It Takes a Village: How to Motivate Those Students on the EM Clerkship Not Going into EM

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- **Why is it important to reach all students including those not interested in EM?**
  - We're educators!
    - We enjoy educating everyone, even those not going into EM
    - We want to create an image of a rotation that enjoys educating everyone
  - Potential to sway a really good student to EM
  - Demonstrate the importance to these students on what care is given in the ED
    - Show our ability to stabilize sick patients (pts)
    - Demonstrate the need to rule out life threatening diseases
  - Clerkship evaluations can be affected by a handful of disinterested students not going into EM

- **Demonstrate teaching approaches that capitalize on the universally applicable aspects of EM**
  - Systems based practice
    - Show students how to navigate the health system with respect to the pt's best interests
      - How to help pt access consultants, home health services
      - Educate them on what should be referred to the ED and what can be worked up in a primary care physician's office
  - Communication and Interpersonal Skills
    - Students can use the ED rotation to practice their communication skills with
      - Patients, family members
      - Nurses, techs, translators
      - Consultants
  - Dealing with patient expectations
    - Pt wants MRI for headache or CT head for minor head trauma
    - Pt wants antibiotics for their upper respiratory infection
    - In the ED we can teach students how clear communication and setting expectations early can help temper patients' desire for unnecessary tests
  - Dealing with difficult patients
    - Intoxicated
    - Litigious
    - Drug seeking

- **Understand the importance of matching the student's area of interest to cases that can be seen in the ED**

- Let them see cases in the field they are going into (ex – student going into ortho picking up ankle sprains, dislocation patients)
    - If prevent them from seeing cases they're interested in, you will have an unhappy student
    - If you just let them just see those cases
        - Miss out the true EM experience
        - Rotation becomes a glorified Sub-Internship in the field of their choosing
- Flexibility in scheduling
    - Allow students to go to ortho conference, meeting with advisor, etc.
    - However, they still need to makeup shift, meet all requirements
- Have the SAME expectations in seeing pts
    - Don't lower the bar for what is expected in clinical work in ED
    - Short-changing the student who may think what they are doing is ok and will then transfer that practice to actual pt care as interns

- Teaching techniques matching student's interest to cases seen in the ED
    - Can tailor sim experience to student's interest
        - For example
            - Student going into derm – take septic shock case and tweak it to be a toxic epidermal necrolysis or staph scalded skin syndrome (peds)
            - Show images of TEN of Staph Scalded Skin Syndrome during sim
            - Student has buy-in to sim and you still cover main points in shock simulation
        - Other examples
            - Optho – globe rupture along with other trauma sim
            - Ortho – long bone fxs into a trauma sim
        - More work on your part (doing the preparation to get images, tweak existing simulations) but students have huge buy-in and great evals of the experience
    - Sim has been shown to increase med student satisfaction
        - Ten Eyck article[1]
            - Randomized control study with crossover where one group starts with sim and the other group discussion and switches midrotation
            - Simulation while more stressful was more enjoyable, more stimulating
    - Ultrasound (U/S) - Especially for students going into Medicine / Surgery
        - Literally no experience on other rotations / clerkships
        - EM may provide the only U/S experience where you have the perfect marriage of disease process, imaging, procedure, and patient contact
            - ED provides wide variety of U/S uses relevant to all specialties
        - Pros of U/S experience in ED
            - Every student gets exposed to it and it enhances the rotation
        - Cons of U/S experience in ED
            - Time taken away from other aspects of the clerkship

            - Hard enough in 4 weeks to get U/S competence, even harder if only using small portion of 4 weeks for U/S
        - Solutions
            - Separate U/S rotation
                - More time to focus on U/S techniques, get proficient
                - However, another course you need to run which entails a lot of work
            - Concentrate on one aspect of U/S during the EM rotation
                - FAST exams in trauma
                - Peripheral IV insertion
    - Evidenced Base Medicine (EBM)
        - Real time scenarios provide better retaining of knowledge
        - Many different aspects of EBM to focus on - gold standards, sensitivity, specificity, negative predictive value, number needed to treat
        - Readily tailored to student interests
            - For student going into Ortho – do open distal tuft fxs need OR washout?
            - Surgery – Does morphine prevent an accurate abdominal exam?
    - Teaching shifts
        - Have dedicated faculty member to only teach 2-3 students on a shift
        - Much easier to match student's interests with cases on teaching shift
        - Problem – need buy-in from faculty, finances to do it
        - It has been proven to work (Cassidy-Smith[2])
            - Students were more satisfied with the quality of bedside teaching, preceptor experience, and usefulness of the rotation
            - Faculty noted improvement in times to initiate workup and pt disposition

- **Key Motivational factors for students not going into EM**
    - Improve procedural skills
    - Opportunity to see patients and problems they may never encounter again
    - Fear of internship responsibilities – need to develop and commit to plans
    - Improve comfort and competence handling sick patients
    - Improve diagnostic skills for undifferentiated patients
    - Expand understanding of life/limb-threatening diagnoses
    - Develop confidence in determining appropriate disposition
    - Need to fulfill this required rotation – fortunately this only rarely the sole motivator

- **Reasons why you may have to educate students not planning careers in EM**
    - Increasing interest in EM by students
    - Increasing recognition of the educational value of EM by institutions
    - EM clerkship is integral for meeting LCME accreditation standards
        - *Standard 6.2 Required Clinical Experiences*

The faculty of a medical school define the types of patients and clinical conditions that medical students are required to encounter

- Translation
  - Med schools and faculty must make sure their students see a variety of patient encounters
  - We see many different patient and disease processes in the ED
  - We can provide students with initial presentations of disease processes that many other clerkships cannot provide

- *Standard 7.4 Critical Judgment/Problem-Solving Skills*
  The faculty of a medical school ensure that the medical curriculum incorporates the fundamental principles of medicine, provides opportunities for medical students to acquire skills of critical judgment based on evidence and experience, and develops medical students' ability to use those principles and skills effectively in solving problems of health and disease.
  - Translation
    - Medical schools need to teach their students how to think critically and incorporate Evidenced-Based Medicine (EBM)
    - EM is the rare clerkship that provides students with undifferentiated patients where they must use their clinical skills to help either make the diagnosis or rule out a life threatening disease process
    - We routinely incorporate EBM into our care
- *Standard 7.5 Societal Problems*
  The faculty of a medical school ensure that the medical curriculum includes instruction in the diagnosis, prevention, appropriate reporting, and treatment of the medical consequences of common societal problems
  - Translation
    - Medical schools need to expose their students to the medical consequences of alcoholism, drugs, non-compliance with medications, domestic violence, elder abuse, etc
    - Emergency departments are an effective place to expose students to the effects of socioeconomic factors in healthcare
- *Standard 7.8 Communication Skills*
  The faculty of a medical school ensure that the medical curriculum includes specific instruction in communication skills as they relate to communication with patients and their families, colleagues, and other health professionals
  - Translation
    - Emergency medicine clerkships provide opportunities to teach students about how to communicate with pts, families, other healthcare workers
    - EM can help the med school meet this requirement by explicitly teaching these skills and through direct observation in the ED

- All these LCME standards show the following
    - EM can provide many solutions to the med school LCME requirements
    - This may lead more students being required to rotate in the ED

Journal articles

1. Ten Eyck RP, Tews M, Ballester JM. Improved medical student satisfaction and test performance with a simulation-based Emergency Medicine curriculum: a randomized controlled trial. Ann Emerg Med. 2009; 54: 684-691.
2. Cassidy-Smith TN, Kilgannon JH, Nyce AL, et al. Impact of a teaching attending physician on medical student, resident, and faculty perceptions and satisfaction. Canadian Journal of Emergency Medicine. 2011; 13: 259-266.