The Future of Critical Care Medicine

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Future of Critical Care Medicine

- What is Critical Care?
- The “Critical” Issues in Critical Care
- Recommendations for the Future (from a “panel of experts” – including the audience)
  - How do we respond to the demand for critical care services?
  - What are the “right” models for critical care?
  - How should we staff for critical care needs in the future?
What is Critical Care?

- “Critical care” has no single definition, but some unifying concepts
- It is historically based on patient *complexity* and need for *specialized* nursing care or *access* to technology
  - Intensive nursing interventions
  - Continuous hemodynamic monitoring
  - Mechanical ventilatory support
- Traditionally defined based on location
The Scope of the Challenge (I)

- Increasing demand
  - Licensed CCM beds have increased by 6.5% between 2000 (88,252) and 2005 (93,955)
  - 15% of all acute care hospital beds and inpatient days

- Does not acknowledge the increasing clinical needs outside of the ICU
  - Transitional care
  - PACU
  - Increasing complexity of every hospitalized patient
…at escalating cost

- 1% of US GDP (~$90b) is spent on CCM
  - Represents 20 – 35% of hospital costs
  - ICU bed cost per day = $3,518 (2005) vs $1,153 for non-ICU bed
- Hospital charges are the largest component
- Professional fees for CCM are escalating
  - Multiple providers
  - CCM codes used in non-ICU settings
The Scope of the Challenge (III)

- Diversity of patient population is creating new challenges
  - “Special” needs of patients (and providers)
  - Ensuring appropriate provider skill mix
  - Adapting to (bedside) technology
- Ethical dilemmas more common
- Regulatory agencies are increasing their scrutiny

...as a result, current models of care are probably not sustainable!
Where do we go from here?

- While the “perfect” single model is not yet defined, there are some data that can guide future decision-making.

- Some “realities”
  - Organization and structure of ICU management improves care.
  - Expertise of multiple providers is essential to good outcomes.
  - The number of critical care trained physicians will not meet demands.
Leapfrog Standards for ICU Care

- ICUs will be managed or co-managed by *intensivists* who
  - Are present during daytime hours and provide clinical care exclusively in the ICU and,
  - When not present on site or via telemedicine, return pages at least 95% of the time
    i. within five minutes *and*
    ii. arrange for a physician, physician assistant, nurse practitioner, or a FCCS-certified nurse to reach ICU patients within five minutes.
ICU Realities, 2009

- Only 30% of hospitals are “Leapfrog Compliant”
- The number of physicians completing CCM training programs (and practicing CCM) is declining
- Leapfrog does not take other needs into account!
ICU Providers

- Intensivist
- “Primary” Provider
- Hospitalist
- Critical Care Nurse Practitioner
- Critical Care Clinical Specialist
- Nursing Staff

- Respiratory Therapist
- Social Worker
- Care Coordinator
- Nutritionist
- Physical and Occupational Therapist
- Pharmacist
- Spiritual Care
Where do we go from here?

- How do we respond to the increasing demand for critical care services?
  - Is critical care a place or a management strategy?
- What are the “right” models for critical care?
- How should we staff for critical care needs in the future?
Discussion Points

Should every hospital have an ICU?

or

Should all ICU care be regionalized?
What is the role of the virtual ICU?
Discussion Point

Should every unit be staffed by a board-certified intensivist?
Discussion Point

What is the role for the hospitalist in the care of the ICU patient?
Should all ICUs be closed?
How do we optimize the staffing and skill mix in the ICU?
How do we handle the “burden of regulation” while optimizing patient care?