End-of-life care quality metrics in patients with cancer: challenges and opportunities

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In recent years there has been increasing recognition of the importance of quality of end-of-life care metrics. Most metrics are related to aggressive care during the last days of life, including chemotherapy/immunotherapy, intensive care unit admissions, lengthy admissions, hospital deaths, multiple emergency room visits, and invasive procedures. Such metrics are associated with lower quality of life and increased costs.[1]

Hicks-Courant et al have authored an important article on use of aggressive interventions among Medicare patients 65 years or older with gynecological malignancies. The authors used the Surveillance, Epidemiology, and End Results (SEER) database to determine the frequency, intensity, and overall cost of care.[2] One key finding is that more than half of the patients received aggressive care, with more than 40% having received invasive procedures during the last month of life. The authors also found that patients treated primarily by medical oncologists were more likely to receive chemotherapy and those treated by gynecological oncologist were more likely to undergo invasive procedures. The overall cost of care during the last 30 days of life was high for both groups and slightly higher for patients treated by gynecological oncologists (approximately $80 000 vs $75 000).

It is difficult to interpret the differences in metrics according to specialty. One possible explanation is 'specialty bias': towards the end of life medical oncologists consider one additional chemotherapy cycle, and gynecological oncologists one additional invasive procedure. One possible confounder for this interpretation is 'referral bias': patients who required invasive procedures were more frequently seen by gynecological oncologists, and those requiring chemotherapy, especially phase I investigational treatments near the end of life, were seen by medical oncologists who frequently administer such trials.

This study highlights the need to reduce aggressive interventions at end of life. One important evidence-based intervention is timely integration of palliative care. Randomized controlled trials demonstrate that palliative care improves multiple clinical outcomes and reduce cost of care as well as aggressive interventions near the end of life.[3] Early referrals, ideally in the outpatient setting, result in improved quality end-of-life metrics compared with late inpatient referrals.[4]

Importantly, an excessively simplistic interpretation of quality end-of-life care metrics by healthcare administrators might result in unintended consequences including patient harm. Interventions such as chemotherapy, invasive procedures, or admission to the hospital or intensive care unit do not have an inherently positive or negative effect. The potential for positive or negative effects on patient care is related to administrators' wisdom in deciding the appropriateness of their use. As patients approach end of life, it is more likely that some interventions will have more negative than positive effects. However, the benchmark for these metrics is not well understood, and not all metrics carry the same value. Patients with severe symptom distress and those with less family and financial support may not benefit from end of life care provided outside of the hospital setting.[5]

As palliative care clinicians, we have found our gynecology oncology colleagues to be among the most compassionate and thoughtful clinicians in cancer care, including at end of life. More research is needed to better define the best metrics and how to achieve specific benchmarks.

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