in trainees to take on the challenge of being an agent of
change to build people’s capacity and systems to respond effectively to health needs.¹

Community capacity building
Capacity building should not be limited to organisations, but should also extend to working with communities to enable them to more actively participate in defining and addressing public health issues. Health organisations often have a central role in building capacity in communities.

Working simultaneously from bottom-up and top-down directions
The development of high level commitment and action supports the development of local level skills, which in turn builds support within communities and organisations.

CONCLUSION
The School's work with the Pacific Islands reflects these key principles, which are important to sustain the gains from capacity building. It clearly recognises the need to match the system and the people and to pay attention to the demand side. The development of Guidelines for Healthy Islands, ministerial commitment and national action plans are designed to support the training of key personnel in health promotion to ensure their skills fit into a clear framework, are utilised and are evaluated. The training is based on skills identified as important by local workers in their own context, and focuses on developing change agent skills, such as working intersectorally, with communities and policymakers. The training program, through its focus on intersectoral collaboration and the participation of workers from a variety of institutions, is designed to create linkages and a critical mass of expertise. Working both bottom-up and top-down enhances the potential for sustained change in health promotion capacity in the Pacific Islands.

Another important consideration in building capacity in these small island countries is the role of external agencies.

It needs to be recognised that their contribution can be much greater than mere technical support, and that their potential political and strategic influence needs to be acknowledged and harnessed if best results are to ensue.

REFERENCES

CAPACITY BUILDING FOR PUBLIC HEALTH:
A STATEWIDE PERSPECTIVE

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WHAT DO WE MEAN BY CAPACITY AND CAPACITY BUILDING AT A SYSTEM LEVEL?
The word *capacity* is used in a number of different ways and is often related to ability (real or potential aptitude or skill), power or authority (duty, position or role), and capability (power to produce, perform or deploy).¹ The word *capacity* when applied to the public health system can be taken to refer to the system’s ability to perform or produce desired outcomes.

Human systems consist of organisations that, in turn, consist of individuals. The ability of the system to produce desired results depends on the performance of the constituent organisations, and the relationships between the organisations. The performance of an organisation depends on its leadership; on the effectiveness of the
structures and processes through which the organisation functions; on the deployment of resources within the organisation; and on the knowledge, skills and commitment of the individuals that make up the organisation.

*Capacity* is a neutral word, conveying neither positive nor negative qualities. *Capacity building*, on the other hand, implies a deliberate effort to create, support or strengthen capacity. Hawe et al. (1999) identify three ways of thinking about capacity building: building infrastructure, building partnerships and building problem-solving capabilities.²

The infrastructure required for an effective public health system consists broadly of five elements: surveillance and information systems; a knowledgeable and skilled workforce; research and development capacity; legislation; and policy, planning and management systems.³ Partnerships require, firstly, effective leadership and relationship skills; and second, attention to structures, processes and resources in order to ensure sustainability.³ Generic problem-solving skills create the ability to respond flexibly and innovatively to new challenges. This requires an organisational culture that values learning and innovation.

**BUILDING PUBLIC HEALTH CAPACITY AT A STATEWIDE LEVEL**

In March 1999 the Chief Health Officer initiated a project, *Future Directions for Public Health in New South Wales*, aiming to set the medium-term priorities for public health in New South Wales. This project, which was conducted under the guidance of a broadly representative steering committee, represents the first significant review of public health in NSW for ten years or more.⁴

The priority areas that were considered focused not just on health issues and determinants of health, but on the partnerships and infrastructure required to improve the effectiveness of the public health system. Consultations and workshops across the Department and Areas during 1999 identified important strengths in the NSW public health system; and also identified a number of system issues.

The network of Public Health Units and the Area Health Services are regarded by many as significant strengths of the current system, although opportunities to further enhance both were also identified. The Public Health Unit network is seen as particularly successful in its capacity to develop local responses to issues, its response to infectious disease issues, and its capacity to provide specialist expertise to the Areas. The role of Health Promotion Units was also strongly supported. The particular strengths of the Area Health Services are seen as their broad public health role and the emphasis on health improvement.

Aspects of the current arrangements that were most often identified as requiring improvement included: funding and accountability arrangements, intersectoral communication and partnerships, clarity of roles and responsibilities, and workforce development.

A major output of the *Future Directions* project will be the development of a strategic directions statement for public health in NSW, to be released in 2000. This statement will support capacity building initiatives across the public health system.

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2. Hawe P, King L, Noort M, Jordens C, Lloyd B. *Indicators to help with capacity building in health promotion*. NSW Department of Health and the Australian Centre for Health Promotion, Department of Public Health and Community Medicine, University of Sydney, 2000.
Building capacity to improve health is an important element of effective public health practice. Emerging theory in health promotion sees capacity building as an approach to the development of sustainable skills, organisational structures, resources, and commitment to health improvement in health and other sectors.\(^1,2,3\) This is achieved by strengthening and improving our capacity to act within programs, and developing the capacity of the health system to respond to emerging issues that affect health.\(^1,2\)

Evidence suggests that building the capacity of the system enables it to prolong and multiply health outcomes from public health programs.\(^1,2,3,5,6,7\) The Health Promotion Branch, NSW Department of Health, in collaboration with many other partners in NSW, has been working to increase the understanding of capacity building within the health system. Tools have been developed to assist with strategy development, and for the measurement of a concept that is not new, but which is further developed.

Within their work to map the domains of capacity building and develop indicators to guide practice, Hawe et al. identify three conceptual approaches to capacity building. These are health infrastructure and service development; program maintenance and sustainability; and problem solving capability of organisations and communities (Figure 1).\(^2\) Their work provides a major step forward for health promotion practitioners by clearly articulating the intent of capacity building efforts.

Capacity building is of particular importance to health promotion because it provides clearer definition, and attempts to measure, what is sometimes described as the ‘invisible work’ of health promotion.\(^2\) It is the ‘behind the scenes’ effort by practitioners that increases the likelihood that effective health promotion programs will be sustained.

In addition, capacity building strengthens evaluation by emphasising the importance of measuring context; it considers sustainability, provides tools to measure the capacity we have against the capacity we need to reach an outcome; and provides a framework for thinking about, not only the capacity within programs, but the capacity of systems–organisations to respond to changing health needs.

The Health Promotion Branch is particularly interested in the application of capacity building strategies and indicators to programs that focus on approaches across settings, priority populations and health issues. Tools that help with the development of strategies and measurement when building capacity are being applied in a number of program areas such as: safe communities, women’s health outcomes, tobacco control, Aboriginal health promotion, better practice, health promotion with schools, primary health care transition and youth suicide.\(^2,7\)

The focus of the Health Promotion Branch so far has been on:

![A WAY OF CONCEPTUALISING CAPACITY BUILDING IN HEALTH PROMOTION](image)
• defining capacity building;
• articulating capacity building strategy (existing and new);
• engaging people in debate about the place and value of capacity building in public health practice;
• investing in research to develop resources to guide the measurement of our previously invisible capacity building effort;
• supporting the transition of capacity building research into practice.

This has been achieved by supporting:
• the publication of indicators to help with capacity building in health promotion that have been developed by the Department of Public Health and Community Medicine at the University of Sydney;2
• the development of a strategic framework by NSW Health, *Capacity building to improve health,*7
• the development of the Community Capacity Health Development Index by the University of Queensland;4
• the capacity building grant incentive scheme, *Putting the latest capacity building indicators research into practice*;
• the NSW Health Capacity Building Forum, *Achievements, experiences and opportunities for the future—capacity building and public health* held at Sydney University in October 1999;3
• a colloquium in March 2000: *Capacity Building: Mastering the art of the invisible.*

Our challenge now is to encourage the systemic application of these tools by health and other systems; build research into practice; and continue with judicious investment in research, measurement and sustainability of our capacity building effort.

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2. Hawe P, King L, Noort M, Jordens C, Lloyd B. *Indicators to help with capacity building in health promotion.* NSW Department of Health and the Australian Centre for Health Promotion, Department of Public Health and Community Medicine, University of Sydney, 2000.
BUILDING CAPACITY FOR PROMOTION, PREVENTION AND EARLY INTERVENTION IN MENTAL HEALTH

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Building the capacity for promotion, prevention and early intervention in mental health—to contribute to reducing the burden associated with mental health problems—requires a number of approaches. This article discusses three specific areas: establishing the policy context; building the capacity of the community to promote their own mental health; and enhancing the capacity of the workforce for promotion, prevention and early intervention in mental health. Collaboration is a key theme across all of these areas. Other approaches that build the capacity to promote mental health—such as building the capacity for research (including intervention research), allocation of resources and leadership—are referred to.

The burden of mental health problems is large and increasing. It has been predicted that depression will be one of the greatest health problems world-wide by the year 2020.1 These findings were replicated in a 1999 Australian study.2 Further, it is becoming clear that the burden associated with mental health problems and disorders will not be significantly reduced by treatment alone. To achieve this an increased emphasis is required on building capacity within the community to promote and sustain their own mental health; as well as on interventions earlier in the course of mental health problems. The effectiveness of initiatives to promote mental health; and the prevention of, and early intervention in, mental health problems, is strongly supported by evidence.3–9

ORGANISATIONAL CAPACITY TO PROMOTE MENTAL HEALTH

A favourable policy context is critical to ensure that promotion, prevention and early intervention initiatives in mental health are supported and sustained. The policy context provides leadership; a framework for activity; facilitates the incorporation of initiatives to promote mental health into the core business of a service; and can influence resource allocation.

In Australia, including NSW, the current policy context for promoting mental health and preventing the development of mental health problems and disorders is well established, and provides a clear mandate and priorities for action. The Second National Mental Health Strategy has identified promotion, prevention and early intervention in mental health as one of three key priorities.10 Under this auspice the Mental Health Promotion and Prevention National Action Plan provides a framework for building capacity and implementing initiatives across the Australian population and, within this, specific population groups.11 These same directions are reflected in strategies in NSW for achieving mental health.12–18

BUILDING CAPACITY IN THE WORKFORCE

Enhancing the capacity of the workforce to implement promotion, prevention and early intervention is also essential. The workforce is spread across: health, including mental health, community health, youth health, hospital services among others; other sectors, including education, community, housing, police and social services; and non-government and community organisations.

Enhancing the capacity of the workforce includes a wide range of activities from raising awareness through to supporting and sustaining new skills and initiatives that are incorporated as part of routine service delivery. The revised Mrazek and Haggerty framework outlined in the National Action Plan has been important in disseminating the concepts of promotion, prevention and early intervention in the mental health context (Figure 2). Disseminating information on evidence-based programs and their key components (through forums, seminars and resource documents) is an important part of enhancing the capacity of the workforce.19,20 The learning of new skills needs to be reinforced through supervision and support. Systems and processes need to be established within and across services that ensure that the range of approaches that promote mental health are supported and sustained. Shifting attitudes to support promotion, prevention and early intervention in mental health, and incorporating such initiatives as part of routine service delivery, are challenges to be addressed. Ensuring an optimal mix of promotion, prevention (universal, selective and indicated), early intervention (indicated and case identification) and treatment initiatives, is also important.21 The following are two examples of initiatives that have set out to achieve the above aims.

The Mother Infant Network

The Mother Infant Network (MINET) in South Western Sydney is a comprehensive program, developed over nine years, with the aim of improving the mental health of new mothers and their infants in disadvantaged areas. Key components of this initiative include: definition of roles and responsibilities of service providers; description of pathways to care; development of a psycho-social screening tool with linked information system; and provision of training, clinical supervision and support to early childhood nurses learning new screening and counselling skills.22 Components of the MINET program will be disseminated to other Areas across NSW over the next five years.
The Southern Area First Episode (SAFE) program is establishing a comprehensive early intervention program for young people experiencing a first episode of psychosis. Raising awareness—and defining the roles of service providers including child, adolescent and adult mental health workers, general practitioners, and school counsellors—were important first steps. Ongoing knowledge and skill acquisition and the provision of clinical supervision by video conferencing with experts from across NSW are also critical. The SAFE program provides a useful model for other rural Areas considering the introduction of programs to tackle early psychosis.

BUILDING CAPACITY IN THE COMMUNITY

Increasing the capacity of the community to promote and sustain their own mental health is of pivotal importance. Promoting connectedness (in families, schools and communities), and promoting resilience in individuals, can provide a buffer to the development of mental health problems and disorders.24 Mind Matters is one example of a school-based program that aims to promote mental health among the school community.25 Enhancing mental health literacy within the community is also important to ensure increased recognition of mental health problems and disorders; and referral to appropriate treatment at the earliest stages.26 Another example is Dumping Depression.
an initiative of the Central Coast Area Health Service, which aims to raise awareness of depression and available services among young people.27

Other factors can also affect a community’s capacity to promote mental health. These include: the availability of housing, child care and welfare benefits; equitable access to, and availability of, other services; and levels of community discrimination and violence. Community development that empowers community members to have the capacity to define issues and develop solutions, as well as advocate for their adoption, also contributes to improving a community’s capacity to promote its mental health. Addressing these factors will effect the connectedness and resilience of individuals. The NSW Rural and Regional Youth Suicide Prevention Program 1997–2000 is an example of an initiative that has promoted community development in rural communities across NSW.28

CONCLUSION

Building capacity to promote mental health and prevent and intervene early in illness is required to reduce the burden associated with mental health problems and disorders. This article has discussed three specific areas of activity necessary to achieve these aims: establishing the policy context; building capacity within the community to promote their own mental health; building the capacity of the workforce to promote mental health and early intervention and prevention in mental health problems and disorders.

Some other areas of activity that are necessary include: building the capacity for research, particularly intervention research; resource allocation; and leadership. How to apply capacity building to health promotion action: A framework for the development of strategies provides a framework for considering a range of issues to build capacity to promote mental health and prevent the development of mental health problems.29 The document Mental Health Promotion in NSW: Conceptual Framework for developing initiatives outlines a process to assist in developing these initiatives.30

Collaboration is a key theme that links all of these activities across health sectors, across government and non-government agencies, and across communities.

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In November 1996 the Health Promotion Branch embarked on an innovative dissemination strategy for measuring its capacity building efforts. The following report illustrates how NSW Health is linking research and practice through a small grant incentive scheme. The grant scheme aims to encourage the application and further refinement of the capacity building indicators developed by the Department of Public Health and Community Medicine at the University of Sydney.  

Dissemination refers to the purposeful transfer of knowledge from researcher to practitioner. It is an active process that involves a number of stages. According to King, Hawe and Wise there are five stages in the dissemination process:

- providing or seeking information
- persuasion about the relevance and applicability of something (the innovation)
- making a decision to adopt or try the innovation
- changing practices and using the innovation
- sustaining the changed practices.

The primary purpose of the grant scheme is to move the concept of measuring capacity from theory into practice.

As such, it is a dissemination strategy that closely follows the above five-stage approach. The work of the University of Sydney in developing *Indicators to Help with Capacity Building in Health Promotion* has generated a lot of interest among health promotion practitioners and other public health professionals. Although the indicators were specifically designed for health promotion practitioners, they have been taken up and applied to a range of programs—and by a range of practitioners—within and without the public health system (stages one and two).

In November 1996, 11 Area Health Services applied for seeding grants of $5,000–$15,000 (stage three). The six grant projects awarded for 1999–2000 were:

- *Make a Noise* Youth Suicide Prevention Project, Greater Murray Area Health Service
- Oral Health Promotion Project, South Eastern Sydney Area Health Service
- Health Promotion Seeding Grants Program, South Western Sydney Area Health Service
- Health Promoting Schools Project, Western Sydney Area Health Service
- Primary Care Transition Project, Far West Area Health Service
- Health Promotion Network, Mid North Coast Area Health Service.

The grant scheme will capture the experiences of health professionals working on these projects by creating an
environment for experimentation with the indicators and reporting on their use against existing health programs (stage four). Professionals involved with the grant projects are being asked to reflect on the process of using the indicators, report on their strengths and weaknesses, and identify any gaps. Their reports will illustrate how the indicators were used; for example: who used them, how often, in what context, and why. We are also interested in finding out how the use of the indicators further influences health promotion practice (stage five).

Moreover, the planned evaluation of the grant scheme will allow us to develop a greater understanding of the dynamics of dissemination and the barriers to it.4

Current dissemination research suggests a number of strategies for improving the relationship between research and practice. Nutbeam proposes several approaches, including education and training for practitioners, and a more structured approach to rewarding research development and dissemination efforts.6 Oldenburg’s analysis of successful dissemination includes strategies that actively involve key stakeholders, provides funding, and ongoing support.7 We will be evaluating this grants scheme in terms of how well it has met this challenge of improving the relationship between research and practice.

A range of indicators is being developed to measure capacity, and many practitioners are experimenting with their use without the financial incentive of grants. However, the strength of the grants program is that it intends to establish a dialogue between practitioners and researchers. Green describes the participation of practitioners as a ‘rule of thumb’ for dissemination: ‘the rule of thumb governing the readiness of practitioners to adopt or apply the results of research and development appears to be the degree to which they have been consulted and involved in the formulation of the study’.8

The NSW Department of Health has collaborated closely with the Department of Public Health and Community Medicine at the University of Sydney in the development of this set of capacity building indicators. It has also consulted with the key practitioners who are implementing capacity building strategies for health promotion. By doing so it has harnessed some of the growing interest in capacity building research and practice, promoting further this important part of public health practice.

REFERENCES
enhance the capacity of States and Territories to respond to local priorities.

NATIONAL PUBLIC HEALTH PARTNERSHIP GROUP

The National Public Health Partnership Group operates as a sub-committee of the Australian Health Ministers’ Advisory Council (AHMAC). The Partnership Group comprises:

- the Chief Health Officers or Directors of Public Health in all States or Territories, including the First Assistant Secretary of the Public Health Division, Commonwealth Department of Health and Aged Care;
- executive members on the National Health and Medical Research Council and the Australian Institute of Health and Welfare;
- the Director of Public Health of the New Zealand Department of Health, as observer.

The role of the Partnership Group is to oversee the Partnership work program and to report to the AHMAC on progress in key areas of work, including consultation with relevant stakeholders. It makes recommendations to Health Ministers via AHMAC on national priorities for public health, the Partnership work program and other policy issues and responds to matters referred to it by the Australian Health Ministers’ Conference and the AHMAC.

THE PARTNERSHIP ADVISORY GROUP

The Partnership Advisory Group is made up of representatives from key national non-government organisations. The Advisory Group ensures that the National Public Health Partnership is informed of service provider and consumer perspectives on its work program. The organisations represented on the Advisory Group include:

- Australian Health Promotion Association
- Australian Institute of Environmental Health
- Australian Nursing Federation
- Consumers’ Health Forum
- National Aboriginal Community Controlled Health Organisation
- Public Health Association of Australia
- Public Health Education and Research Program (PHERP) Directors
- Faculty of Public Health Medicine, Royal Australasian College of Physicians
- The Royal Australian College of General Practitioners.

THE NPHP SECRETARIAT

The NPHP Secretariat provides direct support services to the NPHPG. Situated in Melbourne, it coordinates research that supports policy developed by the NPHP; and provides additional support services including the Australian Institute of Health and Welfare’s role as secretariat for the National Public Health Information Working Group.

THE NPHP WORK PROGRAM

The NPHP work program concurrently focuses on building capacity and infrastructure supporting public health, and on specific public health areas. While priority work areas are set, issues within these areas continue to emerge and evolve.

Examples of activity in the six priority work-areas include:

- Legislation Reform
  The review and harmonisation of public health legislation across the nation, such as to address passive smoking and immunisation.

- Workforce Development
  The implementation of national public health workforce development initiatives, with current priorities in environmental health, health promotion and leadership.

- Research and Development
  The strengthening of national public health research and development capacity, in conjunction with the National Health and Medical Research Council, including contributions to the Health and Medical Research Strategic Review (Wills Review) on the future directions of health and medical research.

- National Strategies Coordination
  The development of better coordination and increased sustainability in national public health strategies, especially in the areas of chronic disease and communicable disease prevention.

- Planning and Practice Improvement
  The development of standards for the delivery of core public health functions and appropriate planning and resource allocation methods.

- Information
  The implementation of the National Public Health Information Development Plan.

Examples of NPHP involvement in other key national issues include:

- support for the development of the National Environmental Health Strategy, utilising technical advice from the EnHealth Council (formerly the National Environmental Health Forum).
- support for developments in food safety and nutrition, focusing on the consistent implementation of the National Food Standards across jurisdictions.
- collaboration on the national strategic response to hepatitis C, including assistance with coordination.
FIGURE 3
STRUCTURE OF THE NATIONAL PUBLIC HEALTH PARTNERSHIP

- Australian Health Ministers’ Conference
- Australian Health Ministers’ Advisory Council
- Queensland Health Department
- Victorian Department of Human Services
- New South Wales Health Department
- Northern Territory Health Services
- Australian Institute of Health and Welfare
- National Health and Medical Research Council
- Australian Capital Territory Department of Health and Community Care
- National Public Health Infrastructure and Planning Development Projects
- Public Health Issues Progressed in partnership with Strategic National Bodies
- Program Support

NPHPG Advisory Group

Chairs of National Strategies
The NSW Health Hepatitis C Public Awareness Campaign is a new campaign targeting Hepatitis C (HCV) conducted by the NSW Department of Health in partnership with a range of government and non-government organisations. This article describes the campaign, including its background and development.

The campaign, which will run during March and April 2000, will target the complex issues of increasing awareness of HCV, and will include a statewide television advertising campaign aimed at reducing misinformation and creating an environment supportive of HCV prevention programs using social marketing techniques. It is hoped that the campaign will also encourage people concerned about HCV to seek advice and, where appropriate, testing from their local General Practitioner.

BACKGROUND
It is estimated that there are approximately 200,000 people in Australia infected with HCV. The rate of new infections is estimated to be 11,000 people annually, with NSW accounting for over 40 per cent of all HCV cases, in terms of both prevalence and incidence.

Prevention of HCV infection to date has concentrated on the development of health education programs targeting high-risk populations, and measures such as needle and syringe programs. No previous HCV information and education campaign in the mass media has targeted the general community in Australia. There are, however, a number of reasons why a mass media campaign would be an effective prevention and education measure. While the NPHP is an alliance of governments, it also places great emphasis on developing and participating in other partnerships to foster collaboration in national public health. Other providers of public health, such as local government, public health research and education programs, and relevant agencies from States/Territories and the Commonwealth are also involved in work program activities.
reasons were highlighted by the NSW Legislative Council Standing Committee on Social Issues Inquiry into Hepatitis C (1998), and the recent Commonwealth Government review of Australia’s response to HCV (1999), and include:

- the continuing high incidence rate for HCV possibly suggests that education and prevention programs may not have been sufficiently effective. A campaign targeting the general NSW community could substantially enhance the effectiveness of existing education and prevention programs;
- HCV may pose a greater risk to the general community than is currently realised because of poor infection control practices in skin-penetration businesses in non-health care settings;
- many people potentially infected with HCV may be unaware that they are chronically infected with the disease, that they are potentially infectious to other people and that they may benefit from the recent advance in new combination treatments for hepatitis. A general community awareness and education campaign could provide tangible health benefits to these people;
- there is a need to reduce both community concerns about HCV and the potential discrimination faced by people living with HCV.

DEVELOPMENT OF THE CAMPAIGN

In March 1999 the NSW Department of Health established a campaign steering group, comprising representatives from: NSW Health Hepatitis Advisory Committee, NSW Department of Health, Commonwealth Department of Health and Aged Care, relevant non-government organisations, researchers, and general practitioners. This group has overseen the development and implementation of the campaign.

A consultation process involving a broad range of key stakeholders for the campaign was conducted in April and May 1999. The process included focus groups with people with HCV in both rural and urban NSW as well as telephone interviews with a range of key informants including: general practitioners, researchers, experts on injecting drug use issues, community based organisations, and people living with HCV. The information collected was used to develop an overall communication strategy and key messages for the campaign. These messages are summarised below:

To the general community

That HCV is a widespread infectious disease that can cause serious health problems. There is major risk of infection through sharing injecting equipment, and through tattooing and body piercing with unsterile equipment. Transmission, symptoms, effects and the treatments for HCV are different to those of Hepatitis A and B. Information and support is available.

To people with hepatitis C

That information, treatment and support is available.

To people with hepatitis C who are from a non-English speaking background:

That HCV is a widespread infectious disease that can cause serious health problems. There is a major risk of infection through sharing injecting equipment, through tattooing and body piercing with unsterile equipment, and through medical procedures carried out with unsterile equipment in some overseas countries. Information and support are available.

To Health Professionals

That your attitude towards people with HCV can make a difference.

The NSW Department of Health appointed an advertising agency in January 2000 to develop the campaign products. The agency has developed a broad range of campaign materials to be launched in late March 2000.

EDUCATION COMPONENTS

The NSW Health Hepatitis C Public Awareness Campaign will employ a range of educational components. These will include:

- statewide television advertising, broadly based on the key messages of the campaign which will run from late March 2000 until the end of April 2000;
- print resources, including posters and pamphlets available from Area Health Services and other relevant health organisations;
- a telephone contact helpline, which will be available throughout the period of the campaign providing information and referrals relating to HCV;
- local Area Health Service activities will include, local campaign launches, information for general practitioners, needle and syringe programs;
- information mailout to General Practitioners.

The NSW Department of Health has also been working with a range of relevant government and non-government organisations including: the Hepatitis C Council of NSW, the NSW Users and AIDS Association, CEIDA, and the Multi-Cultural HIV/AIDS Project in developing a range of additional support services to deal with the effects of the campaign. These include materials targeting specific ethnic groups.
DEAR EDITOR

The NSW Public Health Bulletin has helped to bring together a group of researchers to investigate the links between cardiovascular disease and periodontal disease. Staff at the Royal North Shore Hospital and the United Dental Hospital are joining forces in the Pericar Study to study the effect of periodontal treatment on haemostatic risk factors for cardiovascular disease in patients with advanced periodontal disease.

The Pericar Study was developed as a direct result of the recent publication of the four-part oral health series in the Bulletin during 1999. The papers in the series successfully promoted a greater awareness of oral health issues in the wider health community and facilitated interaction and discussion between health professionals.

We thank the Bulletin for providing the forum that resulted in this exciting research opportunity with its implications for health care.

Geoffrey Tofler
Department of Cardiology
Royal North Shore Hospital

Barbara Anne Taylor
Department of Periodontics
United Dental Hospital of Sydney

REFERENCES


LETTER TO THE EDITOR

Further information about the NSW Health Hepatitis C Public Awareness Campaign can be obtained from Brent Mackie, AIDS/Infectious Diseases Branch, NSW Department of Health, Locked Bag 961, North Sydney NSW 2059. Telephone: (02) 9391 9247. Email: bmack@doh.health.nsw.gov.au.

ERRATUM

In the January–February issue of the NSW Public Health Bulletin (Volume 11, Numbers 1–2, page 13) the contact list for Women’s Health Coordinators in the Area Health Services had an incorrect table heading. The heading ‘Injury Program Manager’ should have read ‘Women’s Health Coordinator’. The editor apologises for this error.
FACTSHEET

CHICKENPOX

WHAT IS CHICKENPOX?
• Chickenpox is a viral illness caused by the herpes zoster virus (also known as the Varicella-Zoster virus).
• It is very contagious.
• It commonly occurs in children.
• Over 90 per cent of the population have had chickenpox by the age of 15 years.

WHAT ARE THE SYMPTOMS?
• Chickenpox is an acute illness that begins with a sudden onset of slight fever, runny nose, feeling generally unwell and a skin rash.
• Sores usually begin as small lumps and turn into blisters and then scabs.
• The sores appear over three to four days, and at any one time, people affected will have sores in various stages of development.

HOW IS CHICKENPOX SPREAD?
• The virus is spread by coughing (early on in the illness) and by direct contact with skin sores.
• People are infectious from one to two days before the rash appears (that is, during the runny nose phase) and up to five days after (when all the blisters have formed crusts).
• The incubation period of chickenpox is around two weeks.
• People rarely get chickenpox twice.

HOW CAN I PREVENT CHICKENPOX?
• Pregnant women should avoid contact with someone with chickenpox.
• People with chickenpox should avoid others until all the blisters have crusted and they feel well.

• Good personal hygiene should be maintained, such as covering the nose and mouth when coughing or sneezing, disposing of soiled tissues, washing hands carefully and not sharing eating utensils, food or drinking cups.

WHAT IS SHINGLES?
• Shingles is caused by the reactivation of the virus that causes chickenpox.
• This usually occurs many years after the initial illness.
• Shingles is characterised by the development of painful groups of small skin eruptions.
• Skin eruptions generally occur on an area on one side of the body.
• Symptoms may persist for three to five weeks, but in most cases clear up after two weeks.
• The virus can be spread by direct contact with the skin eruptions of infected people.
• Shingles occurs more commonly among older people.
• Adults with cancer, patients on immunosuppressive drugs and those with compromised immune systems are also more susceptible.

HOW CAN CHICKENPOX AND SHINGLES BE TREATED?
• See your General Practitioner (GP) for advice on ways to minimise the discomfort associated with the symptoms of herpes zoster infection.

For more information please contact your local public health unit, community health centre, pharmacist or doctor.
TRENDS
Notifications of infectious diseases through to January 2000 are shown in Table 1 and Figure 4. Notably, notifications of gonorrhoea appeared to have reached a plateau during 1999, after a steady rise since 1995. Other notifications appear to be in line with seasonal expectations.

A CLUSTER OF LISTEROSIS IN THE HUNTER
Listeriosis is a food-borne disease caused by the bacterium Listeria monocytogenes. People who are immunocompromised, elderly and pregnant are particularly susceptible to the disease. The case-fatality rate for invasive disease is approximately 30 per cent,1 and the incubation period ranges from three to 70 days.1

Food may become contaminated with Listeria, which are commonly found in the bowel of livestock, through cross-contamination in food processing facilities; or by contact with soil containing the bacterium. Because the contamination of raw foods is common, uncooked foods of animal origin (for example, meats and milk) and fruits and vegetables may present an infection risk to those who are susceptible. Infection can be prevented through:

• thorough cooking
• temperature control (Listeria can grow at 4°C)
• minimising storage time for high risk foods
• minimising cross contamination during the preparation of food
• avoiding high risk foods if susceptible.2

Nosocomial acquisition of listeriosis (for example, infection acquired by a person while in hospital by consuming contaminated food) has been recognised previously.2,3

The Hunter Public Health Unit usually receives between two and four notifications of cases of listeriosis each year. Between September 1997 and January 1999, nine cases of listeriosis were notified among Hunter residents. All of these individuals were either immunocompromised or elderly, and six died.

Because the first person to present in the cluster of cases had been a resident of a Hunter health care facility for 58 of the 70 days prior to the onset of their illness, the investigation of the cluster included assessment of the risk of nosocomial acquisition. Of all nine cases, six had been resident in Hunter health care facilities within the incubation period for listeriosis. Foods likely to have been consumed by the cases while they were in the health care facilities were sampled from the facilities’ kitchens and tested for the presence of Listeria.

Listeria was isolated from the fruit salad supplied to the Hunter health care facilities by a local processor. Using molecular subtyping techniques this isolate was found to be a subtype indistinguishable from the clinical isolates from four of the cases (including three of the individuals who died). Relatives of three of the four cases infected with the same strain as that isolated from fruit salad could be contacted. One of the cases had a history of consumption of fruit salad while resident in Hunter health facilities. No history of consumption of fruit salad could be confirmed in the other two cases. While it is difficult to establish a causal link, in this cluster the similarity between the isolates found in the clinical specimens, and that found in the fruit salad, implicates the fruit salad as a likely source of infection.

All cases of listeriosis should be investigated to exclude possible nosocomial transmission. Isolates of Listeria obtained from infected individuals who have been resident in hospitals or aged care facilities should be submitted to the Institute of Clinical Pathology and Medical Research (ICPMR) laboratory at Westmead hospital for subtyping, to assist in the detection and investigation of clusters. The development of a central state and/or national database would provide information on the relative frequency of subtypes of isolates identified, and aid in the interpretation of epidemiological and environmental findings.

As residents of aged care and other health facilities are often immunocompromised, special measures are required to protect them from nosocomial listeriosis. The NSW Health Circular 99/95 describes measures to minimise the risk of infection with Listeria from a range of foods including fresh fruits and salad vegetables.

In response to the preliminary findings of this investigation, in late 1999 the NSW Chief Health Officer (CHO) wrote to all public and private hospitals advising of the potential risks associated with the consumption of fruit salad and other minimally processed foods. In addition, the CHO commissioned an expert group to review the implications of these findings for hospital food safety, and to develop appropriate recommendations. Further laboratory investigations related to this cluster of cases in the Hunter are under way, and a comprehensive report will be published on completion of the investigation.

REFERENCES
FIGURE 4
REPORTS OF SELECTED INFECTIOUS DISEASES, NSW, JANUARY 1995 TO JANUARY 2000, BY MONTH OF ONSET

These are preliminary data: case counts in recent months may increase because of reporting delays.
## TABLE 1

### REPORTS OF NOTIFIABLE CONDITIONS RECEIVED IN JANUARY 2000 BY AREA HEALTH SERVICES

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* lab-confirmed cases only † includes cases with unknown postcode

CSA = Central Sydney Area  WSA = Western Sydney Area  CCA = Central Coast Area  SES = South Eastern Sydney Area  NEA = New England Area  FWA = Far West Area
NSA = Northern Sydney Area  WEN = Wentworth Area  HUN = Hunter Area  NRA = Northern Rivers Area  MAC = Macquarie Area  GMA = Greater Murray Area
SWS = South Western Sydney Area  ILL = Illawarra Area  MNC = North Coast Area  MWA = Mid Western Area 
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