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The Economic Benefits of Integrating Palliative Care and End-of-Life Care Into Chronic Disease Management

PalliativeCare AUSTRALIA

KEY FINDINGS

- Palliative care improves symptom management, pain relief and quality of life but in many chronic life-limiting conditions, like CHF and COPD, palliative care is still significantly underutilised and referral delayed.[11-16]
- There has been a small but appreciable increase over the past 10 years in access to specialist palliative care services in Australia in patients dying with non-cancer conditions, but most people with non-cancer life-limiting conditions die before they receive palliative care.[9]
- The continuing high use of costly resources in the final months of life for people with chronic life limiting conditions suggests a tendency towards potentially clinically futile or aggressive care.[19,21]

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]

PALLIATIVE CARE AND CHRONIC LIFE-LIMITING CONDITIONS

In 2015, there were 159,052 deaths in Australia.[3] Two-thirds of those who died were aged 75 years or above and the five most common underlying causes of death were coronary heart disease (CHD) (19,777 deaths, 12.4% of all deaths), dementia including Alzheimer's disease (12,625 deaths, 7.9%), cerebrovascular disease (10,869 deaths, 6.8%), lung cancer and cancer of the trachea (8,459 deaths, 5.3%), and chronic lower respiratory diseases (7,991 deaths, 5.0%).[3] In total these causes account for more than one-third of all deaths registered in Australia in 2015. The median age of people dying from these five top causes of death was 85.1, 88.6, 86.6, 73.5, and 81.7 years respectively.[3] In 2014–15, 76,856 people died in hospital and 55,605 deaths occurred in residential aged care.[4] Nearly half of Australians die in hospital and over a third in residential aged care.

Traditionally, palliative and end-of-life care has been associated with cancer, with the majority of consumers who receive palliative care in hospital, in residential aged care or at home having advanced cancer.[5-7]

However, other chronic life-limiting conditions such as chronic heart failure (CHF), chronic obstructive pulmonary disease (COPD), renal and liver disease, dementia, diabetes, multiple sclerosis, motor neurone disease or HIV/AIDs are also very amenable to palliative care interventions.[8-13] While people with other chronic life-limiting conditions have symptoms as severe and distressing as those of cancer patients, they do not have equal access to palliative care.[13-15] The majority of studies in the literature on the costs of palliative care have only included populations with an advanced cancer diagnosis and not individuals with palliative care needs and non-malignant conditions. The cost-effectiveness of palliative care for patients with other chronic life-limiting conditions may differ and therefore should be investigated.[16] Two examples are palliative care in the management of CHF and COPD.

ECONOMIC BENEFITS OF PALLIATIVE CARE FOR PEOPLE WITH CHF AND COPD

CHF is a serious condition that is caused when the heart muscle becomes damaged through, for example, CHD, a heart attack, cardiomyopathy, diabetes or a long-term health problem like high blood pressure.[8,11,13,17] COPD is also a complex, progressive condition that involves a slow decline in lung function characterised by shortness of breath and limited airflow, and includes emphysema and chronic bronchitis.[14,15,18] In 2015, 3,540 Australians died from CHF and over 7,000 died from COPD.[3]

A randomised control trial (RCT) conducted in Sweden showed that an advanced home palliative care intervention for individuals with CHF resulted not only in improved quality of life for consumers but also significant reductions (67%) in the costs of hospital admissions and emergency transport.[11] There was a doubling of the cost of GPs and a 10 fold increase in the costs of other health professionals such as nurses, physiotherapists and occupational therapists in providing the palliative care services relative to usual care. However, the reduced need for hospital-based care through fewer hospital admissions and days spent in hospital meant that the palliative care service was cost-effective with savings from the intervention being significantly larger than the costs of its implementation.[11]

Similar results were found in a 2013 Australian RCT of 280 older patients with CHF discharged to home from three tertiary hospitals in which a home-based intervention was compared with a specialist outpatient clinic-based intervention.[8] The mean total health care costs were 27% lower for those patients who received the home-based care. This equated to a savings of $13,100 per person. When differing survival rates were taken into account, the total health care costs per person per 100 days of follow-up were 54% lower in those receiving home-based care. The home-based intervention was

associated with a higher gain in benefit at lower costs in terms of life years, quality adjusted life years, days alive out of hospital and days of all-cause hospital stay.[8]

The healthcare resources used and costs incurred by people with COPD at the end of life were examined in a 2016 systematic review of studies from Europe, North America and Asia.[19] The use of hospital services increased almost exponentially as the end of life approached. However, very few individuals who died with COPD had used palliative care services available in either acute hospital or home care settings. The mean daily costs of COPD patients who received palliative care were significantly lower than the mean daily costs of COPD patients who did not receive palliative care during their last year of life. This reflected the reduced use of high cost hospital services and interventions. One study showed that the average total healthcare costs for COPD patients during their last six months of life were a third higher than those for patients with lung cancer. COPD patients were twice as likely to be admitted to an Intensive Care Unit (ICU), had 5 times the odds of remaining there for 2 weeks or longer and were less likely to receive palliative care compared with patients with lung cancer.[20]

A study in Taiwan of people with COPD admitted to hospital for acute care found major differences in the clinical practice patterns between end-stage COPD patients receiving and not receiving palliative care.[21] The palliative care patients had a lower death rate in ICU (41% vs 73%), a lower frequency of invasive ventilation (29% vs 57%), a higher rate of signing do-not-resuscitate orders (100% vs 51%) and a lower rate of cardiopulmonary resuscitation (12% vs 51%) when compared with patients who did not receive palliative care. Patients in the palliative care group had longer hospital stays, reflecting increased survival times. While there was no overall difference in total medical costs between the two groups because of the longer length of stay of the palliative care COPD patients, the daily medical costs were significantly lower in the palliative care patients than those who did not receive palliative care.[20]

RON'S STORY

Palliative care can also help manage chronic life-limiting conditions. Ron is 84 and has congestive heart failure, is on continuous oxygen, has type 2 diabetes and was recently diagnosed with prostate cancer. He lives at home with his wife Jan who was struggling to manage his care. Ron had monthly hospital admissions in the previous 12 months for management of his heart failure.

After receiving the cancer diagnosis Ron was referred to the specialist palliative care team who developed a management plan with Ron and his wife that addressed all of his health concerns. He was taught how to manage his medications safely at home, visited the outpatient palliative care clinic regularly, and the palliative care team liaised with his oncologist, cardiologist, endocrinologist and his GP in planning and delivering his care.

Within eight months of his diagnosis with prostate cancer, Ron's many health conditions were being successfully managed at home, with no hospital admissions in this time. Ron continues to live at home with Jan and they both know when to contact the palliative care team should circumstances change and they need further assistance.

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