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The Quest for Leadership and Striking The Perfect Work / Life Balance

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Could You Briefly Describe Your Department?

We run 250 ICU beds in several different hospitals caring for both adult and paediatric ICU populations. We have around 15 specialised units under this umbrella including med-surg ICUs, cardiothoracic ICUs, trauma ICUs, medical ICUs, paediatric ICUs and neuro ICUs, each containing 10-25 beds. In terms of physician staffing, we have about 90 attendings and 50 fellows in the department. There are about 100 nurses per ICU, with a nurse to patient ratio of two to one or higher, based on unit and level of need. We also have respiratory therapists dedicated to the ICUs as well as ICU pharmacists, physical therapists, occupational therapists, and social workers.

What Goals do You Strive to Meet in Your Current Position?

Our department has education, research and clinical missions. In each of these domains, we have different things we are trying to do. With the clinical mission, it is always a constant challenge to move towards more standardised care. We are currently involved in a number of initiatives to better leverage information technology for better, more standardised ICU care. These efforts include better patient surveillance both in the ICUs and on the floors. We run all the outreach teams for the hospital floors, we run a paediatric critical care transport service for the region, and we are interested in improving regional ICU services delivery for all patients across south western Pennsylvania. For most clinical problems, we serve a catchment area of about 14 million people, including western part of Pennsylvania, the northern half of West Virginia, and the eastern half of Ohio. In addition, for a number of services, such as management of fulminant hepatic failure, we will take patients from a far wider area.

You mentioned the use of IT in your units…

We use computerised physician order entry, we have a complete electronic medical record, all our imaging is digital, and all of our rounds are done with a mobile cart, which all operate wirelessly and connect to our electronic medical records system. Thus, a lot of the infrastructure is already there. However, the use of that system for electronic prompts for quality improvement and for standardisation of treatment practices is still an ever-consuming process. We can embed applications into the existing system, but the problem is that each new initiative involves a lot of time working with programmers and educators. In addition, every new alarm or prompt has to be field tested to ensure we don't induce alarm fatigue, or accidentally distort care with unintended consequences. At this point, we do have fairly robust prompts for many common ICU practices, such as ventilator weaning, checks for potential drug reactions, antibiotics usage, DVT prophylaxis, blood sugar control, and so on. However, there is certainly still a long way to go in terms of what we could do to further utilise this system in standardising practices from unit to unit.

In addition, most of our beds are in the big teaching hospitals in the UPMC system, but of course there are 20 hospitals in the system and in the more peripheral hospitals, we have less of an influence. So, collaborating

with those physicians working in those outlying hospitals is important in support of our long-term goal of more integrated care.

What is Your Greatest Interest in the World of Critical Care?

Well I like sepsis.

Well who doesn't…?

Well it does hold a fair amount of interest… as does pneumonia and multi-system organ failure. I'm lucky to run a research group that has grown considerably over the last ten years. And, as it has grown, the research portfolio has expanded. Along the way, my own curiosity has been stimulated by all our faculty and projects. Today, we now have several programmes within CRISMA, each with different programme directors. As the overall director, I have a certain amount of passion for each of the arms. In addition to interventional trials in sepsis, I remain very interested in research into health policy and cost effectiveness, especially those studies tackling the causes of unwanted regional variation and efforts to minimise unwanted variation. Another area of interest is to explore ways to develop more sophisticated patient phenotyping for better trial design, such as theragnostics, where treatment is guided by particular biomarkers.

Utilising Biomarkers is Certainly an Area of Interest for Many of Our Readers…

To that end, we have several biomarkers studies currently underway. We also maintain a large "bio-bank" of frozen blood and urine samples from thousands of patients from different cohort studies and randomised trials. We use these samples to look at potential genetic biomarkers as well as cellular and circulating biomarkers, mainly in the areas of pneumonia, sepsis, acute lung injury and acute kidney injury. The other area that has been interesting for me is to think about critical illness in the context of under-resourced countries. I worked previously for Medecins sans Frontieres and my original research 20 years ago focused specifically on how healthcare systems in developing countries respond to emergencies. Thus, there is a certain sense of life turning full circle as I begin to think again today about some of these problems.

What do You Feel Poses the Greatest Threat to Patients in ICUs?

Oh, well there are a number of threats.

First, patients can be at risk of death or injury by not being admitted to an ICU in a timely fashion. Thus, efforts at earlier identification remain a big priority in my mind.

Second, once admitted, patients can be at risk due to variability in care. I wish all ICUs delivered consistent care 24 hours per day, but they don't. Extending that notion, there has been a big focus in the last ten years on error reduction. When I think of errors, I consider both errors of omission and errors of commission. Most interest has focused on commission – actively harming a patient. However, I feel errors of omission are far more common, much more insidious, and harder to eliminate.

Third, patients can be at risk of receiving care they don't wish for – helping patients and families consider their preferences and then respecting them remains a huge challenge.

Finally, a big risk to patients' well-being in the ICU is going to be our ability to safeguard the ICU workforce. ICU clinicians can burnout, and this burnout can be a huge tax on the system. I expect patients will benefit considerably if we can effectively minimise burnout in our workforce.

What do You See as Your Role as Chairman?

Well I wear many hats. I've been fortunate to work with a number of world-class intensive care professionals in my department. My job is to help them keep being successful. I also think I'm responsible for maintaining a vision about the future of critical care and then helping our team focus on that vision. I've spoken already about our research group. We have other research groups in the department as well, most notably the Safar Center, run by Pat Kochanek. My role with the Safar Center is to try to help Pat get what he needs and then get out of the way! Our educational programme also has fabulous leadership under Paul Rogers, and here too my job is to try to make his life easier and then let him run with things. On the clinical side, we have a whole team of ICU directors

who run all of the ICUs. These folks are incredibly important. I think about ways to develop their leadership skills because I believe the ICU director inevitably has a huge role to play as a team leader to motivate staff, change outcomes and positively influence the entire hospital environment. In fact, we've just finished putting together a 15- credit certificate programme with the Department of Health Policy and Management in our Graduate School of Public Health. It is specifically designed to teach hospital-based physician leadership and we hope will eventually become a core competency for any ICU director.

How do You Teach Leadership?

Good question! In the case of this new certificate programme, we have created a number of specially designed courses combined with existing courses from our business school and from our degree programmes in health administration and health policy. There a number of things that one needs to learn outside of medical education in order to manage an ICU or a department. For example, it is important to know how the hospital

runs with regards to hospital finance and purchasing, so that you can speak intelligently with hospital administrators. You also require basic management skills such as negotiating skills, the ability to initiate change and, of course, the ability to motivate people both by giving positive and negative feedback. Of course, a lot of leadership is innate,

but many of these skills need to be practiced and honed. Even people who have some of these basic skills and are already good mentors or leaders can enhance their skills and become the best mentors or leaders they can be. This principle is the same basis for business degrees, like MBAs – there are skills that can be taught. Unfortunately, none of these skills is taught in medical school. In fact, if anything, these leadership instincts are often beaten out of you…

So, we are very interested in taking these clinician leaders who make their way into ICU director positions and work out what additional skills they can learn through didactic teaching to compliment whatever natural or innate skills they already have. We are just launching this credit programme, but we have already had a great deal of success over the past two years with another programme – regular 'leadership retreats'. These are one-day courses off-campus facilitated by a professional facilitator that are attended by a group of our senior leaders. The group works together to problem- solve, engage in conflict management, build team camaraderie and leadership, and help identify potential problems and work out how to help each member function better as a team. It is a good exercise to help all ICU directors from across an entire hospital system work together, and then to help them to operate more effectively in their own ICU.

What Kind of Feedback have You Received from this Leadership Retreat Programme?

Well, before each course, the initial feedback is usually that most people do not want to go and question why we are making them participate… Usually ICU directors feel as though they are too busy to "waste time". Generally, though, once people are there, the mood changes and they get into the activities, often becoming quite vocal. By the end of the retreat, most actually give very positive feedback about the day and feel that it was a worthwhile experience.

This interview will be part of the Airway issue, which features topics varying from oral care lowering instances of VAP to the effectiveness of CT scans in ARDS diagnosis. What do you see as a priority in this regard – investing in new tools or a resurgence of emphasising basic care?

I am a big fan of doing the simple things well. I think we get a lot of bang for the buck with things such as simple VAP and lung protection strategies. In the current era of sweeping waves of H1N1, there is also a basic need to make sure that the sickest patients are triaged early to the right care setting such that they are cared for by those who are best suited to handle sick patients.

Do You have any Words of Wisdom to Impart to those Entering the Field?

I wholeheartedly endorse the decision to enter this specialised profession: it is a great move. I think critical care is a fantastic field, although I would caution newcomers to pace themselves somewhat. Many of us these days are adjusting to a "shift-work model" where it is important that you retain continuity of care for the patient but it is also important that at the end of a hard day you go home. There is a renewed emphasis in the field on the need for a good home life / work balance. This work we do can be intense and rewarding, but still necessitates a life outside- you should still go see a movie and enjoy off time, and a regular life. That idea has worked well for us here, knowing that you have a colleague to arrive and take the beeper from you, letting you walk away to relax and recharge from the stress of the environment. I have a lot of optimism for critical care as a profession so long as we continue to embrace these new models and avoid the burnout that results from the old idea that you must be chained to the unit. Right-sizing the workload and improving the life / work balance will certainly make the profession more attractive to prospective physicians.

So What Hours do You Generally Work?

Me personally? I'm always on! Unfortunately the buck stops with me… Of course, I have an administrative role, a research role, a clinical role, a teaching role but I try to incorporate myself into these roles as much as possible. I try to wear jeans whenever I can and, when not in the unit or attending meetings, it is nice to have a good study to work on at home …

That does not Sound Like a Good Life /Work Balance!

(laughs) True, well… I'm too old to change probably. However, I try to only do research and tasks I really enjoy when I'm at home and I leave the administrative work at the office. It is the one rule I try to follow: Only rewarding work at home!

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