

## Critical care at the tipping point

The Presidential Address from the 30th Educational and Scientific Symposium of the Society of Critical Care Medicine

A few weeks ago, while I was trying to decide just what I wanted to say to all of you, a friend told me about an interesting book. I have a long history of losing myself in books, especially when there is other work to be done. So, I went right out and bought it. Instead of a diversion, it turned out to be exactly what I needed for talking with you today.

The book is titled *The Tipping Point*, by Malcolm Gladwell (1). It explains why modern change happens the way it does. It uses language taken from medicine—from the behavior of epidemics. It describes the *one* dramatic moment in an epidemic when everything can change, all at once: how a steady-state viral infection can explode into a worldwide epidemic; or more positively, how suddenly in 1998 *everyone* had a cell phone. After a period of equilibrium and little change, some small event triggers a *big* change, a big change that happens very quickly. This sudden change is the tipping point, the moment of critical mass, the threshold, the point at which the unexpected becomes expected, where radical change is more than possibility. It is a certainty. I believe we in critical care medicine are at a tipping point.

After three decades of hard work (of laying the groundwork, of explaining our vision), a series of events and the actions of some exceptional people (some very influential people) have brought us to this very dramatic point.

So, how is it that we are at the tipping point? What exactly do I mean? How did

we get here? And what does it mean for our profession and for our patients? What opportunities does it present and what obligations result?

First, we have moved to our new home in Chicago, where so many associations locate their headquarters, from the AMA [American Medical Association] and the ADA [American Dental Association] to the AHA [American Heart Association] and the ABA [American Bar Association]. Librarians, lawyers, dentists, and doctors have long been headquartered in the "Windy City." Locating our operation in a city of voluntary organizations allows us to benefit from an exceptionally large pool of experienced association professionals. These individuals want to put their expertise to work to help build our growing, maturing, and increasingly valued professional association. Our new, streamlined organization will free resources for important projects and increase our potential to realize our dreams.

But, we cannot become a leader in organized medicine just by acquiring a zip code. If critical care medicine is going to become the inside player we want it to be, we need to be visible and accessible. And we are. We are now able to meet with anyone, anywhere, anytime. When our colleagues are formulating policy or taking positions, we will be at the table adding the perspective of the Society of Critical Care Medicine (SCCM). Today, our headquarters at One East Erie is only a short walk, a cab ride, a couple of El stops away from more than 200 national medical organizations like ourselves.

Our visibility with the *public* is important, too. You may remember that we got a big boost a year ago when *U.S. News & World Report* called us "hot" and added us to their list of hot jobs for new millennium (2). Why did *U.S. News & World Report* label us that way? Because "as the population ages, and more and more pa-

tients in hospitals need critical care, the demand for intensivists will grow."

The *Journal of the American Medical Association* provided support when, in December, it published our Committee on Manpower for Pulmonary and Critical Care Societies (COMPACCS) manpower study (3), predicting that the need for intensivists will increase dramatically after the year 2010. Unless we act soon, by the year 2030, there will be a huge gap between supply and demand for intensive care professionals: physicians, nurses, pharmacists, respiratory therapists, and all the other members of the intensive care team.

You and I know that worker shortage is not the only reason, and *certainly* not the most important reason, we are hot. Those paying the bills—the nation's employers—say so, employers such as those in the Leapfrog Group (4). You have seen them quoted in the newspapers, that consortium of *Fortune 500's* chief executive officers from AT&T, Boeing, Eli Lilly, and General Motors, to name a few, who recognized that despite the huge cost of health care, there are serious safety and quality flaws in our system and who sat down together and said, "There's got to be a better way. There's got to be more value in return for our dollar."

They are looking at three ways to get more value: evidence-based hospital referral; computer physician order entry; and ICU physician staffing. Specifically, they want board-certified intensivists present during the daytime and providing care exclusively in the intensive care unit (ICU), with an FCCS [Fundamentals of Critical Care Support]-certified alternate able to reach a patient within 5 minutes the rest of the time. They estimate that institution of their standards will save 54,000 lives a year!

They are looking at the same data we are, and they draw the same conclusions. Just as the article by Pronovost et al. in the *Journal of the American Medical As-*

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sociation shows, "When an intensivist makes rounds, more patients survive—mortality is cut by a factor of three" (5). Although they focus on the intensivist *per se*, we know that this is shorthand for the multidisciplinary, multiprofessional team of a well-organized ICU. The Leapfrog Group has looked at the evidence, and they have adopted our vision!

They realize that better care means better business. They are now issuing a demand: They are putting the nation's hospitals on notice that if they want a piece of the forty billion dollar action that caring for their employees represents, the hospitals will have to meet their standards.

And the story builds. Just last week, *USA TODAY* reported that tens of thousands of lives and \$1.5 billion a year could be saved if hospitals pursued an intensivist-led, multiprofessional model of care (6).

So, suddenly, after all these years of preparation, there is a convergence of new and powerful influences: change in our population demographics, new appreciation of the value of intensive care professionals, new recognition of the enormous impact of errors in medicine, leaders in industry recognizing that better care is cheaper care. And we find ourselves at the tipping point, when the demand for our expertise is going to expand exponentially and the opportunity to realize our vision is real, as never before.

What does this mean for us? What is next? What is our mandate, both for us as individual practitioners and for us as SCCM? The tasks, as I see it, are three-fold.

*First*, each of us has an obligation to recruit into our respective professions. Without adequate staff, we will not be able to work effectively. Whether it is speaking at local high schools or colleges, manning a booth at a community health fair, mentoring junior students, or bending the ear of a promising resident rotating through your ICU, help to make the intensive care professions exciting career options, and think carefully about new, innovative, approaches to organizing our system to stretch available resources.

I feel very confident about the *second* task as well. SCCM as an organization must provide us, its members, with the support we need to continue to grow and improve as professionals. We are working hard to do that. Here are some examples.

- Our advocacy committee has successfully led an effort to restore the

value of the critical care codes and to reword them to match the work as we know it. We are increasing support to the committee to a new level to enhance their activities in Chicago and Washington, DC.

- We have built on the success of our outstanding journal by launching a new journal, *Pediatric Critical Care Medicine*, in collaboration with the World Federation of Pediatric Intensive and Critical Care Societies. It will be the international voice of the pediatric intensive care community.
- Project Impact provides us with a tool to measure our application of what we hear at meetings or read in the journals to our patients' care. It gives us the opportunity to evaluate outcomes against the standard of our peers and relate the process of care to outcome. The new version, released this winter, simplifies its use and has made it even more attractive. In its newly planned for-profit state, we anticipate new growth and increased support for users.
- Our FCCS program offers training to our new staff and non-ICU colleagues in stabilizing critically ill patients until we can reach them. FCCS has been translated into five languages. We have given courses in 24 countries. FCCS has brought name recognition for SCCM around the world. Now, with the Leapfrog Group adding FCCS to its ICU standard, it is going to explode in this country! I challenge each of you to give one course in your community this year.
- This year, we have a *brand new endeavor*, the creation of the Critical Care Education and Research Foundation. A foundation designed to support our missions of education and research in service of the best possible outcomes for our patients. Our overarching goal is to improve patient safety in the ICU. I urge you to support this foundation: there is no more powerful message to potential donors than evidence that every member of the Society is committed to the vision. If you have not reserved a seat at the Research Special Event, "Set the Stage in San Francisco," Monday night, tomorrow, do not miss the opportunity to be present as we embark on this

endeavor and "invest in patient safety."

It is the *third* task that is going to be our real challenge.

Right now, our best ICUs have an admirable success rate. Eighty percent (and more) of our patients live, eight of ten. Yet, if you ask the public what happens in an ICU, they think of death. We need to find ways to educate patients and families that for the majority, the ICU is not a place to go to die; it is a place of hope and recovery.

My challenge to you, to all of us, is to consider the other side of that 80% coin. To ask whether we can do more. I believe we can; we can improve mortality rates and overall quality of care. The Leapfrog Group believes our presence improves care. We should celebrate this new recognition of the importance of our work and mandate for our presence. We can bask in that pleasure for a few minutes. However, despite Woody Allen's observation that 80% of success is showing up, we can do better (7).

We *must* do better. The Leapfrog Group's goal is to improve patient safety and the quality of medical care in intensive care units. Since the foundation of this society, that has been our goal—we led the way—but national statistics indicate that there is much more to do. It is time for us to take the next leap.

As the purchasers of health care come to recognize our potential to improve outcomes and as the public becomes aware of our role (comes to equate *us* with intensive care), they are going to develop high expectations for us. If we are to be catapulted into the public eye, new obligations will go hand in hand with new recognition. They will take for granted that we are continuing our intensive effort to advance the science behind our practice; they will rightfully expect that we devote ourselves equally to protecting them from harm and treating them with great compassion.

We must lead the way in developing a culture of excellence and safety. We believe we are practicing good medicine, that we are doing our best. But, we know that we do not reliably put good evidence into practice. We need to make sure that what the literature tells us is best for our patients is how we practice. Instead of letting professional autonomy and personal style drive variability in care, we must assure that only *patient* differences drive variability.

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We know that errors occur. To quote Alexander Pope (and the Institute of Medicine), "to err is human" (8). But, to solve problems is also human. "This is the very perfection of man, to find out his own imperfections" (9).

We need to find ways to record and examine the results of our care much better than we have been able to do to date. We need to develop systems that no longer rely entirely on an individual professional's best efforts but rather weave a safety net around our patients. We need nonpunitive methods to examine critical events and to develop systems for accountability and improvement; we need to develop fail-safe mechanisms and safety valves that protect patients from human fallibility.

The Leapfrog Group has established what they feel is an acceptable safety standard, but you and I know this is only a beginning. We can raise that standard.

In this meeting, you will learn about advances in the hard science of our field. You will hear about the potentially enormous impact of activated protein C in sepsis, mechanical stresses during ventilation in acute respiratory distress syndrome, the physiology of immune competency, among much else. Some of what we will learn represents a tipping point in our ability to improve outcome. Much represents slow, steady chipping away at the impact of critical illness and very gradual improvement in patient care.

In addition to excellent science in this meeting, there is great and vital emphasis on compassionate care. A large part of what is offered will be discussions of end-of-life care, which, sadly, is an important part of the work we do. Doing it well is essential. Doing it *masterfully* should be the goal.

Fortunately, most (in fact, a large majority) of our patients live and remember their ICU experience to some extent, as do their families. We have immense power to shape their memory of the experience.

Each one of us needs to devote as much time and attention to developing our listening and empathic "connection" skills as we have given ourselves to learning to titrate ventilation and circulatory support. Each member of the multiprofessional ICU team has an opportunity and obligation to hone these skills. There is a paradox in medicine and, perhaps especially, in critical care. "No one cares how much you know, until they know how much you care" [Jeff Wall]. It is a

cliché in medicolegal circles that being the best "technical" professional in the world is less important than being perceived as caring, as compassionate.

Over the past 20 years and more, I have been astonished and moved by the access patients and their families and friends give us to their most deeply held feelings and beliefs. I have learned that whenever I take the time to listen, they will share just about anything important to them. They will talk and laugh about a child's mischief, express guilt at past moments of anger they want to erase. They share their terror about the illness, their sense of responsibility for the child's condition. They talk freely of feelings about a child's disabilities and related hope or despair. They will talk about extended family members who help them and those who make life much more difficult. They confide discord between parents or branches or the extended family. I believe this access to patients' and families' private lives puts us in a truly privileged position.

Not only do we have the opportunity to make the difference between life and death (what an audacious opportunity), but also we have a window on the innermost concerns of people at a crucial time in their lives. We have the opportunity to earn their trust that we will handle their bodies, their feelings, indeed, their souls well. What we can learn about ourselves, what we are given in return for our care, is truly priceless. When we hear their stories and see them through hard times, we can ourselves be filled up in a way I believe is very special.

In hearing their stories, we also learn a lot about what is important to them, how they make decisions, what previous experiences influence their thinking. We establish ourselves as interested in them beyond the diagnosis of the moment. When major decisions need to be made, we already know how to tailor our approach so that our recommendations make sense to them. In talking with members of the ethics consultation service at one major medical center, I hear that 60%, and perhaps as much as 90%, of the "ethical dilemmas" evaluated are actually the result of inadequate communication between patients and caregivers. Surely, we can do better.

We have learned that advance directives are important, but we have also learned that they are flawed. It is difficult for patients to anticipate all the

situations that may arise in the course of a major illness. I believe that when we hear patients' and families' stories, it better equips us to help them make choices about care—choices that respond to the particulars of the moment and remain true to the patient's long-term story and "spirit."

A few years ago, I had a very frightening winter. Both of my parents were in intensive care units, for different reasons, in different cities. They both received excellent medical care, and the outcome was good. In one ICU, I was welcome to visit freely. In the other ICU, visiting hours were restricted to 15 minutes every 2 hours, despite the fact that my presence was clearly beneficial. The literature contains much more disturbing stories of final moments lost while loved ones waited to be "allowed in." I wonder whose needs these policies really serve. If we cut off our patients and ourselves from contact with important people in their lives, we lose an important tool in caring well for them.

If there were ever a place in medicine in which lessons from pediatrics apply, it is in the intensive care unit. Patients are often unable to speak for themselves. Even when they can, they often seek the support of family and friends, because of the magnitude of the decisions and their difficulty with thinking clearly. The sicker our patients, the more important their loved ones' input becomes. To the extent patients cannot speak for themselves, we need to hear and *listen* to what their loved ones can tell us the patient might want.

Twenty years ago, when I was interviewing for the job I still hold today, the Medical Director of the hospital, a wonderful, very senior pediatrician who did not quite know what critical care was, asked me why I had chosen intensive care. I told him that I loved the mix of fast-paced, complex, and highly technological care combined with the opportunity to support patients and families through what was necessarily one of the most difficult and frightening periods in their lives. I realize that to this day I feel the same. The science has become more and more interesting, the opportunity to intervene successfully is much greater, and the chance to share patients' and families' hopes, fears, joy, or sorrow is such a privilege, I cannot imagine better work.



This is a special, very exciting time; we are at the threshold of seeing our vision adopted by the larger society. It is also a sobering time; there is a great deal to be done—to advance science, safety, and compassion in service of our patients.

Being president of this organization at the tipping point in its history is a marvelous opportunity. I want to thank Robert Taylor, our president 2 years ago, for having the insight and courage to launch this move, Carolyn Bekes for her dedication to seeing it through, and Barry Shapiro, interim CEO for the past year, for doing the heavy lifting necessary to accomplish the task. Thanks also must go to the dedicated California staff, for whom I will always have special affection. Without them, we could never have come this far. Also, thanks go to our new CEO, David Martin, and to the Chicago staff who have joined with such enthusiasm.

There are many people who have helped me along the way to this important moment in my life—many more than I can mention. But, I must thank a few in particular: Drs. Jack Downes and Russell Raphaely, who first showed me the multidisciplinary model of intensive care, inspired me to follow my love of this work, and gave me the tools to do so.

Peter Winter, Ake Grenvik, and Peter Safar gave me the opportunity of a lifetime when they offered me my current position nearly 20 years ago and have provided support ever since. Enormous credit goes to my faculty colleagues whose hard work, creativity, and friendship have surrounded me with excellence and inspiration and certainly to fellows, past and present, whose energy, talent, and humor make facing the next struggle worth it every day.

I also thank my parents for starting me on my way and supporting me ever since and Joel Frader, who has shared most of the last 30 years of my life and is my friend, confidante, and invaluable professional consultant. He has helped me think about all the most important aspects of ethics and compassion in critical care. And finally, my son, Seth, whose very presence on this earth is a joy to me and whose growing and maturing into a marvelous young man has served as a daily reminder of the importance of the work we all do.

Thank you.

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2001 President

Society of Critical Care Medicine

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## PEDIATRIC INTENSIVE CARE UNITS 2002 DESIGN AWARD

The Society of Critical Care Medicine (SCCM), the American Association of Critical-Care Nurses, and the American Institute of Architects Academy on Architecture for Health will sponsor an award of \$500 for their 2002 ICU Design Citation. This award honors a Pediatric Critical Care Unit that combines functional ICU design with the humanitarian delivery of critical care, recognizing exceptionally designed units, and disseminates examples of exemplary designs.

Applications for this award must be submitted by August 15, 2001. To receive an application, contact Lisa Mynes at AACN (800) 394-5995 ext. 204.

The submitted materials of the winning and runner-up entries have been compiled into the *ICU Design Video and Booklet*. Each year, additional projects are added. The notebook and video package are valuable tools for ICU design teams looking for ideas ranging from space planning to details. *Critical Care Unit Design & Furnishing* is a guidebook that helps team members make an optimal contribution from conception of the design to its fruition. These products are available by calling SCCM at (847) 827-6869.