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Original Research

Warm Homes, Healthy People Fund 2011/12: a mixed methods evaluation

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ABSTRACT

Objectives: To assess how the Warm Homes Healthy People Fund 2011/12 was used by English local authorities and their partners to tackle excess winter mortality.
Study design: Mixed-methods evaluation.
Methods: Three sources of data were used: an online survey to local authority leads, document analysis of local evaluation reports and telephone interviews of local leads. These were analysed to provide numerical estimates, key themes and case studies.
Results: There was universal approval of the fund, with all survey respondents requesting the fund to continue. An estimated 130 000 to 200 000 people in England (62% of them elderly) received a wide range of interventions, including structural interventions (such as loft insulation), provision of warm goods and income maximization. Raising awareness was another component, with all survey respondents launching a local media campaign. Strong local partnerships helped to facilitate the implementation of projects. The speed of delivery may have resulted in less strategic targeting of the most vulnerable residents.
Conclusions: The Fund was popular and achieved much in winter 2011/2012, although its impact on cold-related morbidity and mortality is unknown.

Introduction

The health impacts of cold

On average over the last decade, the average number of excess winter deaths in England has been just over 25 100 a year.[1] Up to 40% of deaths are due to cardiovascular disease exacerbation with another 33% due to respiratory disease.[1] Cold indoor[2] and outdoor[3] temperatures are believed to contribute to this excess, with mortality rates almost three times higher in the coldest quarter of housing in the UK than in the warmest quarter.[2] Suggested reasons for the higher winter mortality rates in countries that experience milder winters (such as UK and Portugal) include having less energy efficient housing[4] and residents being less likely to wear protective clothing in cold winter,[5] compared to those from colder countries (such as Finland). Thus, the 2009 Annual Report of

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the Chief Medical Officer suggested that many of these excess winter deaths in England are largely preventable.[6] In addition to mortality, cold exacerbates cardiovascular and respiratory morbidity, influenza, colds and arthritis, especially in the elderly and those with underlying chronic conditions.[4] Other negative impacts include mental ill health in all age groups, respiratory morbidity in children, as well as broader effects on children's educational attainment, emotional well-being and resilience.[4] Whilst there is a plethora of evidence linking cold living conditions to adverse health outcomes, the evidence base of what can be done to tackle this problem, is limited, and mainly involves structural improvements to housing.[7]

The Cold Weather Plan for England was first published in November 2011, with the aim of reducing winter deaths by raising awareness and triggering actions in the NHS, social care and other community and voluntary organizations to support people who have health, housing or economic circumstances that increase their risk, in addition to mobilizing communities to help vulnerable neighbours, family and friends.[1]

Warm Homes, Healthy People Fund

The Warm Homes, Healthy People (WHHP) fund was announced by the Department of Health (DH) with the publication of the Cold Weather Plan. It aimed to support implementation of the plan in winter 2011/2012, by making £20 million available to Local Authorities and their partners. In December 2011, bids were invited from top-tier local authorities in England for innovative ways to meet the aims of reducing morbidity and mortality due to cold housing in vulnerable people. The funds needed to be spent by 31st March 2012. The bids also needed to state which vulnerable groups would be targeted, how partner agencies would be involved, and how the intended programme fitted strategically with the Cold Weather Plan. In total, 157 projects were approved, across 135 local authorities, with the bids amounting to £20 million of funding.

Whilst there was no mandatory requirement for local monitoring or evaluation, an independent national evaluation was carried out by the Health Protection Agency (HPA) between May and August 2012.[8] Due to the short timescale and limited availability of outcome data, it was decided to conduct an assessment of the programme process and implementation (a 'process evaluation'). As such, the main objectives were to identify:

- How many people received the services;
- Whether those receiving the services were the intended targets;
- What interventions were implemented;
- Facilitators and barriers to implementation;
- Examples of good practice; and
- How the WHHP fund could be improved.

Methods

A 'mixed methods' approach to data collection was decided during initial stakeholder meetings between the HPA and DH, in order to fulfil the agreed objectives. 'Mixed methods' research is increasingly used for health service research, especially for evaluations of complex interventions, with 'comprehensiveness' identified as the main driver for using mixed methodology.[9]

The following three methods were used:

1) Online questionnaire

This was developed using HPA survey technology with 38 quantitative and qualitative questions devised in order to fulfil the evaluation objectives. Quantitative questions, such as finding out how many people in the local area received certain interventions could be answered by drop box options with a range of figures. It was decided that providing a range of figures would be easier to answer than asking for precise numerical values as local projects may not have collected accurate data since they were not required to do so. Qualitative questions, such as asking what factors helped to deliver projects, could be answered by free text box. The survey was piloted by sending to several local authority WHHP fund leads and HPA staff. Suggestions for change were incorporated into the final version of the online survey, which was emailed to all WHHP fund leads with a covering letter explaining the purpose of evaluation. The survey was 'live' for four weeks between May and June 2012.

The quantitative results were generated automatically by HPA survey technology and exported on to a Microsoft Excel spreadsheet, for more detailed analysis. Numerical estimates for England were scaled up to account for the survey response rate. With a response rate of 64%, numerical values were divided by 0.64 to give estimated figures for England. Qualitative results were also generated automatically by the survey technology. Thematic analysis was undertaken on two key qualitative questions: what were the facilitators and what were the barriers to implementation, with the comments categorized into key themes.

2) Document analysis of local evaluation reports

Although there was no requirement to produce evaluation reports as a condition of the fund, these were produced independently by many local projects, and those received by DH were forwarded on to HPA for analysis. Examples of good practice of a broad range of interventions (especially those that appeared to work well, were innovative or sustainable) were identified and telephone interviews were arranged with many of these project leads.

3) Semi-structured telephone interviews

WHHP fund project leads were selected by purposive/maximum-variation sampling based on good practice identified in their evaluation reports, to reflect a broad range of successful local interventions. As such, the 'iterative process' was used, whereby concurrent data analysis (results from the questionnaire and evaluation reports) was used to inform data collection (from the telephone interviews).[10] The one-to-one telephone interviews were semi-structured, based on discussing three main questions (what worked well, what did not work well and what was planned for next year if a further WHHP fund was offered) as well as discussing an aspect of the local project that was identified as a possible 'case study'.