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The potential cost savings of greater use of home- and hospice-based end of life care in England

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National Audit Office

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Summary

The National Audit Office (NAO) commissioned and worked with RAND Europe to estimate the current economic impact of end of life care in England and examine the potential implications of expansion of those services. This commissioned study is part of a broader Value for Money study that the NAO is undertaking into end of life care in England (see Box 1). This is a timely and important issue to consider not only because of the challenges ongoing demographic trends will impose on the system, but also because, as evidence suggests, there is unmet need for palliative care and end of life care services. As importantly, while the majority of people express the wish to die at home, most people (two out of three) die in hospital. The implications are clear: a recent study showed that if past trends in terms of reductions in home deaths continue, in order to meet the projected increase in the numbers of annual deaths (585,000 in 2030) there would be a need to expand inpatient facilities by over 20%.

Box 1: End of life care as defined by the National Council for Palliative Care

End of life care “Helps all those with advanced, progressive, incurable illness to live as well as possible until they die. It enables the supportive and palliative care needs of both patient and family to be identified and met throughout the last phase of life and into bereavement. It includes management of pain and other symptoms and provision of psychological, social, spiritual and practical support.”¹

There is an increasing distinction between **end of life care** and **palliative care**. The latter is being accepted to cover patients of any age of advanced and life-threatening illness who may still be receiving curative care and are not considered to be in their last 6–12 months of their life.

The objective of this study is to explore and provide estimates of the financial consequences of decreasing reliance on acute care during the last year of life. The present study has two distinct phases. The first reviews the end of life and palliative care literature for evidence of effectiveness and resource utilisation. The second phase is the economic analysis of end of life care in England which: a) provides an overview of the current costs to the NHS for delivering services to patients (under current usage levels of palliative care services) in England, and b) models and quantifies the potential cost implications of

¹ National Council for Palliative Care. 2007. *Building on Firm Foundations: Improving End of Life Care in Care Homes: Examples of Innovative Practice*, London: NCPC, June 2007. <http://www.ncpc.org.uk/download/publications/BuildingOnFirmFoundations.pdf> (accessed 6 October 2008).

decreasing reliance on acute care during the last year of life by higher levels of adoption of palliative care services.

The review of the literature revealed that there is consistent and robust evidence that palliative care services reduce the symptom burden and improves satisfaction and quality of life of patients and caregivers. Almost all studies that look at costs find economic benefits for palliative care; the evidence is clearer for cancer patients and predominantly from the United States. Any savings result from fewer hospitalisations and reduced use of intensive acute care resources.

To progress the economic analysis for England, we developed an economic model (a Markov model), which uses health expenditures and utilisation data. We then used the model to: a) estimate the current cost (to the NHS) of healthcare provision of end of life care for patients who are in their last year of their life and suffer from cancer or organ failure (pulmonary and heart failure), and b) simulate various scenarios of reduced acute care utilisation by those patients and measure the economic implications. The implicit assumption is that the time patients spend in hospitals could be reduced by transferring them to their preferred care setting at the end of their life. By providing end of life care in the community both the number of unplanned emergency admissions and the days spent in hospital could be decreased. With the use of the economic model we estimate the days of acute care which could be potentially avoided as well as the associated amount of resources which could be made available for redeployment.

Overall, results show the estimated cost of providing care in the last year of life to the nearly 127,000 patients who died from cancer is approximately £1.8 billion, corresponding to £14,236 per patient. For the nearly 30,000 organ failure (heart and respiratory diseases combined) patients that are in their last year of life the cost of providing care is £553 million, or £18,771 per patient. Sensitivity analysis indicated that overall costs of caring for cancer patients are substantially influenced by the cost of providing home/community care. A 10% variation in the daily cost can decrease or increase total costs by £122 million in a single year.

The simulation of different scenarios that examine decreases in the proportion of unplanned admissions for cancer patients (5–20%) and in the corresponding length of stay from 1 to 5 days (of those admissions) show expected reductions in expenditures ranging from £42 to £171 million per annum.

Overall, the study results consistently point in the same direction as the literature: there is real potential for palliative care services to reduce expenditures associated with hospitalisation while at the same time accommodating the expressed preferences of patients.