Proposal for Departmental Status: Emergency Medicine

November, 2013
Outline

- Emergency Medicine – national context
- Emergency Medicine – at UW Health
History of Emergency Medicine

- 1960: Emergency Medicine conceived
- 1970: 1st Emergency Medicine residency at University of Cincinnati
- 1980: 1st Emergency Medicine board examination by American Board of Emergency Medicine
- 1989: Emergency Medicine recognized as primary board by American Board of Medical Specialties
Defining of a Specialty

• Increasing patient visit volumes
  – Insured > Uninsured

• Increasing patient acuity
  – Aging demographics
  – Surviving with more co-morbidities

• Increasing number of early therapies & early interventions
  – MI, Trauma
  – CVA, AAA, Sepsis

• Increasing inpatient and outpatient capacity constraints
  – Increased intensity of care in the ED (labs, rads, consults).
Results: Over the study period, ICU admissions from EDs increased from 2.79 million in 2002/2003, to 4.14 million in 2008/2009, an absolute increase of 48.8% and a mean biennial increase of 14.2%. By comparison, overall ED visits increased a mean of 5.8% per biennial period. The three most common diagnoses for ICU admissions were unspecified chest pain, congestive heart failure, and pneumonia.
Issue Brief

Insured Americans Drive Surge in Emergency Department Visits

Issue Brief No. 70
October 2003
Peter J. Cunningham, Jessica H. May

Visits to hospital emergency departments (EDs) have increased greatly in recent years, contributing to crowded conditions and ambulance diversions.¹ Contrary to the popular belief that uninsured people are the major cause of increased emergency department use, insured Americans accounted for most of the 16 percent increase in visits between 1996-97 and 2000-01, according to a study by the Center for Studying Health System Change (HSC). This Issue Brief examines trends in emergency department and other ambulatory care use, focusing on differences among insurance groups. Although insured people accounted for most of the increase in emergency department visits, uninsured Americans increasingly rely on emergency departments because of decreased access to other sources of primary medical care. Emergency department waiting times also have increased substantially, which may lower patients’ perceptions of the quality of their care.
Emergency Department Visits
(Data are for the U.S.)

- Number of visits: 136.1 million
- Number of injury-related visits: 45.4 million
- Number of visits per 100 persons: 45.1
- Percent of visits with patient seen in fewer than 15 minutes: 21.7%
- Percent of visits resulting in hospital admission: 12.6%
- Percent of visits resulting in transfer to a different (psychiatric or other) hospital: 3.2%

Source: National Hospital Ambulatory Medical Care Survey: 2009 Emergency Tables, tables 1, 4, 14, 24 [PDF - 481 KB]
In the 1990s, 
59% ↑ in critical care visits,
36% ↑ in urgent visits, and
8% ↓ in nonurgent visits to California EDs*


ED Expect Note
Jun 14, 2004 2:34pm
Here in office, 86 yo woman s/p mitral and tricuspid valve repair w/ ongoing CHF, s/p recurrent lower GI bleeding, here w/ fatigue, dyspnea on exertion, and some abd pain. Not orthostatic. Appears in failure. Possible R inguinal hernia. Hct has decreased to 23. Please assess.
Likely need labs, abd/pelvis CT, transfusion, diuresis, surg consult, and med admit.
EM Residency Programs
Unaccredited Fellowships
Ultrasound, Simulation, Research, Administration

Subspecialty Certification

- Emergency Medical Services
- Hospice and Palliative Medicine
- Internal Medicine-Critical Care Medicine
- Medical Toxicology
- Pediatric Emergency Medicine
- Sports Medicine
- Undersea and Hyperbaric Medicine

Subspecialties at a Glance
NHLBI Research Career Development Programs in Emergency Medicine (K12)

Currently Recruiting Candidates!

NHLBI Program and Initiative:

Research Career Development Programs in Emergency Medicine (RFA HL-11-011)

In July 2011 the National Heart, Lung, and Blood Institute (NHLBI) funded six institutional research career development (K12) awards to promote multidisciplinary clinical research training programs in emergency medicine (EM) that prepares clinician-scientists for independent research careers and academic leadership in EM. Programs will provide comprehensive research training to evaluate innovative approaches in the diagnosis and clinical management of patients with acute threatening manifestations of cardiovascular, pulmonary and hematologic diseases, and severe trauma in emergency department (ED) settings.

This goal of this program is to promote the growth of strong, competitive clinical EM investigators. Clinical research training will help ensure a solid foundation of EM research and thereby advance the public health.
For Immediate Release  
Tuesday, July 31, 2012

**NIH News**

**National Institutes of Health (NIH)**

Contact:  
**Alisa Z. Machalek**, NIGMS Communications Office  
301-496-7301

**NIH creates Office of Emergency Care Research**

*Will coordinate and foster research and training in the emergency setting*

To help improve health outcomes of patients who require emergency care, the National Institutes of Health has created a new Office of Emergency Care Research (OECR). The office is a focal point for basic, clinical and translational emergency care research and training across NIH.

“NIH has supported research to advance emergency care for years; however, now we have a single office to coordinate and foster our activities in this arena,” said NIH Director Francis S. Collins, M.D., Ph.D. “The NIH Office of Emergency Care Research will focus on speeding diagnosis and improving care for the full spectrum of conditions that require emergency treatment.”
Growth of Academic Departments of Emergency Medicine
Count and Percentage of U.S. Medical Schools with Departments or Divisions of Emergency Medicine
February 28, 2013 AAMC Faculty Roster Snapshot
March 28, 2013

<table>
<thead>
<tr>
<th>Medical Schools That Have at Least One Department of Emergency Medicine</th>
<th>N</th>
<th>%</th>
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<tr>
<td></td>
<td>96</td>
<td>72%</td>
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<tr>
<td>Medical Schools That Have at Least One Division of Emergency Medicine</td>
<td>35</td>
<td>26%</td>
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<tr>
<td>Medical Schools That Have at Least One Department or Division of Emergency Medicine</td>
<td>108</td>
<td>77%</td>
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<tr>
<td>All U.S. Medical Schools</td>
<td>141</td>
<td>100%</td>
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</table>

96/108 = 89%

10 remaining divisions - AACEM
Illinois @ Chicago – DEPARTMENT
Iowa – DEPARTMENT
Indiana – DEPARTMENT
Michigan – DEPARTMENT
Michigan State – **Division** (no residency)
Minnesota – DEPARTMENT (no residency)
Nebraska – DEPARTMENT
Northwestern – DEPARTMENT
Ohio State – DEPARTMENT
Penn State – DEPARTMENT
**Wisconsin** - Division
### Top Ranking Programs with Academic EM Departments

<table>
<thead>
<tr>
<th>Institution</th>
<th>Year of Dept.</th>
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<tbody>
<tr>
<td>University of Pennsylvania</td>
<td>1994</td>
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<tr>
<td>Johns Hopkins University</td>
<td>1994</td>
</tr>
<tr>
<td>University of Pittsburgh</td>
<td>1995</td>
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<tr>
<td>Emory University</td>
<td>1998</td>
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<tr>
<td>University of Michigan</td>
<td>1999</td>
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<tr>
<td>Northwestern University</td>
<td>2004</td>
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<tr>
<td>Brown University</td>
<td>2004</td>
</tr>
<tr>
<td>University of California - San Francisco</td>
<td>2008</td>
</tr>
<tr>
<td>Yale University</td>
<td>2009</td>
</tr>
<tr>
<td>ACCESS TO EMERGENCY CARE</td>
<td>QUALITY &amp; PATIENT SAFETY ENVIRONMENT</td>
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<tr>
<td>--------------------------</td>
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<tr>
<td>Board-certified emergency physicians per 100,000 pop.</td>
<td>Funding for quality improvement within the EMS system</td>
</tr>
<tr>
<td>Emergency physicians per 100,000 pop.</td>
<td>Funded state EMS medical director</td>
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<tr>
<td>Neurosurgeons per 100,000 pop.</td>
<td>Emergency medicine residents per 1M pop.</td>
</tr>
<tr>
<td>Orthopedists and hand surgeon specialists per 100,000 pop.</td>
<td>Adverse event reporting required</td>
</tr>
<tr>
<td>Plastic surgeons per 100,000 pop.</td>
<td>Hospital-based infections reporting required</td>
</tr>
<tr>
<td>ENT specialists per 100,000 pop.</td>
<td>Mandatory quality reporting requirement</td>
</tr>
<tr>
<td>Registered nurses per 100,000 pop.</td>
<td>% of counties with E-911 capability</td>
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<tr>
<td>Additional primary care FTEs needed</td>
<td>Uniform system for providing pre-arrival instructions</td>
</tr>
<tr>
<td>Additional mental health FTEs needed</td>
<td>State has or is working on a stroke system of care</td>
</tr>
<tr>
<td>Level I or II trauma centers per 1M pop.</td>
<td>State has or is working on a PCI network or a STEMI system of care</td>
</tr>
<tr>
<td>% of population within 60 minutes of Level I or II trauma center</td>
<td></td>
</tr>
<tr>
<td>Accredited chest pain centers per 1M pop.</td>
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</tbody>
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Overall Patient Visit Volume Growth

Admit 30% of ED patients
Account for 40% of UWHC admissions

UW EMERGENCY DEPARTMENT PATIENT VISITS BY FISCAL YEAR

FY2006: 32,190
FY2007: 34,963
FY2008: 37,845
FY2009: 40,758
FY2010: 41,292
FY2011: 49,818
FY2012: 46,301
FY2013: 47,861
FY2014 (annualized): 60,904

UW Emergency Department Percent Increase in Total Patient Visits Fiscal Year 2006 through Fiscal Year 2014: 58.4%
UW EMERGENCY MEDICINE PATIENT LENGTH OF STAY BY FISCAL YEAR

Length of stay remained stable despite greater than 50% increase in patient visit volume
UW Emergency Medicine Committee Chart

* Accreditation Council for Graduate Medical Education
<table>
<thead>
<tr>
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Timeline

• Formal Division of Emergency Medicine faculty vote
  • 4/23/2013 - unanimous

• Formal Department of Medicine Executive Committee vote
  • 6/17/2013 – one abstention

• UWSMPH candidate department designation
  • 7/1/2013

• UWSMPH Council of Chairs vote
  • 7/8/2013 – unanimous

• UWSMPH Academic Planning Committee vote
  • 9/18/2013 – unanimous

• UW-Madison Academic Planning Committee vote
  • 10/24/2013 – pending
Future of EM - Potential

- **Central hub** in health care delivery system, especially in **accountable care organization** with medical homes
  - in collaboration with other providers, address patient needs, ranging from **acute** to **non-acute** to **social services** to **end of life/palliative care**
Future of EM - Potential

- **Central hub** of multidisciplinary teaching and collaborative research
  - *Multidisciplinary learners*
    - Medical, PA, EMT, Pharmacy, & Nursing students, over 80 per year
    - EM & non-EM residents, over 70 per year
  - *Collaborative research*
    - Medical, Nursing, & Pharmacy
    - Departments of Radiology, Neurology/Neurosurgery, Trauma Surgery
Future of EM – Challenges

• Increasing Needs; Decreasing Resources
  – Increased number of insured; healthcare reform
  – Decreased resources; resident duty hours
  – Increased capacity constraints; inpatient and outpatient

• Increasing scope of responsibility & liability
  – Sedation and procedures in ED
  – Readmission penalties

• Physical space needs
  – Clinical space (ED Clinical Decision Unit, ED – MRI)
  – Administrative space

• Recruitment challenges
  – Faculty, researchers
  – NP/PA
Thank you!