

## Clinical Educator Portfolio

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**GOAL:** This portfolio demonstrates excellence in five areas:

- 1) Enhancing the clinical mission to improve clinical education.
- 2) Commitment to excellent care and education in the management of severely injured trauma patients.
- 3) Development of Evidence-Based Medicine Curriculum for residents consistent with ACGME Practice-Based Learning Competency
- 4) Development of an education metrics tool using principles of Mission-Based Budgeting
- 5) Teaching and clinical excellence.

### SECTION 1: EXCELLENCE IN IMPROVING CLINICAL OPERATIONS To ENHANCE the CLINICAL EDUCATION MISSION

#### Director: Urgent Care Program

##### Goals of Urgent Care Development

- 1) Provide timely care to adult patients with low acuity problems, requiring minimal resources.
  - Use mid-level providers to care for patients with low acuity/ low resource needs.
- 2) Improve the clinical and educational environment in the main Emergency Department by concentrating the higher acuity patients in the main department.

##### Background

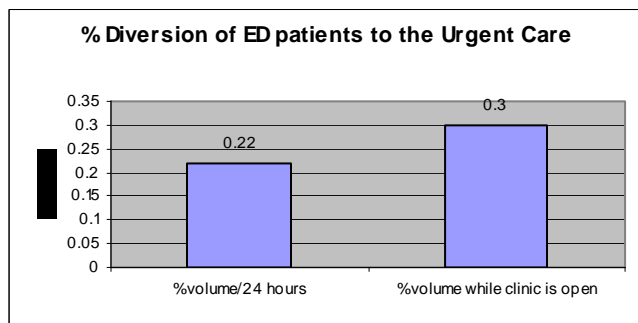
January 2000:

Urgent Care in the Department of Emergency Medicine opened.

- Through appropriate triage, patients with minor illness are seen more efficiently.

##### Outcomes

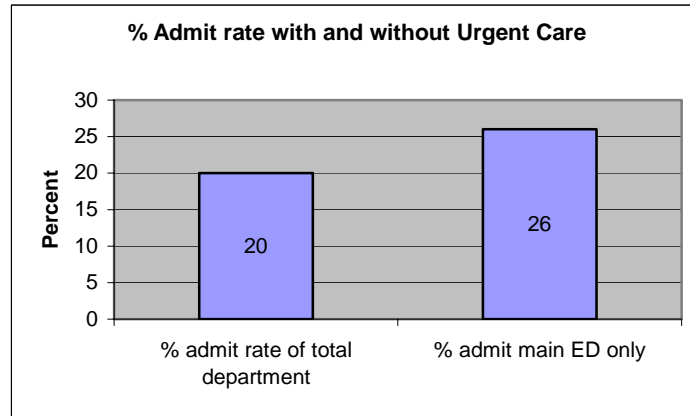
##### Patient Flow



- **22%** of Emergency Department patients are triaged to Urgent Care daily.
- **30%** of patients are triaged to the Urgent Care area when it is open.
- Door-to-Discharge time: **80** minutes; Emergency Department: 195 minutes

Admission Rates and Implication for Education

With the diversion of patients to the urgent care, the admission rate in the main Emergency Department has increased. The increased admission rate represents increased patient complexity for residents, thus enriching their learning environment.



**Director: Physician Assistant (PA) Program**

October 2000: The PA Program implemented.

Outcomes

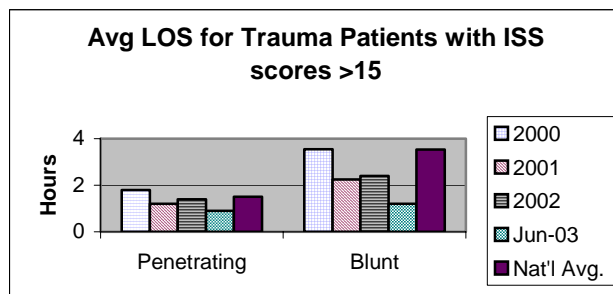
- 1) Enhanced resident education by retaining physicians in the main Emergency Department.
- 2) Established Practice Guidelines.
- 3) Hired and supervise five Physician Assistants.
- 4) Cost Savings: **\$435,740/year** versus physician staffing in the Urgent Care.

**SECTION 2: EXCELLENCE IN TRAUMA TEAM DEVELOPMENT**

Background

The Trauma Room is a highly complex environment where multiple disciplines come together to manage severely injured patients. No forum was in place to make systemic improvements to the trauma team.

2000: Co-developed and co-chaired Operational Quality Improvement Committee on Trauma. *Clinical Outcomes*



National Comparisons noted on right of each bar graph group.

Other Clinical Outcomes:

- Established Clinical Observer policies for the trauma room, delineating roles for observers in the trauma room.
- Established a Law Enforcement Presence Policy, delineating the role of police presence in the trauma room.

Educational Initiatives in the Trauma Program

- 2000: Co-developed and continue to moderate a monthly Grand Rounds format, quality assurance review of taped resuscitations performed in the department's trauma room. Attendees include health care providers from the Division of Trauma and the Emergency Department.
- 2001: Give a yearly didactic on the role of the trauma team leader.

Outcomes

- The average score of the Trauma Team Leader Didactic is **4.8** (5 being the most positive and 1 being the least).
- The average score of the trauma tape resuscitation review is **4.75** (5 being the most positive and 1 being the least).

**SECTION 3: EVIDENCE BASED MEDICINE (EBM) CURRICULUM DEVELOPMENT**

Background

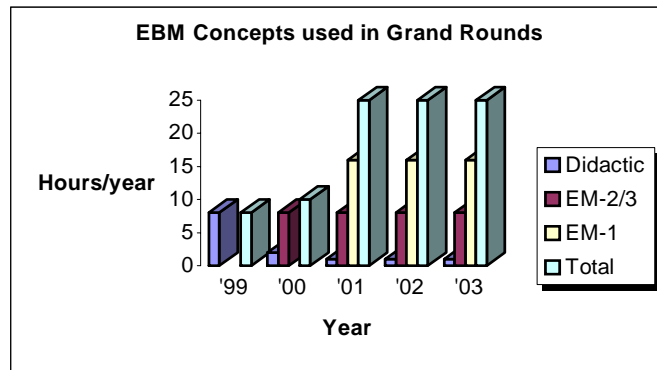
Practice-based learning is one of mandated ACGME core competencies for residency review committee approval, which includes evidence-based medicine (EBM). Competency in EBM require that residents demonstrate a systematic approach to identify knowledge gaps, formulate an accurate question, search for the best evidence, critically appraise the evidence, and then apply it to patient care.

Curriculum

- 1) 1999: Didactics program started on evidenced-based medicine principles.
- 2) 2001: EM-2 and EM-3 educational objectives and presentation guidelines established. Mentor residents in small group setting, critically appraising an article of interest. Residents then moderate Grand Rounds focused on critical appraisal of that article.
- 3) 2002: EM-1 educational objectives and presentation guidelines established. Mentor residents in case presentation, clinical question formulation, and literature searching skill, leading to a Grand Rounds presentation.
- 4) 2003: Establish database preserving the resident critical appraisals done in Grand Rounds

Outcomes

- Didactics have decreased and interactive adult learning has increased.
- As one of the six core ACGME competencies, a stable and growing practice-based learning program contributed to a **five-year accreditation** for the Department of Emergency Medicine Residency program from the Residency Review Committee (RCC).



**SECTION 4: DEVELOPMENT OF EDUCATION METRICS**

Background

The American Association of Medical Colleges has called for faculty and departmental accountability in teaching medical students. Objective measures of effort in the educational mission can be associated with fiscal allocations within the department to assess faculty accountability toward education.

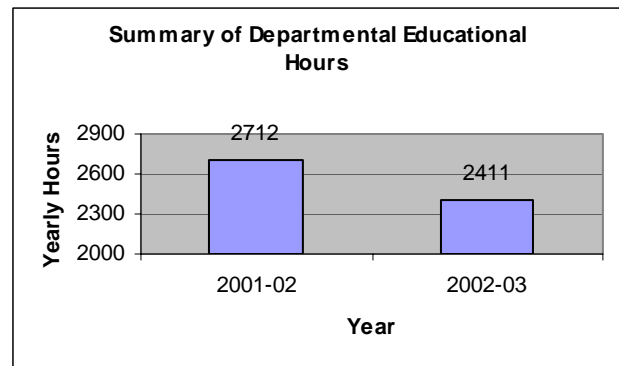
Metrics Development

- 1999: Reviewed existing literature on educational metrics. Faculty consensus was gained identifying educational activities that would be measured in the department. Baseline activity commitments were established for departmental citizenship (goal hours). Activity beyond that was measured as well.
- 2001-2: A quantitative metrics tool was developed that captures departmental educational work to the residents and medical students.
- 2002-3: Quantitative metrics tool was expanded to include extra-departmental work as well.

Outcomes

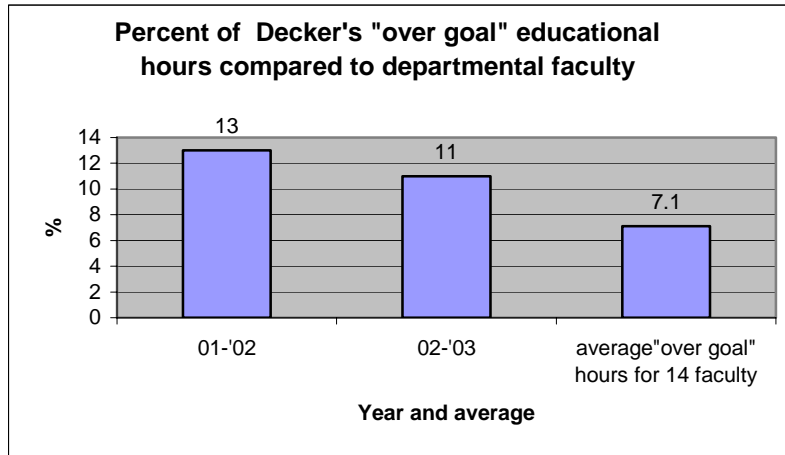
Results of system established by Dr. Decker are now used by the department chair to manage accountability and incentivize educational activity. For example:

- 1.0 FTE clinical faculty member works 1472 hours/yr.
- 1.84 FTE (2001-02) and 1.63 FTE (2002-3) of educational work
- **3235** educational hours were performed by faculty for 2002-2003 (e.g., presentations at departmental, medical school, local, regional, and national levels).



## SECTION 5: TEACHING EXCELLENCE

### Quantitative Outcomes



- Goal Hours were the expected educational hours each faculty needed to do for departmental citizenship.
- "Over-goal hours" were additional hours beyond the goal hours, measured as a percentage of total department "over-goal hours."

### Learner Ratings of Teaching Effectiveness

#### Medical Students

Didactic Presentation for M3 Clinical Procedures Rotation: Acute Myocardial Infarction

- Average Score across two sessions: **4.68/5.0**

Didactic: Clinical Reasoning.

- Audience: Medical students on Pediatric Emergency Medicine rotation
- Average Score **1.0/1.0** (1 being the most positive and 5 being the least)

#### Residents Didactics

Didactic: Clinical Reasoning and Evidenced-Based Medicine

- Audience: Emergency Medicine Residents
- Average Score **4.71/5.0**. Presented three times.

Didactic: Chest Trauma for Emergency Medicine Residents

- Average Score **5.2/6.0**

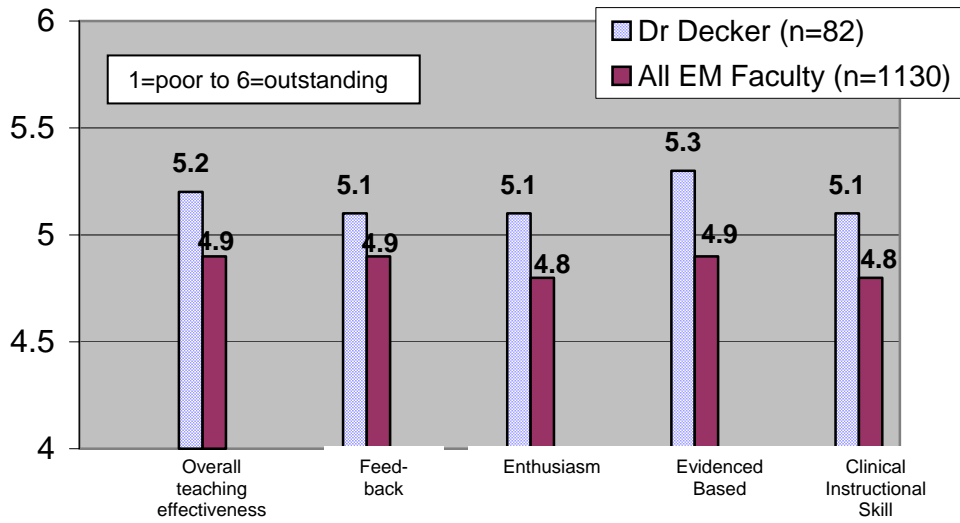
(See the Section 2 for trauma team development lectures.)

#### Allied Health

Didactic: Sepsis. Audience: Emergency Department and ICU nurses from the region. Average Score: **4.8/5.0**. Presented three times.

#### Resident Teaching Evaluations

Resident Evaluations July 2001-June 2003



Excellence in Patient Care

Resident Evaluation July 2001-June 2003

