Internal Medicine Simulation Training Center
Undergraduate and Graduate
Internal Medicine Curriculum
Types Of Simulation Training

- Standardized patients (role play)
- Basic models (partial task trainers)
  - Simple level
  - Higher level
- Mannequins
  - Low fidelity
  - High fidelity
- Virtual patients
- Screen-based; computer-based

COMBINATIONS
- Augmented sp encounters with technology
- Crises management
Advantages of Simulation

- Patients are *never* at risk
- Serious but infrequent events, in predictable times and places
- Errors can be allowed to occur, and play-out
- Rehearsal, repetition, mastery
- Crisis management simulation, planning
The Clinical Simulation Center
Temple College
January 2004

- A “state of the art” mini-hospital
- Multi-disciplinary health care professions education
- Using high-fidelity human patient simulators, partial task trainers & standardized patients
- Collaborative effort with 3 Institutions, and Industry
Four
Emergency Treatment/ICU Units
IM Departmental Projects

M3 Clerkship
- Technical skills (LP, IV, ABG, NG, Foley, EKG Lead Placement, Prostate exam)
- Unstable respiratory and CV patients, team training
- Communication training
- OSCE

M4 Elective
- Academic medicine research
- Curriculum development, teaching and assessment
- Protocol development, advanced physiology
Student Feedback

“I think it should be a permanent part of the 3rd & 4th year. The more the better! It provides much needed experience in an ‘I'm not going to kill them’ environment.”

“Excellent! I learned a great deal and I learned what to study. Exposure is so helpful - big confidence boost. Great to have instruction ahead of time to read like IMed. IMed did it well.”

“Very valuable asset for Medicine and Surgery clerkships. Even if we won't be running codes on the floor, simply knowing how one operates and the individual team member's roles is invaluable.”
Internal Medicine Residency Simulation Curriculum

Pre –PGY1

- During the work of orientation and before they begin their call responsibilities, all incoming residents are assessed in their ability to perform the MSOP competencies by a multidisciplinary faculty team. The following skills were assessed:
  - Foley Insertion
  - NG Insertion
  - IV Insertion
  - Chest Decompression (Tension Pneumothorax)
  - Lumbar Puncture
  - Phlebotomy

- ACLS scenarios – incoming residents were assessed in their ability to run a code using ACLS type scenarios
Internal Medicine Residency Simulation Curriculum

PGY 1

- Code team training
  - Review ACLS protocols and develop competency in code blue scenarios; as individual code team leaders and while functioning as a member of a team.

- Advanced technical skills
  - Central lines (Femoral / IJ / Subclavian)
  - Lumbar Puncture
  - Chest tube
Internal Medicine Residency Simulation Curriculum

- PGY 2
  - Difficult airway
    - Initial training in ‘Adjunctive Airway Techniques’
    - Training in management of simple and complicated airways,
      - Establishment of an airway when endotracheal intubation cannot be accomplished.
  - Risk management derived scenarios
    - Based on actual patient cases from the Hospital setting
    - Residents receive training to educate them on how to approach and handle a clinical situation.
Internal Medicine Residency Simulation Curriculum

- PGY 3
  - Partner with Department of Humanities and the Department of Pastoral Care
    - Cultural awareness
    - Clinical ethics
    - Scenarios are derived from actual events that challenge participants to functionally integrate clinical ethics, professionalism, and cultural awareness.
  - Partner with Local Fire Department and Hazmat crews
    - Weapons of Mass Destruction
    - Mass Casualties
    - Scenarios are derived from actual events slightly modified for simulation
Resident Feedback

“**I think [the Simulation center] is great.** It's kind of nice to do some of the procedures on fake patients before we do the real deal. The clinical scenarios are great too. The fact that the patient "talks" adds a little pressure to the situation which makes you think on your toes. I do wish that we could spend a little more time there.”

“**Very practical and similar to real life experiences.”**

“**I thought it looked like a great place to get experience in a low stress environment**”

“**I like the Simulation center because there is a lack of pressure, and a chance to learn procedures without ‘inflicting care’ on a patient.”**
When asked the question: Did the Simulation Center influence your decision to come to TAMU-SW for residency? If so, how/why?

“Actually I think it did in a positive way. I've always had issues with the idea of mastering procedures on sick/dying patients, I actually loved the idea that at Scott and White I would have a chance to improve skills on high tech simulated patients. I am an extremely kinesthetic learner, therefore I love the opportunity to go through this with my hands/eyes at the simulation center.”

“Yes, I thought it provided an opportunity to standardize my experience so that if I happen to miss out on mastering a particular critical situation I could use the SIMC to simulate the events and ensure I graduated feeling comfortable with urgent care situations.”