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Defining the Value Proposition for Specialist Palliative Care Delivered in Intensive Care Units

Our hospital has a fairly large adult palliative care consultative service that is generally staffed by one attending physician, two nurses, a social worker, a chaplain, and a fellow. How likely is it that these six people can make a measurable population-based impact on our institution's >7,000 annual intensive care unit (ICU) admissions? Is the value proposition argument hopeless for these hardworking clinicians?

Hua and colleagues (pp. 1067–1074) consider this question and more in this issue of *AnnalsATS* (1). In their analyses, they used a New York state database that included over a million patients treated in 151 hospitals (very small hospitals were sensibly excluded) to determine whether the presence of a palliative care program was associated with differences in markers of treatment intensity for patients in the ICU. The authors found that hospital length of stay and ICU procedures (e.g., ventilation, dialysis, and tracheotomy) did not differ in clinically meaningful ways between hospitals with (79%) and without (21%) palliative care programs. However, they found that care in a hospital with palliative care was associated with a nearly 50% greater likelihood of being transferred to hospice.

The reader should carefully consider the authors' thoughtful discussion about the limitations of their analyses, primarily regarding the trade-offs between hospital- and patient-level markers of exposure to specialist palliative care. Noting the distinction between availability (measurable, specific) and use (tougher to measure, nonspecific), the authors make the excellent point that the ICD-9 V66.7 code for a palliative care encounter could be associated with care delivered by either a specialist or generalist. Although the authors' sensitivity analyses failed to identify potentially explanatory hospital characteristics, their methodological approach was comprehensive and persuasive. Also, they remind us that many key patient-level measures potentially impacted by palliative care were not captured in the database. Were the indications for palliative care appropriate? When and how was care activated? What was the quality of the ICU–palliative care specialist interaction? What were the impacts of care beyond resource utilization?

These authors and others have made it clear that there is a substantial need for palliative care, delivered by either primary

clinicians or specialists, in the ICU—particularly among older adults. Currently, nearly a third of older adults receive ICU care in the last 30 days of life (2), and the use of ICU services is continuing to increase in populations with particularly poor outcomes, such as nursing home residents (3). Palliative care services delivered in many outpatient and inpatient settings are associated with fairly robust effects on patients, their family members, and surrogate decision-makers, as well as healthcare systems. In contrast, the evidence for benefits of specialist-delivered palliative care with regard to patient- or family-centered outcomes in an ICU setting is weaker. In fact, only about 60% of experimental studies have reported an associated reduction in length of stay, care intensity, and costs (4).

Back to the value proposition: moving forward, how can we better define the impact of palliative care specialists in ICUs? One strategy is to conduct multicenter pragmatic trials in which the intervention is default palliative care specialist consultation for patients with specific conditions (5). When patient eligibility and outcomes ascertainment are automated and opt-out orders are integrated into hospitals' electronic health records systems, the power of this approach—as well as the large patient numbers—is compelling. This approach could also overcome process barriers to care delivery—technical or social factors that limit the consistency of care delivery, such as intensivists' common behavior of ordering specialist palliative care infrequently, often arbitrarily, and often so late in the course that hospice transfer is impossible. A trade-off with this approach is that trigger-based prompts, which by themselves may not be direct measures of actual need, may have relatively high false-positive rates for actual unmet palliative care needs (6).

Another strategy would be to perform clinical trials that focus specialist palliative care interventions only on patients with a sufficient burden of unmet needs. This focus on the “true positives” can be accomplished using the electronic health record system, although it requires patients or family members to complete a short needs instrument on a tablet (7). By aligning specialists with the most challenging cases, this approach could address structural care delivery barriers—difficult-to-change factors that limit scalability, most notably including the small national palliative care workforce (~5,500) and general lack of an established intensivist–palliative care specialist infrastructure for efficient care. A trade-off with this

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approach is that pragmatic trials across health systems that involve electronic health system–integrated apps are currently difficult and single-health-system trials are less generalizable.

Ultimately, persuasive data are needed to drive policy designed to broadly improve the equitable and efficient delivery of palliative care in ICU settings. And policy-driven change is essential to address the fact that the likelihood of hospitalized patients even having the opportunity to receive specialist palliative care depends on the state in which they live, the size and setting (rural versus urban) of the hospital in which they receive care, and the hospital's tax status (i.e., for profit or not for profit) (8).

Hua and colleagues's methodologically rigorous work reminds us to consider the valuable downstream effects of palliative care, and points out the need for future studies enriched with more personalized information that can add to this story and help to better define the value proposition for hospital-based palliative care programs. This is important work that contributes richly to the field and helps us better understand opportunities to both recognize and address the particularly high variability in specialist palliative care delivered in ICU settings (9). ■

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