

Linking Research, Policy and Practice: Applying Evidence-informed Policy to Falls Prevention in Australia

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Abstract: ‘Evidence-informed’ policy bridges the gap between research and practice, however incorporating evidence into policy making is complex and no longer seen to be a linear process. As falls injuries are the most common cause of nonfatal injuries and increasing hospital admissions among older people in Australia, falls injury prevention policies have become necessary. New South Wales Health has developed a Falls Policy: “*Management Policy to Reduce Fall Injury Among Older People*” in order to minimise injury through a policy development process that applied an evidence-informed perspective. Networks and partnerships among researchers, policy makers and practitioners were established to link research, policy and practice. The policy’s impact on health care practice and on falls prevention will be assessed to evaluate its effectiveness and to inform future policy development. The development of a falls policy in New South Wales is an example of an evidence-informed policy development process that could also be applied to policy development across a broad range of health care issues, including falls prevention in the elderly, in Japan.

Key Words: evidence-informed policy, falls prevention, older people, Australia

Introduction

Policy making process is a complex rather than a linear or sequential process¹⁾. The policy cycle begins with the identification of issues and problems and provides an analytical framework for identifying processes and stakeholders to be included in the policy formulation²⁾. Policy is created in historical, social, economic, cultural and ideological contexts, and consideration of context is important in policy making³⁾. Zwi⁴⁾ described four possible relationships between evidence and policy using a policy-evidence matrix: no policy and no evidence; policy and no evidence; no policy and evidence; and evidence-informed policy. Any relationship between evidence and policy will fall into one of the quadrants of this matrix. Application of the matrix to the relationship between evidence and policy assists the development of a clear understanding of the role of evidence in policy development.

Falls injuries among older people have serious impacts on individuals and health care systems, particularly in countries with ageing populations such as Australia and

Japan. The World Health Organization⁵⁾ has recently sought to increase awareness of the importance of preventing or minimising serious injury in old age. This paper describes falls policy in New South Wales, Australia (NSW), as an example of ‘evidence-informed’ policy. Firstly, falls injury in Australia and the development of falls policy in NSW is explained. Secondly, the interface between research and policy is examined. Thirdly, the role of evidence is described and the challenges to policy development presented by an ‘evidence-informed’ perspective linking research and practice are explored.

Background of Falls and Falls Policy in New South Wales

Falls are a common cause of injury among older people in Australia. Over 45,000 Australians aged 65 years and above are hospitalised annually due to accidental falls. With an increasing life expectancy and the ageing of the Australian population, a significant proportion of the population is at risk of fall related injury⁶⁾. The predicted impact on the Australian health care system is massive.

By the year 2051, the total cost of falls in NSW is predicted to be double the current annual cost of \$644 million. This will create demand for an additional 886,000 hospital bed days and over 3,000 nursing home places across Australia⁷⁾. Epidemiological and injury cost evidence has identified the significant burden of falls injuries and their impact on the health care system in Australia, resulting in the issue moving onto the national health agenda. At both the national and state level, reducing falls injuries in the older population has been identified as a high priority for preventative health care initiatives⁸⁾.

NSW Health has responded to the national agenda by developing the *Management Policy to Reduce Fall Injury Among Older People: Detailed Strategies and Performance Requirement 2003–2007* (the “Falls Policy”) as part of the NSW Health Public Health initiative⁹⁾. The policy delineates goals and strategies to be implemented to reduce falls and fall related injuries among older people in three settings: the community, residential care and hospitals. The target audience of the policy is all those who work with or plan services for older people and who can contribute to the minimisation of falls and fall related injuries in the elderly.

The policy also outlines key strategies and actions for other agencies including local government, tertiary institutions and research organisations. The policy incorporates four key action areas: generating a low risk population; reducing fall injuries among older people; improving outcomes through partnerships; and developing and managing knowledge.

Research and policy interface

There are a number of barriers between researchers and policy makers that influence decision making. Researchers and policy makers live in different communities, use different languages, and have different goals and values¹⁰⁾. They also work within different time frames and possess different visions and objectives. In general, research takes time and is sometimes conducted in an indirect manner¹¹⁾. Although research may provide evidence of effective interventions and raise new questions, it does not have an immediate and direct influence on the policy making process¹²⁾.

Evidence of the risk factors associated with falls in

older people has been well established but there is difficulty formulating evidence based policy and translating it into practice. For instance, a number of studies have identified the risk factors for falls in clinical settings¹³⁾. However, the National Ageing Research Institute (NARI) in Australia reviewed several intervention studies in hospital settings and found that research into falls interventions conducted in those settings has been less evident in terms of effective falls prevention strategies than interventions implemented in the community. For example, poor vision and balance, combined medications and unsafe shoes have been identified as risk factors for falls in elderly patients^{14, 15)}. Although interventions to minimise these risks have been implemented, the potential for falls in hospital settings still exists with respect to insufficient patient access to assistance devices, use of faulty equipment and inadequate bed lighting¹⁶⁾. More generally, there is a need for specific policies for different stakeholders and for different settings, such as clinical (i.e., clinicians’ knowledge, skills and culture), institutional (i.e., managers, safety and quality officers), and more broadly based organisational settings (i.e., the Health Department, Area Health Services, hospital accreditation organisations).

Falls related injuries in the elderly involve a combination of intrinsic and extrinsic risk factors. As the causes of falls injuries in older people are multifactorial, a long-term approach to falls prevention is required, while public health interventions to prevent falls related injuries must respond to the multisectorial nature of this health problem¹⁷⁾.

The role of evidence in policy development

Evidence is defined as ‘information indicating whether a belief or proposition is true or valid’¹⁸⁾ and evidence has been increasingly important to medical practice, via evidence-based medicine, since the 1980s¹⁹⁾. Where evidence-based medicine focuses on one form of evidence in research, evidence in policy making needs to be considered in a different context. The move from evidence-based medicine to evidence-based health policy requires context to be considered in the decision making process²⁰⁾.

Stocking²¹⁾ explained that to incorporate evidence into practice three requirements must be met: observability of the available evidence, trialability of the available evi-

dence, and demonstrable relative advantage. Lomas²²⁾ stressed the important role of evidence in the development of policy. The active management of evidence is vital to get evidence into policy and practice, rather than merely allowing passive diffusion. However, evidence must be translated before it can be used as an input to the policy making process. Further, Nutbeam²³⁾ noted that evidence is not only derived from conventional research. The views of experts, stakeholders and frontline staff should be valued and can provide context to evidence, leading to a re-focusing of interventions and service delivery processes. Evidence can thus be used in different ways to lead, justify, and support policy development.

An 'evidence-informed' perspective

Bowen et al²⁴⁾ identified five types of evidence that should inform policy development: research; knowledge and information; idea and interests; politics; and economics. Policy development that considers each of these forms of evidence allows policy makers to commission, process and use evidence from a variety of sources, whilst decision making that focuses on a single type of evidence often fails in real situations and practice.

A potential pathway between evidence-informed policy and practice is described by Bowen and Zwi²⁵⁾. This pathway consists of three active stages: sourcing the evidence; using the evidence; and implementing the evidence. These three stages go through a cycle: "adopt, adapt, and act". This pathway is underpinned by individual, organisational and system level values and is influenced by the policy context and other decision-making factors.

Nutbeam²⁶⁾ suggested three challenges to the development of evidence-informed policy. First, the challenge is to develop evidence that is fit for purpose. The second challenge is to ensure that evidence informs decision making. It needs to communicate, to provide timely information and to suggest improved techniques for managing the foreseeable uncertainties that arise through scientific research. The third challenge that researchers and practitioners face is the need to understand that the policy making process is political in nature and to employ this understanding effectively in the policy development process. The development of networks and partnerships to influence policy development and implementation is thus vital

to effective policy making.

Linking research, policy and practice

Falls Policy in NSW has the goal of reducing falls among older people in NSW and is based on evidence obtained from a variety of sources including epidemiological and economic analyses and input from a wide range of stakeholders including academics, researchers and practitioners. The policy successfully moves from descriptive research to research that is focused on evaluating falls prevention interventions and is an attempt to balance intervention research designed to assess effectiveness with an improved understanding of policy implementation in practice. Measuring compliance with the policy and assessing its sustainability will be the keys to an effective evaluation of the policy's implementation, as "interventions need to be appropriate to the values and practices of the target population and be acceptable in the target environment"²⁷⁾.

The Injury Prevention and Policy Branch in NSW Health Department approached a wide range of stakeholders, including researchers who provided evidence and health practitioners and advocates who wished to see the policy implemented. Networks were established to minimise falls among older people. The NSW Falls Injury Prevention Network and the NSW Injury Prevention Network comprise policy makers, researchers and health practitioners who regularly review and exchange new information through e-mail and regular meetings²⁸⁾. The network members also include health promotion workers, managers, clinicians, and health care workers who work in communities, residential care facilities and hospitals.

A partnership was established with the Clinical Excellence Commission for NSW to support the state-wide coordination and implementation of the falls prevention policy. Area Falls Coordinators were allocated to each Area Health Service and a state-wide Falls Advisory Group was established. The Department of Health ensures performance quality through its Quality and Safety and clinical governance activities in health care facilities. The Commission also communicates with academic research groups and networks and is linked with consumer groups, NGOs and local government²⁹⁾.

NSW Health assessed and applied a wide range of evidence to inform policy development and the falls preven-

tion policy can be described as being evidence-informed. Further, the inclusion of evaluation and monitoring plans for injury prevention and intervention strategies is a particular strength of the policy. For instance, monitoring of key health outcome indicators such as number of deaths caused by falls and falls related hospital admissions has been implemented. The outcomes of this process will assist in identifying priority issues for the next injury prevention plan in NSW.

In addition, NSW Health formed the Translation Task Group (TTG) to reinforce the translation of research into policy and practice. The purpose of this group is to improve the linkages between researchers, policy makers and other stakeholders and to encourage knowledge exchange among them. The TTG supports the growth of 'policy-sensitive researchers' and 'evidence-sensitive policy makers' and promotes the development of policy appropriate research³⁰⁾. An Evidence Check System has been developed by the Sax Institute in partnership with the NSW Department of Health, which facilitates access to high quality data from research for policy development³¹⁾.

Each of the initiatives detailed above will reduce the barriers between researchers and policy makers, support an understanding of the ways in which research evidence can be incorporated into policy development and form a bridge between policy and practice. Bowen and Zwi stated that "Policy actors and practitioners rightfully need to understand and decide how best this evidence should be acted upon in each circumstance"³²⁾. Nutbeam³³⁾ emphasized that the achievement of a better match between research and policy is a fundamental challenge for the future development. Improving the quality of evidence used to inform policy will necessitate a shift in the focus of research specifically towards policy formation.

Conclusion

This paper reviewed the development and implementation of a falls prevention policy in NSW, Australia as an example of successful informed policy development. The interface between research and policy was described and the role of evidence in the policy making process was explained. Evidence types and the translation of evidence into policy were examined, as was the development of effective links between research, policy and practice. Fur-

ther, the impact of different types of evidence on the decision making process and on the implementation of policy was discussed, as was the involvement of researchers, policy makers and practitioners in networks and partnerships designed to enhance communication and knowledge exchange. Initiatives of the NSW falls policy process such as translating research into policy and practice via the TTG and employing the Evidence Check System to assess a wide range of evidence will strengthen the link between research and practice. Evaluation of the policy's effectiveness will in turn provide evidence to assist in the development of future policy. To conclude, the development of a falls policy for NSW is a model of an evidence-informed policy development process that could be applied to a wide range of health issues, including falls prevention among older people, in Japan.

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