Physician Staffing Models and Patient Safety in the ICU

To the Editor:

Staffing, as discussed by Gajic and Afessa in CHEST (April 2009), is a determining factor of outcomes in the ICU. The most ideal solutions, however, might not be feasible in the future because of anticipated staff shortages and staff exhaustion if we go on in the same way. As suggested in the editorial by Dunn and Murphy in the same issue, the ICU does not function in a vacuum. There are many outside influences. Most are uncontrollable by those working in the ICU. However, some are.

Two important influences are the societal expectations about ICU care and, related to that, the way we in the ICU use our resources. There are large cultural differences between countries. Without judging these differences, a comparison might indicate the direction to look for solutions. In the United States, >50% of all hospital deaths occur in the ICU. This figure probably means that too many patients with an incurable disease are admitted to the ICU. There might be several reasons for that. Expectations by patients and families that are too high, pressure by colleagues, and uncertainty by the intensivist all can lead to ICU admissions with an unreachable target. Changing this figure for ICU deaths might have considerable impact.

In our view, patients do not necessarily need to die in the ICU while receiving mechanical ventilation. In our hospital with 50,247 acute care admissions in 2008, 2,905 of these admissions were to our high-intensity staffed ICU. In the hospital, 705 patients died in 2008, and 255 of these patients (36% of total hospital mortality) died in the ICU. Within 3 months after ICU admission, 125 patients had died, 52 patients in hospital wards and 73 patients at home. It seems that we have fewer ICU admissions and less ICU mortality as a percentage of hospital admissions and mortality; perhaps more patients are dying at home. Cure is the primary goal of ICU admission. Patients who cannot be lifted from the hospital list will always suffer from ineffective ICU care. That is, the ICU is not a department that focuses on palliation. That is what makes Asimov’s transition from life to death even more troublesome.

Education of the society and of colleagues, and better education for intensivists to handle expectations that are too high might help to solve these problems. Fewer patients will suffer unnecessarily, less ICU care will be required, and intensivists will be confronted less often with hopeless cases, leading to less burnout among physicians. More and better trained intensivists might help break the spiral of staff shortages and too great a demand for ICU services.

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REFERENCES


Response

To the Editor:

We thank Dijkema and colleagues for their comments regarding our review in CHEST (April 2009) about physician staffing models and patient safety in the ICU. They bring up important issues concerning ICU utilization and staffing shortage. They highlight the imbalance between ICU-staffing demand and supply, regional variations in the utilization of ICU resources, and the factors that influence triaging decisions for ICU admission. We agree with their comments.

The triage decisions regarding who will or will not benefit from ICU care are difficult to make. Although most physicians agree in principle that patients who are too well or too sick to benefit from ICU support should be denied ICU admission, the judgment of clinicians in determining who is sick enough to benefit from ICU admission is far from perfect. Observational studies have suggested that early intervention in the ICU is of critical importance in patients whose condition is deteriorating on the regular hospital ward. A multinational European, prospective, observational study (“Triage Decision Making for the Elderly in European ICUs” [or ELDICUS]) has just been completed, and we hope it will improve our understanding of triage decisions.

Staffing models that include appropriately trained critical care specialists facilitate decision making in these challenging situations. The regionalization of critical care similar to what