

Evidence Cluster: Prevention

Issue Recent developments in health and social care policy have seen a noticeable thrust towards a prevention agenda. Despite the increasing popularity of the term 'prevention' together with an increased focus on the promotion of wellbeing, there are no clear definitions of the term and little or no consensus as to what is included in preventive services (Curry, 2006). This evidence cluster addresses the evidence base associated with the topic of prevention. We have tried to locate evidence that either lends support for or against the current health and social care prevention agenda.

Content of this evidence cluster Prevention is a broad concept and one that suggests different things to different people. Prevention can refer to different things at different stages of life such as remaining fit and healthy and preventing decline; remaining out of hospital or residential care in older age; prevention of less desired alternatives such as compulsory admission. Much of the discussion surrounding prevention has focused on older people, therefore this is reflected in the content.

In this evidence cluster we have addressed research about falls prevention, housing adaptations, preventive home care, low level services and interventions, and cost effectiveness of preventive social care. We have not at this stage included the research evidence related to secondary stroke prevention and the promotion of mental health well-being.

Low level care has been seen as synonymous with prevention in recent policy and the terms often appear to be used interchangeably. This is reflected throughout the evidence cluster.

Definition There has been considerable debate surrounding the definition of prevention and preventive services. For the purposes of this evidence cluster the definition offered by Wistow, Waddington and Godfrey (2003) is used. Wistow and colleagues uphold a two-fold definition of prevention with a focus on 1) preventing or delaying the need for high cost care as a result of ill health or disability due to ageing, **and** 2) promoting (and improving) the quality of life of people and their inclusion within society and community life.

Policy Background Prevention as a policy focus has increased in popularity since the early 1990s. The first Wanless Report, published in 2002 *Securing our Future Health* added pressure to speed up prevention reform and the 2004 White Paper *Choosing Health* called for the NHS to become a health improvement and prevention service.

Most recently, the Social Exclusion Unit report *A Sure Start to Later Life* (2006) centres around a primary focus of preventing a cycle of decline and promoting a cycle of well-being. The 2006 White Paper, *Our Health, Our Care, Our Say* is structured around an underlying theme of prevention which is intrinsic in the government's commitment to modernising social care. The White Paper states that 'An increased commitment to spending on prevention should be part of the shift in resources from secondary to primary and community care. The UK spend on prevention and public health is relatively low compared to that of other advanced economies' (p142). *Our Health, Our Care, Our Say* also incorporates safeguards to ensure that health care services adopt a preventive approach. It introduces performance measures and includes targets to be met by 2008 which reflect the new focus on prevention and promotion of wellbeing.

The other recent report worth mentioning is the Wanless Social Care Review (2006) *Securing Good Care for Older People: Taking a long-term view*. This report builds on a background paper which examined prevention and the cost effectiveness of preventive services. It states that 'Preventive services have become increasingly prominent in health and social care policy in recent years, in part because of their perceived potential to reduce demand for high-intensity, high-cost services' (p169). However it raises the question as to how much spending on prevention and preventive services can

be justified and it identifies a need for identifying effective preventive services.

Two current initiatives with a central focus on prevention are the project aimed at reducing hospital admissions of older people, being run by the Innovations Forum and Partnership for Older People Projects (POPPS). The Innovations Forum was established in May 2003 as a partnership between the Local Government Association and councils rated as excellent. The older people's programme reflects the pledges made in *Our Health, Our Care, Our Say* to move towards prevention and the promotion of wellbeing.

Partnership for Older People Projects or POPPS are a £60m funded initiative from the Department of Health for councils to establish innovative pilot projects which are intended to reduce the dependency on institutional and hospital based care by investing in preventive and community based services. This focus is directly in line with the shift towards prevention embedded in recent government policy.

This evidence cluster seeks to present an overview of the evidence relating to prevention and preventive services, to provide pointers in the direction of practices with a strong evidence base and to offer caution about those where evidence is lacking.

The Evidence – For Searching the available literature surrounding prevention quickly reveals that there are few areas with strong supporting evidence. One area of practice that does appear to be solidly grounded in evidence is that surrounding falls prevention.

:: Falls prevention ::

There have been a number of studies and reports focusing on the reduction of falls in older people. The Older People's NSF contains a Falls Standard and the NHS Health Development Agency, the National Institute for Clinical Excellence, the Department of Health and Help the Aged have all produced reports documenting what works in falls prevention.

The key findings from the literature, as reported by the Department of Health (2003) are as follows:

- multi-factor and interdisciplinary approaches to falls prevention, which also address the complexities within older people's lives are the most successful – this may take the form of reviewing medication, modifying the home environment, identifying and treating postural hypotension
- balance training, such as Tai Chi, may reduce the risk of falls in the elderly
- for cost effectiveness, home assessment is recommended only for those identified as being at risk of falls or having fallen
- an assessment and consequent modification of risk factors, following an older person falling and attending an accident and emergency department, is recommended
- providing hip protectors to some nursing home residents is effective

The Evidence – Against The search for evidence surrounding prevention uncovered two areas where the available evidence appears to be contradicting commonly held beliefs. If preventive services are explored from an economic perspective there is some suggestion that the implementation of preventive services to save money may be mistaken. The search of available sources also revealed a Canadian study that adds weight to the call for further studies into the effectiveness of preventive services.

:: Cost effectiveness ::

Several studies and reports have explored the overall cost effectiveness of preventive services (Curry, 2006; Harvey, 2001; Burton et al, 1995). The recurring theme throughout is that cost-effectiveness is exceedingly hard to measure, partly due to the nature of the outcomes being measured and partly due to a lack of quantifiable evidence.

Harvey (2001) explored the cost effectiveness of preventive social care programmes in Australia and while acknowledging the effectiveness of some social health programmes, cautions that 'we may be embarking upon primary health, patient empowerment, education and self-help programs on the assumption that such investments will be a more effective application of valuable resources than the provision of acute care services... there is no real evidence to show that such programs actually reduce utilisation in other sectors in the long term' (p294).

Harvey also warns that increased preventive activity may not reduce demands on the health system, just delay the need for activity so that ultimately the health service would need to fund more preventive care for more people over long periods, while also still providing acute care as patients live longer.

Burton and colleagues (1995) used an experimental design to look at over 4,000 elderly Medicare recipients living in the community in the US. The intervention group received preventive visits, the control group did not. Medicare costs were compared between the intervention and control group over a two year period. This study found that there were no significant differences in the Medicare charges between the groups owing to the intervention. This study also suggests that while prevention and early intervention programmes may result in short term savings, they may not actually contain long term costs, especially those associated with ageing.

::The Impact of Preventive Home Care and Seniors Housing on Health Outcomes – Canadian HSURC Study::

This Canadian study (HSURC, 2000) explored the impact of preventive home care which provides older people (75 or over) living in the community with low level support services such as homemaking, personal care, and meals. The logical, yet unproven, rationale for preventive home care is that it will prolong the time that people are alive and living independently in the community. It also looked at subsidised social housing available to older people in the Saskatchewan district.

The study used eight years of administrative data which was adjusted for factors other than home care and seniors housing that affect how long an older person lives. Statistical techniques were used to test whether those receiving preventive services either lived longer or lived independently longer. Total costs for all health services used by the older people were also compared over the study period.

The perhaps surprising finding from this study was that 'seniors receiving preventive home care were about 30 per cent more likely to die (relative risk 1.3) and 120 per cent more likely to lose their independence (relative risk 2.2) than seniors not receiving preventive home care' (p3). Even after making adjustments to account for previous service history, older people receiving preventive home care were at 50 per cent higher risk of both death and loss of independence than those not receiving the service.

The results concerning senior housing were more positive; 40 per cent were less likely to die and 60 per cent were less likely to lose their independence after adjustments for risk.

There are limitations to this study, not least that it relies on the outcomes available within routine administrative data. However, the suggestion that services may result in opposite outcomes to those intended, not least that they may contribute to early death or loss of independence, should add strength to the call for further studies exploring the effectiveness of preventive services.

The Evidence – is missing The majority of studies and reports which claim to address the issues of effective preventive services or to explore what works in prevention, appear to suffer from a dearth of evidence. The vague nature of the concept of prevention, combined with a wide range of possible outcomes, has resulted in a concept that appears to be difficult, if not impossible, to measure. On the occasions that quantifiable data are collected, the link between cause and effect often remains tenuous. This has led to the inclusion of a category in this evidence cluster that identifies the key areas where evidence is currently missing.

:: Low level preventive interventions ::

There is a wealth of research looking at the effectiveness of low level interventions. This generally uses qualitative data and suggests that low level preventive services are valued by older people and can help maintain independence. Low level preventive services are services or initiatives that do not necessarily involve specialist input and tend to require minimal resources. Examples include help with tasks that older people may find difficult, such as cleaning, shopping, gardening or basic home repairs.

Research conducted on behalf of the Joseph Rowntree Foundation's Older People's Inquiry (2005) identified a baker's dozen of low level supports that older people valued because they enabled them to stay in their own homes. These initiatives, such as a 'handy help' - a scheme for small repairs around the house, 'welcome home' –a scheme for those returning from hospital, and 'sole mates' – which provides a foot bath and toe nail clipping service, are all held up as examples of services that improve the quality of life of older people and maintain their independence.

While there is considerable evidence to suggest that older people value these low level preventive services, there is no evidence to suggest that they are necessarily cost effective. There is also a lack of evidence to quantify the success of low level interventions in terms of the outcomes they are hoping to achieve (Curry, 2006).

:: Housing adaptations::

Another area that lacks a substantive evidence base is housing adaptations. In an ODPM paper (2005) which reviewed the Disabled Facilities Grant Programme, an acknowledgement is made that quantitative research on a national scale has yet to be carried out, however the report goes on to state 'there is a strong case for the preventative installation of adaptations to help prevent falls' (p22). While it may appear to be common sense that a reduction in falls will result in reduced costs to the NHS and social care budgets, there is no evidence within this paper to support the claim.

This ODPM paper also makes reference to the work of Heywood (2001). It suggests that in 10 per cent of cases, adult recipients of adaptations were kept out of residential care as a direct result of the adaptation that they received.

A detailed look at Heywood's publications and the accompanying JRF paper reporting the results of the study showed this claim should be treated with caution. The measure of effectiveness in their study was 'the degree to which the problems experienced by the respondent before adaptation were, in the respondents' view, overcome by the adaptation, without the causing of new, equally or more serious problems' (p134). This is obviously an important, yet not conclusive, measure.

It may be worth treating some findings with caution when dealing with perceptual data. While evidence may suggest that housing adaptations are valued, there is at present an absence of research looking at their effectiveness.

:: An economic case for preventive services from ODPM ::

ODPM (2006) produced an online paper that accompanied the launch of Sure Start for Older People earlier this year. The title of this paper *Making Life Better for Older People: An economic case for*

preventative services and activities suggests that it would present an overview of the economic case for preventive services. However, closer inspection suggests that this paper suffers from a lack of available evidence.

There are only a handful of references to supporting evidence throughout the document and many of these studies could be disputed, or should be treated with caution, due to the methodologies used. Despite claiming to make 'an economic case' no statistical or quantitative studies are referenced and there appears to be a lack of cost effectiveness evidence to support their case. The report contains several references to the improved quality of life experienced by older people receiving preventive services, yet no evidence is offered.

Conclusion The majority of prevention work and preventive services appear to exist due to the assumption that ultimately they will result in lower use of resources, and will consequently prove cost effective in the long run. This assumption is held up in government policy, despite an evidently weak evidence base.

The discussion above has shown that there is strong evidence for falls prevention; evidence against on the grounds of cost effectiveness and the impact of preventive home care; and that there is at present no conclusive evidence regarding low level preventive interventions, housing adaptations, or the economic case for preventive services.

Further research is required to explore whether preventive services are effective. In the interim fall prevention work is to be recommended, while all other approaches should be treated with caution until conclusive evidence is available to support their use.

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