#### **ECONOMIC RESEARCH NOTE 2, JULY 2017**

# The Economic Benefits of Home Based Palliative Care and End-of-Life Care



#### **KEY FINDINGS**

- Most people prefer to die at home or in a home-like environment surrounded by family and friends.<sup>7</sup>
- The current evidence shows that home-based palliative care saves financial resources while improving consumer quality of life and that person-centred palliative home care is cost-effective.<sup>14-16</sup>
- If people's wishes to die at home are to be realised then a much greater investment in palliative care services provided at home is needed.<sup>20</sup>

## WHAT IS PALLIATIVE CARE AND END-OF-LIFE CARE?

The WHO defines Palliative Care as "an approach that improves the quality of life of consumers and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual".¹ Palliative care is for people of any age who have a serious illness that cannot be cured. Dying is a normal process with palliative care offering a support system to help people to live their life as fully and as comfortably as possible until death and to help families cope during this illness and in their bereavement. People are approaching the 'end of life' when they are likely to die within the next 12-months.²

#### **DYING AT HOME**

Palliative care is a family-centred model of care which is provided to consumers in a variety of settings including at home. While seventy percent of Australians want to die at home, in 2015 only 15% did so. Nearly half of the 159,052 people who died in 2015, died in hospital and 35% in residential aged care.<sup>3-5</sup> Australians aged 65 years and over are half as likely to die at home as older persons living in countries like New Zealand, Ireland, France, South Korea or the US.3 The evidence indicates that when palliative care is provided in the community, people receiving palliative care are 87.5% more likely to remain in the community until death.<sup>6</sup> However, many Australians reaching the end of life do not receive palliative care in the home, even though when asked, they have clear preferences for the type and place of care they would like. Inequities and unmet needs persist in at-home death with socio-economic status, culture and ethnicity along with the lack of access to palliative care services continuing to impact on people's place of death.<sup>7</sup>

GPs are important providers and coordinators of palliative care in the community. In 2014-15, there were around 122,100 consumer encounters with GPs identified as palliative care-related. While the number of GP encounters for palliative care has increased by

13% since 2010-11, the overall level of palliative care related GP activity has remained at 1 in 1,000 consumer encounters.<sup>8,9</sup> The majority of palliative care GP encounters involve older persons, with the percentage of consumers aged 65 years or over increasing from 73.7% in 2010-11 to 88.7% in 2014-15.<sup>8,9</sup> In 2014-15, palliative medicine specialists provided 74,301 services that were subsidised under Medicare to 14,268 persons.<sup>10</sup> However, only 4,327 or 5.8% of attendances involved consultations in a consumer's home and palliative medicine specialists organised, coordinated or participated in only 4,713 community case conferences.<sup>10</sup>

# ECONOMIC BENEFITS OF PALLIATIVE CARE AT HOME

It has been estimated that to double the number of older Australians dying at home would require an additional investment in palliative care of around \$237 million (2013-14 dollars) a year.<sup>3</sup> When people die at home, major savings usually accrue from their reduced use of hospitals and residential aged care. A study showed that the funds released from the reduced need for institutional care offset the costs of providing palliative care to more people at home, making this a cost neutral policy.<sup>3</sup>

A study was conducted of Emergency Department (ED) use in Western Australia by people in their last year of life and who were living with dementia at home. Although only a small proportion of people with dementia receive palliative care, the results showed in the first 130 days of the last year of life, residents who received regular care visited the ED twice as often as those receiving palliative care. In the last month of life, the individuals with dementia receiving regular care visited the ED 6.7 times more frequently than the people with dementia cohort who were receiving palliative care at that time.

Another Western Australia study also examined whether early use of community-based palliative care by persons with cancer and who were living at home in their last year of life reduced the number of visits to EDs in the last 90 days of life. Those persons who had no palliative care or who only accessed palliative care in the 90 days before their death were far more likely to visit an ED in the last 3 months of life than individuals who were able to access palliative care 91-365 days before death (52.0% vs.31.3% of patients). When other factors that influenced their use of services were taken into account then those not accessing palliative care early were 2.8 times more likely to visit the ED. 12

Home-based end-of-life care was also shown to be cost-effective in a Sydney pilot study that compared palliative care extended packages at home (PEACH) relative to usual care in expediting hospital discharge or enabling patients to remain at home.<sup>13</sup> The time that participants, most of whom had advanced cancer, spent at home

was assessed over 28-days of follow-up. Days at home increased on average by one extra day for the PEACH participants and the higher nursing costs compared with usual care were largely offset by lower inpatient costs. PEACH became cost-effective relative to usual care when one extra day at home was valued at \$1,068 or more (2010 dollars).13

A proactively delivered home-based palliative care program for individuals with cancer, chronic obstructive pulmonary disease (COPD), chronic heart failure (CHF) and dementia in Southern Californian resulted in fewer people being hospitalised, lower number of days in hospital, lower hospital costs and lower total costs per month.<sup>14</sup> For each condition, the percentage being admitted in the final 30 days of life, using intensive care in the final 30 days of life and dying in the hospital were lower for participants than those receiving usual care.

The mean 30-day hospital re-admission rate was also lower for participants with COPD, CHF and dementia but not for those with cancer. In the final 6 months of life, healthcare costs for the patients receiving palliative care largely stayed the same from month to month, whereas costs for the non-palliative care patients increased dramatically.14

Paediatric palliative care provides holistic interdisciplinary medical and psychosocial support to children and their families, usually starting at the time of diagnosis and continuing through the life course of the child.<sup>1,15,16</sup> However, access to palliative care services for some children with life-limiting illnesses is still difficult. However, there is strong international evidence that home-based paediatric palliative care also decreases the utilisation and costs of hospital services and improves the health-related quality of life of children with complex life-limiting conditions. 15-17

#### **LIZ'S STORY**

Liz was a 49 year old woman with metastatic colon cancer and a single mother of three children. No longer having treatment, her wish was to die at home. She developed a bowel blockage resulting in severe nausea, vomiting and complex nerve pain. She lost weight, became frail and was unable to care for herself. Without specialist palliative care, Liz would need to be admitted to hospital.

Liz remained at home and her care team were her GP and the specialist palliative care staff who provided access to:

- · Medications for pain relief and severe nausea through syringe drivers. As one of the medicines was not on the PBS for use in palliative care, it would have been expensive, but the team was able to get the medicine through the hospital.
- A social worker who helped Liz access free legal services and her superannuation to pay off her mortgage, and importantly, she helped Liz come to terms with dying and leaving her children in the care of her sisters.
- · An occupational therapist and physiotherapist who assisted her at no cost to access the equipment she needed to stay safe at home.

Liz died at home in accordance with her wishes. Her children were supported by specialist palliative care staff for twelve months after her death, preventing complex grief and mental health issues.

### REFERENCES

- Connor SR and Bermedo MCS. (2014). Global Atlas of Palliative Care at the End of Life. WPCA and WHO, London.
- ACSQHC (2015). National Consensus Statement Essential Elements for Safe High Quality End of Life Care. ACSQHC, Sydney.
- 3. Swerissen H and Duckett S. (2014). Dying Well. Grattan Institute, Melbourne.
- 4. ABS (2016). Causes of Death, Australia, 2015. ABS Catalogue No. 3303.0, Canberra.
- AIHW (2017). National Hospital Morbidity Data and National Aged Care Data Clearinghouse. http://www.aihw.gov.au/data-by-subject/
- 6. Aspex Consulting (2014). The Australian Government Department of Health Analysis of proposed MBS items for Palliative Care. Final Report. Commonwealth of Australia. Higginson IJ, Sarmento VP, Calanzani N et al (2013). Dying at home - is it better: A
- narrative appraisal of the state of the science, Palliat Med. 27(10):918 -924. 8. AIHW (2017a). Palliative care in general practice. http://www.aihw.gov.au/palliative-
- care/general-practice/.
- 9. AIHW (2012). Palliative care services in Australia 2012. Cat. no. HWI 120. Canberra: AIHW. 10. AIHW (2017b), Services provided by palliative medicine specialists, http://www.aihw. gov.au/palliative-care/medicine-specialists-services/.
- 11. Rosenwax L, Spilsbury K, Arendts G et al. (2015). Community-based palliative care is associated with reduced ED use by people with dementia in their last year of life: A retrospective cohort study. Palliat Med. 29(8), 727-736.

- 12. McNamara BA, Rosenwax LK, Murray K et al. (2013). Early admission to communitybased palliative care reduces use of emergency departments in the ninety days before death. J Palliat Med. 16(7):774-779.
- 13. McCaffrey N, Agar M, Harlum J et al. (2013). Is home-based palliative care costeffective? An economic evaluation of the Palliative Care Extended Packages at Home (PEACH) pilot. BMJ Support Palliat Care. 3:431-435.
- 14. Cassel BJ, Kerr KM, McClish DK et al. (2016). Effect of a Home-Based Palliative Care Program on Healthcare Use and Costs. J Am Geriatr Soc. 64(11):2288-2295.
- 15. Postier A. Chrastek J. Nugent S et al. (2014). Exposure to Home-Based Pediatric Palliative and Hospice Care and Its Impact on Hospital and Emergency Care Charges at a Single Institution. J Palliat Med. 17(2): 183-188.
- 16. Goldhagen J. Fafard M. Komatz K et al. (2016), Community-based pediatric palliative care for health related quality of life, hospital utilization and costs lessons learned from a pilot study. BMC Palliative Care. 15, 73. DOI 10.1186/s12904-016-0138-z
- 17. Gans G. Hadler MW. Chen X et al. (2016), Cost Analysis and Policy Implications of a Pediatric Palliative Care Program. J Pain Symptom Manage. 52(3):329-335.
- 18. Chitnis XA, Georghiou T, Steventon A et al. (2013). Effect of a home-based end-of-life nursing service on hospital use at the end of life and place of death; a study using administrative data and matched controls. BMJ Support Palliat Care. 3:422-430

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