How Can EM Infiltrate the Early Years of a Medical School Curriculum?

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Why Bother?

• Real-life learning laboratory
• Allow for earlier career decisions
Year 1 Prehospital Experience
Northwell Health

- 62,000 Employees
  - 14,000 affiliated physicians
  - 3,900 employed physicians
- $11 billion in revenue
- 11 million population
- 4.3 Ambulatory Care Visits
- 287,000 Inpatient Discharges
- 817,000 Emergency Visits
- 42,000 Births

Feinstein Institute for Medical Research

School of Medicine

100 per year
7 years old
4-Year Curriculum

1
2
3
4
Hofstra EM Infiltration

- Case based education
- Cardiac arrest
- Bleeding
- AMI

EMT training first 2 – 9 weeks of medical training

Required Acting Internship
EMT Training in the First Eight Weeks

- Receive training on BLS EMT skills
- Complete 24 ambulance shift hours, acting as a 3rd EMT
- Take necessary exams and practical evaluations

First EMT shift on Northwell Health ambulance

Complete 3 additional shifts by end of year 1

Become Certified EMT-Basics according to NY State
EMT training experiences
Culminating Randall’s Island Mass Casualty Training
Evaluation DATA from MS

1. Definite highlight of first year
   - promotes great initial impressions
   - educational, emotional, group bonding

2. Not perfect
   - some students want more, some less..
Conclusion

• “Knowledge in action” \(\rightarrow\) immediate EMT training

• Medical bystanders \(\rightarrow\) active participants

• Real-life medical exposure through early EM integration
Year 2 ED Experience
Early, Ongoing, Meaningful Patient Care Experience

• 93 Chief Complaints and Concerns
  – EM MCE: chest pain, hypotension, fractures/dislocations
  – Link to basic science

• Learn while “doing” approach
  – Provide care as part of a team
  – shifts with nursing, pharmacy, RT...
  – 4 hour shifts with ED physician
    • 2 to 3 students per shift
**A Week in the Life of the Middle Clinical Experience (M2)**

**Example: Emergency Medicine Rotation**

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>Tu</th>
<th>W</th>
<th>Th</th>
<th>F</th>
<th>Sa</th>
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</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td>Clinical activity: ED physician shift</td>
<td>Clinical activity: ED inter-professional shift</td>
<td>Self-structured learning</td>
<td>Emergency Medicine Rotational Small Group</td>
<td>Clinical activity: ED physician shift</td>
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<tr>
<td><strong>PM</strong></td>
<td>Self-structured learning</td>
<td>Learning Society Small Group</td>
<td>Large group activity (e.g., TBL)</td>
<td>Simulation or Workshop</td>
<td>Self-structured learning</td>
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</tbody>
</table>

ED Inter-professional shifts include nursing, pharmacy, MSW, respiratory therapy
Barriers to Success EM MCE

• Requires substantial investment
  – Faculty stipend for 4 hour shift
  – Cooperation by nursing, pharmacy, RT
    • hospital admin buy-in essential
    • teaching included in job expectations

• Logistical challenges
  – Scheduling students, faculty, ancillary staff
  – Finding patients when multiple learners in ED
Q&A
This experience contributed to my overall learning of this specialty. It was clear what was expected of me. I was given sufficient autonomy to evaluate patients. I had an authentic role with patients. I felt I could contribute to patient management through order-writing.

<table>
<thead>
<tr>
<th></th>
<th>All Emergency Medicine</th>
<th>EM General LIJ</th>
<th>EM General NS</th>
<th>Pediatrics: EM CCMC</th>
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<tbody>
<tr>
<td>This experience contributed to my overall learning of this specialty.</td>
<td>3.76</td>
<td>3.95</td>
<td>3.58</td>
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<td>It was clear what was expected of me.</td>
<td>3.52</td>
<td>3.74</td>
<td>3.21</td>
<td>3.75</td>
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<td>I was given sufficient autonomy to evaluate patients.</td>
<td>3.65</td>
<td>3.89</td>
<td>3.37</td>
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<td>I had an authentic role with patients.</td>
<td>3.57</td>
<td>3.84</td>
<td>3.16</td>
<td>4.00</td>
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<td>I felt I could contribute to patient management through order-writing.</td>
<td>2.61</td>
<td>2.89</td>
<td>2.53</td>
<td>2.38</td>
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Emergency Medicine: Overall Quality of Educational Experience

<table>
<thead>
<tr>
<th>Class</th>
<th>% Good/Excellent</th>
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<td>Class of 2015/</td>
<td>94.4%</td>
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<tr>
<td>Hofstra</td>
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<tr>
<td>Class of 2015/</td>
<td>87.3%</td>
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<tr>
<td>National</td>
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<tr>
<td>Class of 2016/</td>
<td>91.8%</td>
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<tr>
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<td>87.7%</td>
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Emergency Medicine