

are at greatest risk and thereby ameliorate at least some of the patient-specific damages of air pollution.

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The Healing Power of Listening in the ICU

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Critical care services are highly valued because they can often restore function in patients with acute life-threatening illnesses. In this context, advances in medical science have led to increased expectations for favorable outcomes of episodes of critical illness, even when the patient has severe coexisting chronic disease. The growing demand for critical care has led both to increased numbers of patients who survived with desirable functional outcomes and to increased numbers of patients who die in the intensive care unit (ICU). Today, many deaths in the ICU occur after a decision has been made to discontinue or forgo advanced supportive technology.¹ Decisions to shift from apparently ineffective technology to a treatment plan that focuses primarily on the patient's comfort are usually made in discussions between caregivers and family members.² These discussions involve complex conversations and are important to families. Communication processes that have been shown to improve the well-being of patients and family members include proactive, multidisciplinary sessions that provide patients (when they are able to communicate) and family members with the opportunity to ask ques-

tions, articulate the patient's values, express painful emotions, discuss concerns, and obtain help with managing feelings of guilt.³

A clinical course that runs counter to the family's hopes and expectations is extraordinarily stressful and is an important contributor to ICU-related post-traumatic stress disorder (PTSD) among families.⁴ A better understanding of how intensive care clinicians can support families as they make the transition from a goal of cure to one of comfort and acceptance of death is clearly needed. Recognition of the relationship between satisfaction, on the one hand, and expectations, perceptions, and prognosis, on the other hand, can lead to communication processes that synchronize the perceptions of family members with those of providers and close gaps between reality and expectations. Curtis and colleagues have described some of the components of a system of communication that is being increasingly recognized as an effective means of promoting harmony between critical care providers and families.⁵ This five-part system, known by the mnemonic VALUE, includes the following elements: valuing and appreciating what the family mem-

bers communicate, acknowledging their emotions by using reflective summary statements, listening to family members, understanding who the patient is as a person by asking open-ended questions and listening carefully to the responses, and eliciting questions from the family more effectively than by simply asking, "Any questions?" A key skill is listening more and talking less.⁶ Structured, proactive, multidisciplinary communication processes⁷ that are supported by ethics consultation⁸ and palliative care teams⁹ and include bereavement conferences that encourage providers to use a structured approach (such as the VALUE system) for guiding effective communication during critical care¹⁰ are the foundations for improving end-of-life care for patients and interactions with their families.¹¹

The importance of understanding how to use effective communication to improve end-of-life care is increasingly supported by randomized intervention studies — such as the study by Lautrette and colleagues reported in this issue of the *Journal*¹² — that meet most of the accepted standards of good clinical science. Lautrette et al. found that formal bereavement meetings held at the time that the senior physician had concluded that death was inevitable improved the well-being of family members, as measured by validated instruments. This study is groundbreaking in its demonstration of a statistically and clinically significant improvement in symptoms of anxiety, depression, and PTSD among family members, and it shows that expanding the focus of critical care to include family-centered outcomes is appropriate and desirable. In reporting these advances in the peer-reviewed literature, it is often difficult for authors to fully explain the core of their interventions, in part because of the complex, diverse, and emotion-laden nature of these multidimensional conversations.

Although the amount of time spent listening in an individual case will be driven primarily by the medical facts and the needs of the persons facing loss, the study by Lautrette and colleagues¹² suggests that spending an average of 30 minutes (or 10 minutes longer than typical practice) with the patient's family members leads to a significant improvement in their well-being in the months after their loss. Since there is substantial variation in the frequency of deaths, depending on the size of the ICU and the mortality rate of the population served, the fraction of time caregivers

spend to help families manage the critical illness and death of a loved one will vary. On the basis of our research, we propose that the time clinicians working in adult ICUs spend supporting family members in shared decision making should roughly correspond to the mortality rate of the ICU patient population. For example, a full-time clinician serving a surgical ICU with a mortality rate of 2% would spend about 2 hours a week supporting patients and families. The same clinician would spend about 2 hours per day supporting families when serving a medical ICU with a mortality rate of 20%.¹³ When used effectively, this time can translate into considerable savings in costs by reducing the number of days a patient spends in the ICU before death¹³; the time spent with families thus deserves support for compelling economic as well as humanistic reasons.

Recommendations to improve care for patients dying in ICUs are rooted in both observational and interventional studies. Observational studies confirm our own practical experience that nearly every American family will be affected by the loss of a loved one in an ICU and that the effect of this loss can be mitigated by high-quality care. The field has been advanced by interventional studies showing that proactive communication processes, including intensive communication¹³ as well as ethics⁸ and palliative care⁹ consultations, improve outcomes. Evidence that proactive multidisciplinary conferences in which care providers and family members address bereavement, with the provision of printed materials, is another important advance in the field of end-of-life care in the ICU. All providers of critical care should receive training that will allow them to offer the kind of support that they would want if they had a family member who was facing death in an ICU.

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Pay for Performance at the Tipping Point

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It is hard to dispute the rationale behind realigning payment incentives in health care to encourage higher quality and more efficient care. Indeed, across the country and beyond, the number of “pay for performance” programs, as such realignment is called, has reached a tipping point. In the United States, more than half the health maintenance organizations (HMOs) in the private sector have now initiated such programs, covering more than 80% of the country’s HMO enrollees.¹ Congress has mandated that the Center for Medicare and Medicaid Services (CMS) develop plans to introduce a pay-for-performance program into Medicare.² The British have gone a league further, introducing their own version of pay for performance that puts 25 to 30% of the income of family practitioners at stake.³

Because the rationale behind pay for performance is so compelling, it may seem surprising that the evidence base linking such programs to a better quality of care is thin (at least, according to two recent review articles^{4,5}). Most previous studies have looked at incentives to physicians and medical groups. The data showing efficacy are inconsistent, and some studies have revealed unintended effects, such as improvement in documentation without much change in the underlying quality of care.⁶ Only one previous study examined cost-effectiveness.⁷

Given this dearth of solid evidence, it seems apt to compare our adoption of pay for performance with our adoption of new surgical proce-

dures or medical therapies. Many of my clinical colleagues would insist on hard evidence documenting efficacy before endorsing a new therapeutic approach. They cite sobering stories of what can happen when we introduce new approaches prematurely. Consider, for example, the numerous surgical procedures or medical therapies — including radical mastectomy for women with early-stage breast cancer and hormone-replacement therapy for postmenopausal women — that were diffused widely before solid evidence of their relative efficacy was available, only for us to learn later that they were, at best, no more effective than alternative therapies or, at worst, harmful.⁸⁻¹⁰ If pay for performance were a therapy, its rapid diffusion thus far would have to be considered premature.

The study by Lindenauer et al.¹¹ in this issue of the *Journal* begins to address this information gap on pay for performance. The authors report the initial results of a 3-year program in which more than 200 hospitals participating in a quality-benchmarking database maintained by Premier volunteered for a Medicare demonstration in which payments would be allocated partially on the basis of quality performance. Hospitals performing in the top decile received a 2% increment in Medicare payments, whereas hospitals in the second decile received a 1% increment. Hospitals that underperformed by failing to exceed the performance of hospitals in the lowest two deciles (as established during the program’s first