

Workforce Issues & Solutions for Emergency Medical Services

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Steven E. Krug, MD

Head, Division of Emergency Medicine

Children's Memorial Hospital

Professor of Pediatrics

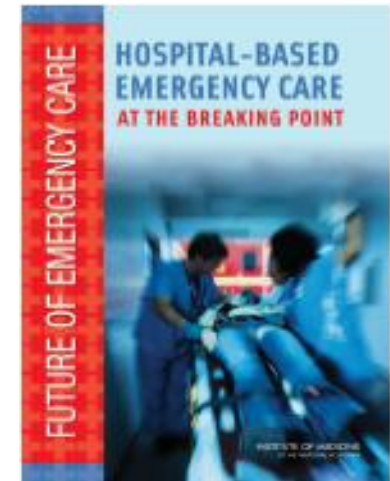
Feinberg School of Medicine, Northwestern University

Chair, Committee on Pediatric Emergency Medicine

American Academy of Pediatrics

Workforce Issues and Emergency Medical Services

- n The ED: America's healthcare safety net
 - n Fraying due to recent trends in healthcare and economics
 - n Much recent attention on ED overcrowding and EMS diversion
 - n Focus has been on EMS system capacity & available ED space/beds
 - n There is an equally serious problem
 - insufficient supply of healthcare providers and qualified providers of emergency care



A Growing Mismatch of Supply and Demand - Physicians



- n The millennium – what fizzled in 2000?
 - n “Y2K” & the widely anticipated physician surplus
 - n COGME, IOM, AMA & others est. 20-30% excess of specialists
- n We are already facing a physician shortage
 - n Primary care, specialty & critical care, emergency care
 - n Shortages in pediatric sub-specialties are even greater
 - n Critical shortage of MDs projected for 2020 coincident with aging of “baby boomers” to ≥ 65
 - n Population growth & shift will consume additional resources
 - n If there are inadequate 1^o and 2^o MDs \rightarrow more use of ED
 - n Projected deficit of 200,000 MDs – a return to 1960’s levels?

COGME – Council on Graduate Medical Education

The Obvious Workforce Solution: IOM Recommendation 6.3

- n We need to train more care providers
 - n AAMC (2006) calling for 30% increase in medical school enrollment
- n Unfortunately, this is not a quick fix
 - n Requires a decade or longer for an effect
 - n Funding may prove to be rate-limiting
 - n Expansion must occur at all training layers
- n Medical school, residency, fellowship
 - n International medical graduates account for 25% of current resident and fellow workforce – 20% of the MD workforce



AAMC – American Association of Medical Colleges



Present Day Emergency Care Workforce Realities

- n The emergency care workforce is very diverse and will continue to be so
 - n MD specialties: EM, FP, Peds, Surgery, etc.
 - n Disciplines: MD, PA, APN, EMT-P, etc.
 - n Likely never to be enough MDs, let alone EM MDs (or PEMs) to staff all EDs
 - n \approx 60% of MDs working in ED are board cert. in EM (AMA)
 - n \approx 20% of hospital EDs have access to PEMs (CDC)
 - n 135 EM residency programs \approx 1300 trainees per year
 - n 59 PEM training programs \approx 100 trainees per year
 - n We must develop processes and standards to assure that these many different providers are well trained and are able to maintain their skills



Arming the Emergency Care Workforce with Knowledge & Skills

- n Recommendation 4.1 - Every emergency-care related health care professional credentialing and certifying body should define pediatric (adult) emergency care competencies and require practitioners to receive the appropriate level of initial and continuing education necessary to achieve and maintain those competencies
- n Recommendation 4.3 - EMS agencies should appoint a pediatric emergency coordinator and hospitals should appoint two pediatric emergency coordinators – one a physician – to provide pediatric leadership for the organization



Building a 21st Century Emergency Care System

- n Recommendation 3.1 – The DHHS and NHTSA, in partnership with professional organizations, should convene a panel of individuals with multi-disciplinary expertise to develop an evidence-based categorization system for EMS, EDs, and trauma centers based upon adult and pediatric service capabilities
- n Recommendation 6.6 – States should link rural hospitals with academic health centers to enhance opportunities for professional consultation, telemedicine, patient referral and transport, and continuing education

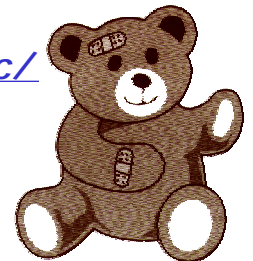
Children Leading the Way?

- n Pediatric emergency care is an excellent example and potential model solution
- n EMSC
 - n Program established 1985 to bridge the gap in pediatric emergency care
 - n Significant improvements in pediatric care in every state
 - n Educational tools
 - n Standards for equipment/meds
 - n Protocols for care
 - n Guidelines for preparedness
 - n Data collection and research
 - n Multi-disciplinary stakeholders



Emergency Medical Services for Children

<http://bolivia.hrsa.gov/emsc/>





Illinois EMSC Hospital Facility Recognition Program – “EDAP”

- n Tiered system
 - n SEDAP, EDAP, PCCC
- n Commitment to pediatric readiness*
 - n Staff training and continuing education
 - n Equipment, supplies and medications
 - n Key policies and quality improvement
 - n Clinical leadership (pediatric coordinators)
- n Voluntary designation through IDPH

EDAP – Emergency Department Approved for Pediatrics

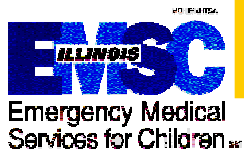
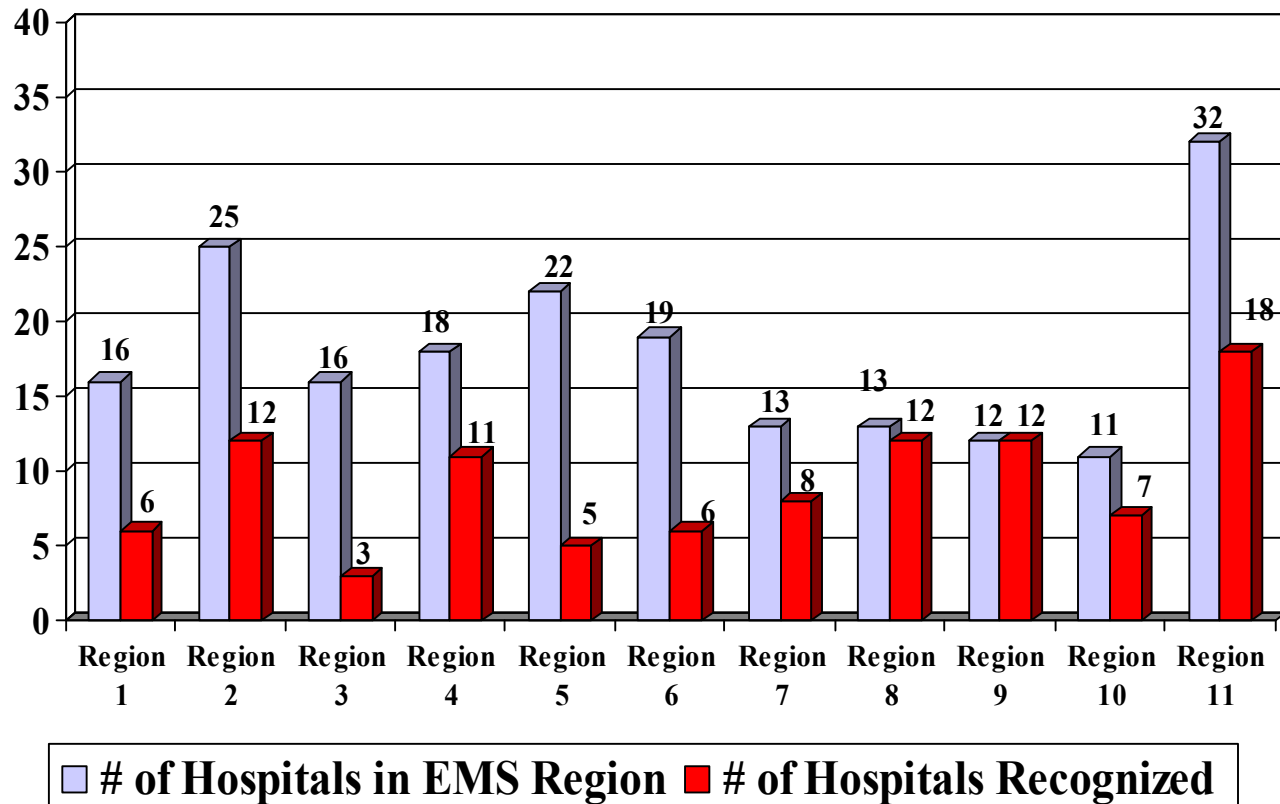
**AAP & ACEP: Care of children in the emergency department: Guidelines for preparedness. Pediatrics 107:177, 2001 & Ann Emerg Med 37:423, 2001.*

Illinois Hospitals Participating in Facility Recognition

Hospital Total
197

Participating Hospitals
100

Date
4/06



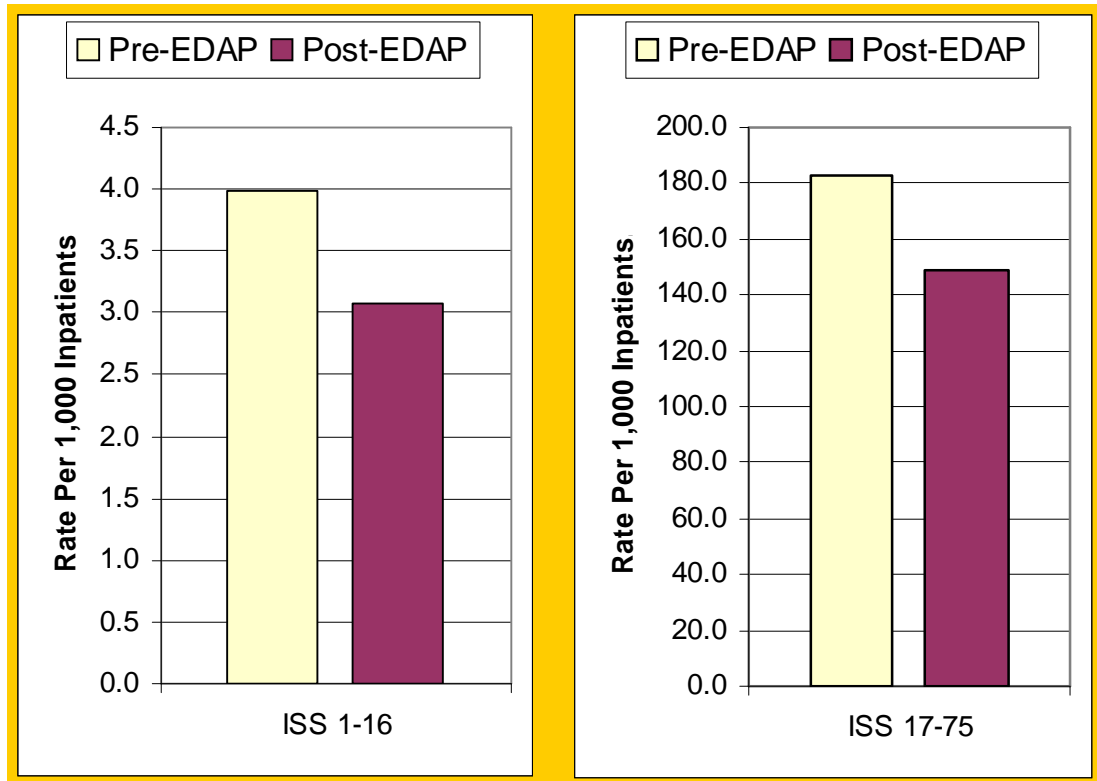
Source: Illinois EMSC [<http://www.luhs.org/depts/emsc/>]

Mortality Rates per 1,000 Injury-Related Inpatient Admissions From the ED

Pre- and Post-EDAP, 1994-2005



- n Age group:
0-15 years
- n Data is only from those hospitals participating in IL EDAP program
- n Reductions in mortality exceed national trends for ISS ≥ 17



| Severity Group | Pre-EDAP | | | Post-EDAP | | |
|----------------|----------|--------|-------|-----------|--------|-------|
| | Patients | Deaths | Rate | Patients | Deaths | Rate |
| ISS 1-16 | 18,571 | 74 | 4.0 | 17,546 | 54 | 3.1 |
| ISS 17-75 | 1,124 | 205 | 182.4 | 1,142 | 170 | 148.9 |

Sources: Illinois EMSC & Illinois Hospital Assn.

Building & Maintaining Critical Skills in Emergency Medical Services

- n What are we doing at Children's Memorial
 - n Hands-on clinical training in our ED
 - n Multiple levels and disciplines of trainees
 - n PEM, Peds, EM, FP, Surgery, DDS, RN, APN, EMT-P
 - n Outreach education lectures and courses
 - n PALS, APLS, PEPP
 - n *Do courses such as PALS solve the problem ?*
 - n Pediatric disaster readiness training
 - n Simulation training - "KidSTAR"
 - n Applications for both trainees & practitioners

Sustaining, Growing and Improving Our Nation's Emergency Care Workforce: The Future is Now !

