

Cost effectiveness of palliative care

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Palliative Care

The Evidence Behind It Dispelling Myths

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Disclosures

- Speakers in this presentation have no disclosures.

Caregiver statistics

- 50% of households serve as unpaid caregivers
- Mostly women
- 30% care for more than one patient
- 20 hours/week average time spent for care
- 25% do more than >40hours/ week of care
- National Alliance for Caregiving and AARP 2012

Financial Burden

- 20% of caregivers stop working
 - 30% lose their savings during an illness
 - Bankruptcy
 - Inability to continue employment
-
- Cameron et al: Cancer 2002 Lifestyle interference and emotional distress in family caregivers of advanced cancer.
 - Salmon et al: Transformative aspects of caregiving at life's end. J Pain Sym. Manag. 2005

Positive outcomes of caregiving

- Increase self-worth
- Increase personal relationships
- Spiritual growth
- Increased meaning of life in providing care
- Schulz, et al. Patient suffering and caregiver compassion. Gerontology 2007

Negative aspects

- Loss of normal family roles
 - Social isolation
 - Loss of intimacy
-
- Schulz, et al .Patient suffering and caregiver comapassion.Gerontology 2007

Studies confirm

- Effectiveness of interdisciplinary palliative care intervention for family caregivers in lung cancer concluded improved social and psychological well being of FCG and less caregiver burden in stage 1-4 nonsmall cell CA

Sun et al. Cancer. 2015 Jul 6. doi: 10.1002/cncr.29567. [Epub ahead of print]

The effect of integrated cancer support team on caregiver satisfaction with end-of-life care

- To test the effectiveness of an IDT cancer support team on caregiver satisfaction with end of life care for family members with advanced cancer.
- Caregiver mood, social support and satisfaction with EOL.
- Conclusions: CST yielded improved EOL satisfaction, mainly in the management of pain, Information about managing pain, speed in treating symptoms, information regarding side effects and coordination of care. The intervention made no statistically significant contributions to caregiver mood.

2014 by oncology nursing society Sara Douglas and Barbara Daly.

Cochrane Review

- Effectiveness and cost-effectiveness of home-based palliative care services for adults with advanced illness and their caregivers
- 23 studies including 37,500 patients and 4000 family caregivers.
- Home based palliative care can help reduce symptom burden without increasing grief for family caregivers after death.
- Gomes B, Calanzani N, Curiale V, McCrone P, Higginson IJ 2013

Study	Focus	method	conclusion
Gysels et al, 2004	Improving PC in cancer patients	The Methods Of Researching End of life Care	Positive effect on CG burden, anxiety and satisfaction
Wilson et al, 2004	Systemic review of EOL care	Systematic review, intervention studies (randomized and nonrandomized designs)	Positive effect on CG burden, anxiety and satisfaction
Acton, 2002 & 2001	Reducing CG burden with dementia	randomized controlled trial effectiveness as well as cost-effectiveness of family meetings	No advantage
2003Resources for Enhancing Alzheimer's Caregiver Health (REACH)	The effect of skill building on CG	Meta-analysis	Reduce CG burden
SUPPORT 2000	Study to understand prognoses and preferences for seriously ill hospitalized patients	A 2-year prospective observational study (phase I) with 4301 patients followed by a 2-year controlled clinical trial (phase II)	Improved CG satisfaction and communication

Subspecialty Statements on Palliative Care

<p>American Thoracic Society Clinical Policy</p>	<ul style="list-style-type: none"> • Patient and family centered that is provided by interdisciplinary team • Concurrent with restorative and life prolonging interventions • Health care providers need appropriate level of competence • Support public education and research
<p>American College of Chest Physicians Position Statement</p>	<ul style="list-style-type: none"> • Support that is individualized to patient and family • Address symptoms • Educate public and develop professional, institutional, and regulatory policies
<p>American Heart Association Scientific Statement End Stage Heart Failure</p> <p>American College of Cardiology</p> <p>Heart Failure Society of American</p>	<ul style="list-style-type: none"> • Symptoms adversely affect QOL and function • Recommended therapies often do not provide lasting remission into less symptomatic disease • Earlier referral to help with communication and setting of expectations with patient and family • Including referral when under LVAD placement evaluation

Subspecialty Statements on Palliative Care

American College of Critical Care Medicine Consensus Statement	<ul style="list-style-type: none">• Patient and family centered• Physicians should have high level of competence and expertise• Well versed in the Ethics of end of life care• Development of a bereavement support for families and staff• Education, Research, and QI importance
American Stroke Association Scientific Statement	<ul style="list-style-type: none">• One of the leading causes of death and disability in adults• Palliative care needs of patients and family are enormous
Renal Physicians Association American Society of Nephrology	<ul style="list-style-type: none">• Share decision making with patient , family, and physicians• Take up responsibility of helping patients through an end of life decision making process which needs to be individualized• Recognize that Functional status and expectations of the future about quality of life are more important to many patients than the chronological age they reach

Subspecialty Statements on Palliative Care

American Society of Clinical Oncology Provisional Clinical Opinion

- Earlier involvement of palliative care
- Consensus that combined standard oncology care and palliative care should be considered early in the course of illness for any patient with metastatic cancer and/or high symptom burden.
- Strategies to optimize concurrent palliative care and standard oncology care
- Research should evaluate impact on important patient and caregiver outcomes (eg, QOL, survival, health care services utilization, and costs) and on society

Subspecialty Statements on Palliative Care

American College of Surgeons Statement of Principles of Palliative Care

- Patient and family centered with emphasis on communication between to create plan that respects decisions even if not life prolonging
- Recognize the physician's responsibility to discourage treatments that are unlikely to achieve the patient's goals
- Arrange for continuity of care by the patient's primary and/or specialist physician, alleviating the sense of abandonment patients may feel when "curative" therapies are no longer useful.

Subspecialty Statements on Palliative Care

American Academy of Family Practice Practice Guidelines

- Primary Care physicians are expected to have basic palliative care skills
- Provide continuity of care and communication among varied settings to promote and facilitate achievement of goals of care
- Provide support for the teams taking care of patients
- Support families and patient with 24 hour access
- Make appropriate referrals early to other community based entities, such as hospice or social based needs – housing, in home help, transportation, etc

Subspecialty Statements on Palliative Care

American College of Emergency Medicine Physicians Section on Palliative Care

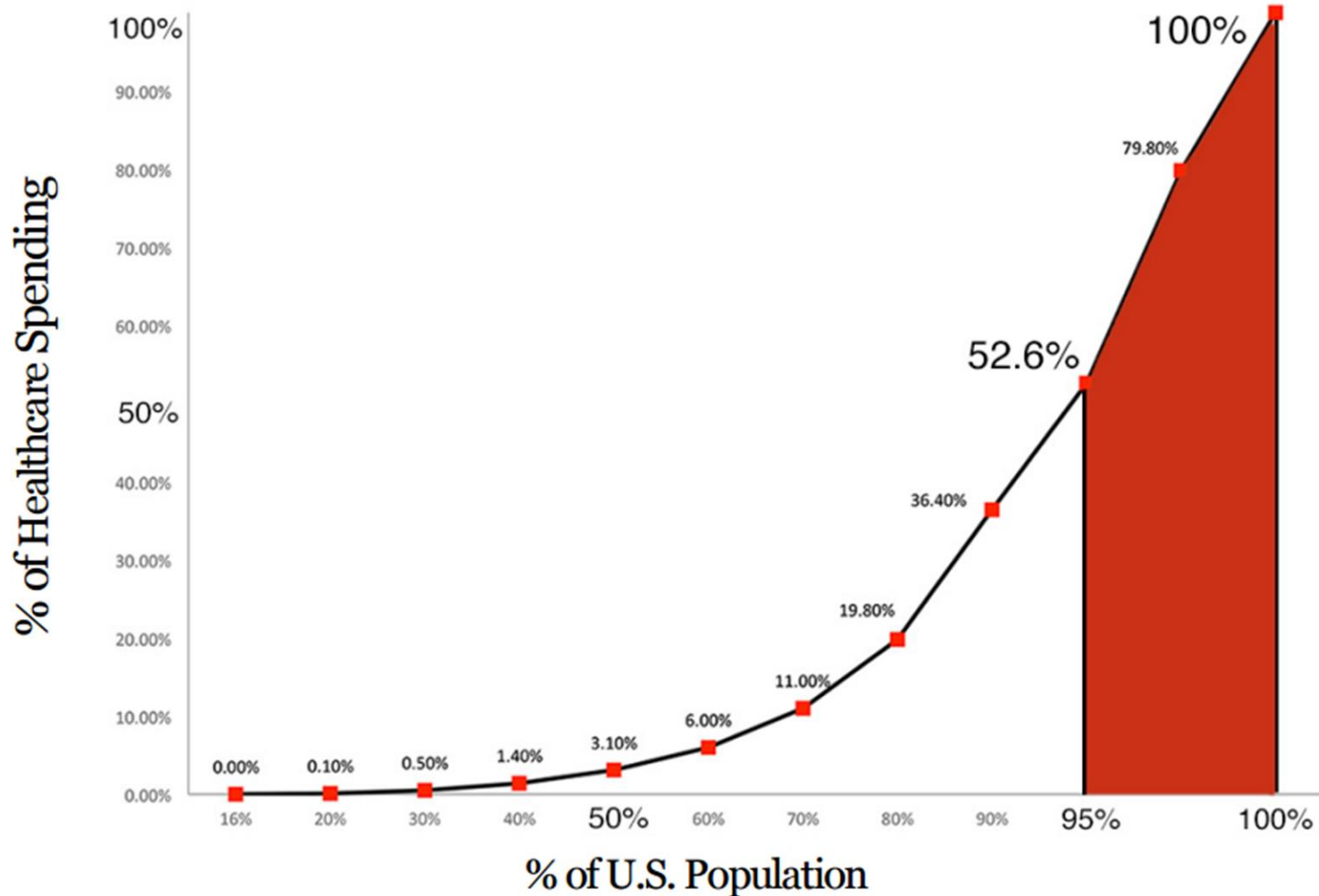
- Promote the subspecialty of palliative medicine;
- Evaluate and develop strategies to better manage palliative care and end of life (EOL) issues in the ED;
- Evaluate strategies to aid decision making in unstable patients in the ED with multi co-morbidities who are at the end of their life. This will include an evidenced based approach to best management of pain and non-pain symptoms
- Investigate developing an Emergency Department based Palliative Medicine Program
- Provide advice to the College on palliative care and EOL issues

Subspecialty Statements on Palliative Care

American Academy of Pediatrics Position Statement

Development of clinical policies and minimum standards that promote the welfare of infants and children living with life-threatening or terminal conditions and their families, with the goal of providing equitable and effective support for curative, life-prolonging, and palliative care.

5% of U.S. Population Spend 50% of Healthcare Dollars



IHCM Foundation. Understanding U.S. Healthcare. July 2011. <http://nihcm.org/images/stories/NIHCM-CostBrief-Email.pdf>

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End-of-life care numbers in the United States

- > 95% of all healthcare spending is for chronically ill patients.
- 25% of Medicare costs occur in last year of life
 - 50% of costs are on hospitalization
- ~64% of all Medicare spending goes to 10% of the beneficiaries with > 4 conditions.

End-of-life care numbers in the United States (cont'd)

- 5% of Medicare beneficiaries die each year accounting for about 27% of Medicare expenditures
- 80% of patients want:
 - less aggressive care at the end of life
 - to avoid ICU stays
 - to die at home
- **Therefore much of the care received by this 5% is unwanted**
- **More spending ≠ greater care quality.**

Christopher Hogan, et al. Medicare Beneficiaries' Costs Of Care In The Last Year Of Life. *Health Affairs*, 20, no.4 (2001):188-195

Cutting costs

Patient Centered Management of Complex Patients Can Reduce Costs Without Shortening Life

- 30% fewer emergency department visits
- 28% fewer hospital admissions
- two years more life expectancy
- price tag was \$18,000 per patient/per month lower than the regular care model

L. Sweeney, A. Halpert, J Waranoff. Patient Centered Management of Complex Patients Can Reduce Costs Without Shortening Life. *American Journal of Managed Care*, February 2007, pp. 94-92.

How to change the numbers

Savings can be achieved by

- screening to identify patients who can benefit from PC
- earlier involvement of PC
- University of Cape Town: 55% of patients in medical wards qualify for palliative care

From: **Cost Savings Associated With US Hospital Palliative Care Consultation Programs**

Arch Intern Med. 2008;168(16):1783-1790. doi:10.1001/archinte.168.16.1783

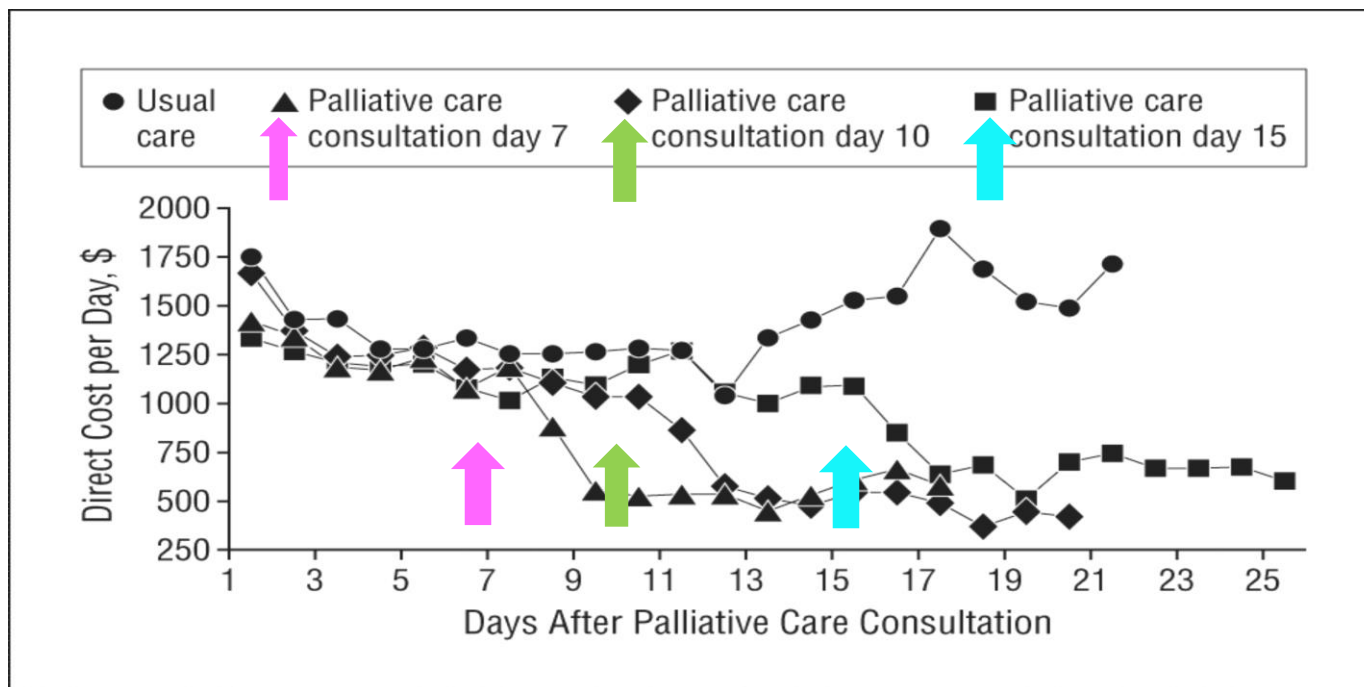


Figure Legend:

Mean direct costs per day for patients who died and who received palliative care consultation on hospital days 7, 10, and 15 compared with mean direct costs for usual care patients matched by propensity score. Hospital day 1 is the first full day after the day of admission.

Original Article

Clinical and Economic Impact of Palliative Care Consultation

Laura C. Hanson, MD, MPH, Barbara Usher, RN, PhD, GCS, Lynn Spragens, MBA, and Stephen Bernard, MD

University of North Carolina Palliative Care Program (L.C.H., S.B.), Department of Medicine, Chapel Hill, North Carolina; University of Pittsburgh Medical Center Palliative Care Program (B.U.), Pittsburgh, Pennsylvania; and Spragens and Associates (L.S.), Hillsborough, North Carolina, USA

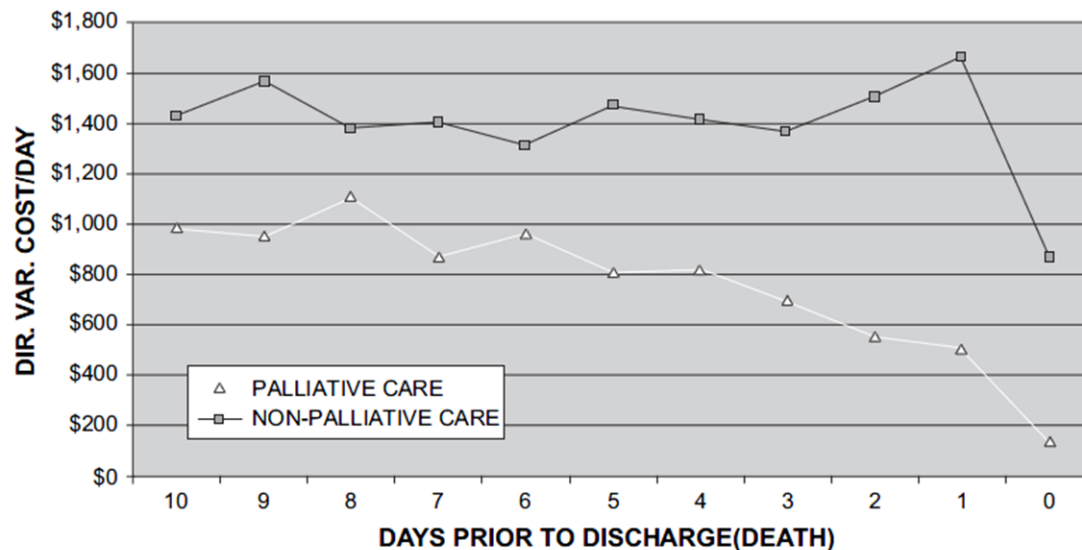


Fig. 2. Direct costs per hospital day for palliative care and nonpalliative care patients, 2004.

TABLE 5-3 Randomized Controlled Trials Comparing the Costs of Palliative and Usual Care

Study (Period Studied)	Number of Patients and Setting	Excess Cost of Usual Care	Other Findings
Gade et al., 2008 (2002-2003)	517 patients in three hospitals receiving interdisciplinary palliative care services (275 patients) or usual care (237)	Excess 6-month post-hospital discharge costs of \$4,855 for each usual care patient ($p = 0.001$)	Greater patient satisfaction with the care experience and provider communication in the palliative care than in the usual care group; also median hospice stays of 24 versus 12 days, respectively
Brumley et al., 2007 (2002-2004)	145 late-stage patients who received in-home palliative care versus 152 who received usual care in two group-model health maintenance organizations in two states	Excess costs of \$7,552 for each usual care group member ($p = 0.03$)	Palliative care recipients were 2.2 times more likely than usual care recipients to die at home and had fewer emergency department visits and hospitalizations; survival differences between the two groups disappeared after data were adjusted for diagnosis, demographics, and severity of illness (Personal communication, S. Enguidanos, University of Southern California, February 25, 2014)

Greer
et al., 2012
(2006-2009)

151 patients with
metastatic non-
small-cell lung
cancer receiving
usual outpatient
oncologic care
with or without
early palliative care
comanagement

Excess overall
costs of \$2,282 per
patient among those
receiving usual care
only

Patients receiving
early palliative care
had significantly
higher quality of life,
experienced fewer
depressive symptoms,
were less likely to
receive chemotherapy
within 2 weeks of
death, had earlier
hospice enrollment,
and survived
2.7 months longer

TABLE 5-4 Observational Studies Comparing the Costs of Palliative and Usual Care

Study (Description)	Number of Patients and Setting	Excess Cost of Usual Care	Other Findings
Morrison et al., 2008 (observational study using propensity score matching, 2002-2004)	4,908 patients who received palliative care consultations and 20,551 who received usual care in eight geographically and structurally diverse hospitals	Excess total costs of \$2,642 for each usual care patient discharged alive ($p = 0.02$) and \$6,896 for each who died in the hospital ($p = 0.001$)	Intensive care unit (ICU), imaging, laboratory, and pharmacy costs were higher among the usual care patients
Morrison et al., 2011 (observational study using propensity score matching, Medicaid-only patients, 2004-2007)	475 patients who received palliative care consultations and 1,576 who received usual care in four diverse urban New York State hospitals	Excess costs of \$4,098 for each usual care patient discharged alive ($p < 0.05$) and \$7,563 for each who died in the hospital ($p < 0.05$)	Patients receiving palliative care consultation were more likely than usual care patients to be discharged to hospice (30 percent versus 1 percent) and less likely to die in intensive care (34 percent versus 58 percent)

Starks et al., 2013 (observational study using propensity score matching, 2005-2008)	1,815 patients who received palliative care consultation and 1,790 comparison patients from two academic medical center hospitals	Excess costs of \$2,141 for usual care patients with lengths of stay of 1-7 days ($p = 0.001$) and \$2,870 for usual care patients with lengths of stay of 8-30 days ($p = 0.012$)	Some differences between palliative care and usual care groups remained
Penrod et al., 2010 (observational study, 2004-2006)	606 veterans who received palliative care and 2,715 who received usual care in five U.S. Department of Veterans Affairs (VA) hospitals	Excess costs of \$464 per day for usual care patients ($p = 0.001$)	Instrumental variables method used to account for unmeasured selection into treatment bias (Stukel et al., 2007)



Smith 2014 (review) Palliat Med	“Conclusion: <i>Despite wide variation in study type, characteristic and study quality, there are consistent patterns in the results. Palliative care is most frequently found to be less costly relative to comparator groups, and in most cases, the difference in cost is statistically significant.”</i>
Hughes 2014 (review) Annu Rev Public Health	<i>“The benefits of palliative care have now been shown in multiple clinical trials, with increased patient and provider satisfaction, equal or better symptom control, more discernment of and honoring choices about place of death, fewer and less intensive hospital admissions in the last month of life, less anxiety and depression, less caregiver distress, and cost savings.”</i>

From: **Health Care Costs in the Last Week of Life: Associations With End-of-Life Conversations**

Arch Intern Med. 2009;169(5):480-488. doi:10.1001/archinternmed.2008.587

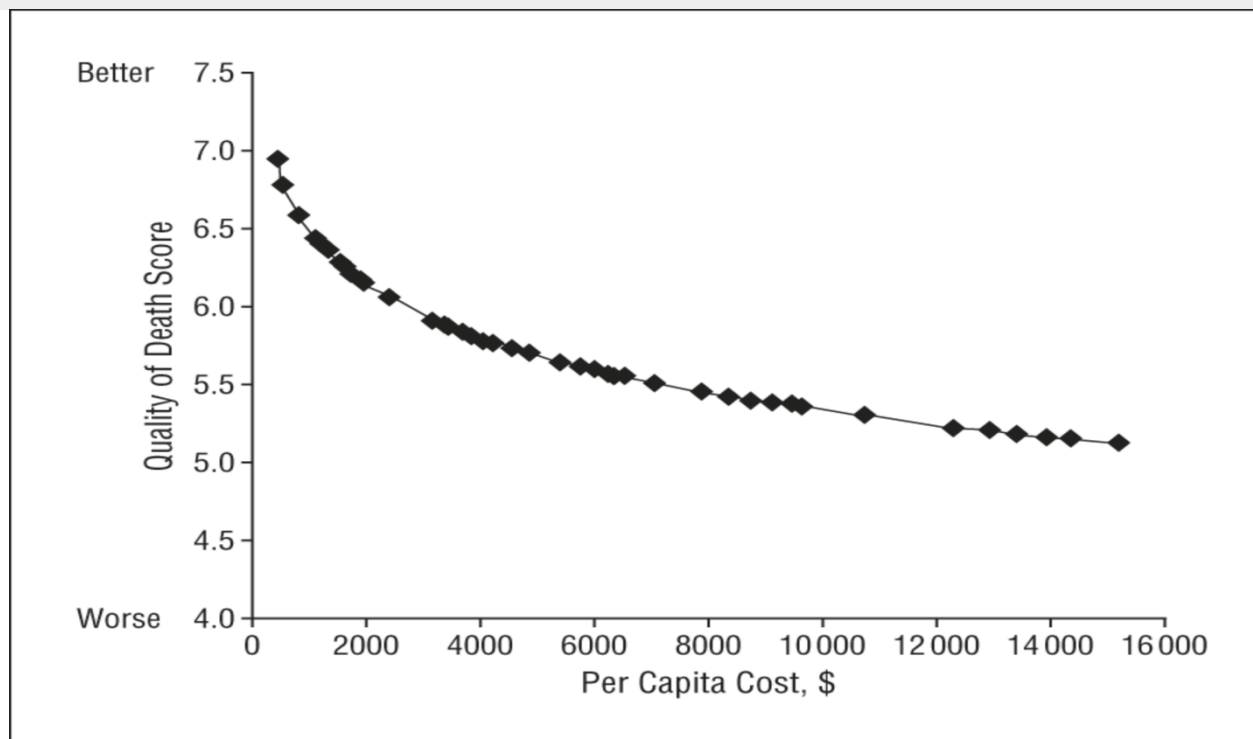


Figure Legend:

Association between cost and quality of death in the final week of life (adjusted $P = .006$). Age, sex, education status, survival time, race/ethnicity, and source of report were controlled for in the adjusted analysis of per capita cost predicting quality of death in the deceased cohort ($n = 316$).

Reducing costs

- Early EOL conversations associated with 36% cost reduction
- Early palliative care RCT of patients with lung ca had 29% fewer hospital days
 - Major focus of visits was communication
- Early conversations about EOL care proposed as key intervention to “bend the cost curve” in oncology
- If palliative care teams were fully integrated into the nation’s hospitals, total savings could exceed \$6 billion per year

Bottom line

- Costing in SA will be different but in principal effects should be the same
- Earlier palliative care intervention not only improves patient outcomes but most likely will be cost saving

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