

References for Measuring Fiscal (and Other) Outcomes of Outpatient Palliative Care

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Article	Key Findings and Features
<p>Jennifer S. Temel et al., "Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer," <i>New England Journal of Medicine</i> 363, no. 8 (Aug. 19, 2010): 733–42.</p> <p>Joseph A. Greer et al., "Effect of Early Palliative Care on Chemotherapy Use and End-of-Life Care in Patients with Metastatic Non-Small-Cell Lung Cancer," <i>Journal of Clinical Oncology</i> 30, no. 4 (Feb. 1, 2012): 394–400.</p> <p>Joseph A. Greer et al., "Cost Analysis of a Randomized Trial of Early Palliative Care in Patients with Metastatic Nonsmall-Cell Lung Cancer," <i>Journal of Palliative Medicine</i> 19, no. 8 (Aug. 2016): 842–48.</p>	<ul style="list-style-type: none"> • Landmark randomized controlled trial that provided outpatient palliative care (PC) visits to patients with advanced lung cancer shortly after diagnosis. Control group received standard oncology care. • Palliative care recipients had better quality of life and lived longer; fewer had depressive symptoms; fewer had aggressive care at the end of life. • Palliative care recipients more likely to enroll in hospice for more than one week. • Palliative care recipients had costs that were \$2,527 lower (not statistically significant given small sample size), driven by reductions in hospital costs (\$2,896 lower) and chemotherapy costs (\$757 lower), while hospice care costs increased.
<p>J. Brian Cassel et al., "Early Palliative Care for Patients with Solid Tumors and Hematological Malignancies: Impact on Quality Metrics and Costs of Care," <i>Supportive Care in Cancer</i> 25, no. S2 (Apr. 22, 2017): 185.</p>	<ul style="list-style-type: none"> • Retrospective analysis of cancer decedents' hospital and clinic utilization, comparing 433 early-PC recipients matched one-to-one to 433 late-PC recipients. • All eight measures of utilization for solid-tumor patients were lower in the early-PC group. • Late-PC patients were 4.8 times more likely to be admitted to the hospital in the final 30 days of life, and 4.2 times more likely to die in the hospital. • Direct costs of care in the final 30 days of life for the late-PC patients were double the costs for early-PC patients, \$13,864 vs. \$6,788.

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<p>Colin Scibetta et al., "The Costs of Waiting: Implications of the Timing of Palliative Care Consultation Among a Cohort of Decedents at a Comprehensive Cancer Center," <i>Journal of Palliative Medicine</i> 19, no. 1 (Jan. 2016): 69–75.</p>	<ul style="list-style-type: none"> • Of the cancer decedents who had PC referral, one-third received PC 90 days or more before death, mostly in the outpatient clinic. • Comparisons were made to cancer decedents who had PC referral within the final 90 days of life. • Earlier PC was associated with lower rates of hospitalization, intensive care unit (ICU) use, and emergency department (ED) visits in the final month of life. • Inpatient costs for the hospital were \$6,687 (26%) lower for the earlier PC patients.
<p>David Hui et al., "Impact of Timing and Setting of Palliative Care Referral on Quality of End-of-Life Care in Cancer Patients," <i>Cancer</i> 120, no. 11 (June 2014): 1743–49.</p>	<ul style="list-style-type: none"> • Similar to the Scibetta study above, one-third of cancer decedents who had PC were referred more than 90 days before death. • Earlier PC (mostly outpatient) was associated with lower rates of hospitalization, ICU use, and ED visits.
<p>J. Brian Cassel et al., "Which Patients Use Outpatient Palliative Care? (S717)," <i>Journal of Pain and Symptom Management</i> 55, no. 2 (Feb. 1, 2018): 665.</p>	<ul style="list-style-type: none"> • 14% of cancer decedents used outpatient PC. • Median time of first visit was six months before death, and the average number of clinic visits was 4.5. • Outpatient PC recipients were younger, had solid tumors (vs. hematological malignancies), public insurance, and fewer comorbidities.
<p>Camilla Zimmerman et al., "Early Palliative Care for Patients with Advanced Cancer: A Cluster-Randomised Controlled Trial," <i>Lancet</i> 383, no. 9930 (May 17, 2014): 1721–30.</p>	<ul style="list-style-type: none"> • Outpatient PC was made available at 12 medical oncology clinics, with 12 other clinics used as controls. • Four months after PC began, several outcomes improved: quality of life, symptom severity, satisfaction with care.
<p>Leslie J. Blackhall et al., "CARE Track for Advanced Cancer: Impact and Timing of an Outpatient Palliative Care Clinic," <i>Journal of Palliative Medicine</i> 19, no. 1 (Jan. 2016): 57–63.</p>	<ul style="list-style-type: none"> • On average, cancer patients were referred to this outpatient palliative care service 2.5 months before death. • Recipients had fewer hospitalizations, were less likely to die in the hospital, were more likely to use hospice, and had lower costs of care compared to similar cancer patients who did not receive palliative care.