

Video-aided simulation-based training to improve interdisciplinary interaction and clinical performance of emergency care competencies

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Simulation benefits...

“Simulation is a powerful training tool because it allows the trainer to systematically control the schedule of practice, presentation of feedback, and introduction (or suppression) of environmental distractions within a safe, controlled learning environment.”

- Long history of different types of simulation in AT education
 - CPR training
 - Oral/Practical examinations

Fidelity Matrix

		Levels		
		Low	Medium	High
Dimensions	Physical Equipment & Environmental			
	Psychological Task & Functional			
	Conceptual			

Video benefits...

“ The use of video analysis represents an effective pedagogical method to educate athletic training students.”

■ 3 benefits

- Evaluation of student proficiency
- Allowing student input into their clinical performance
- Developing archival data of student performance for re-evaluation and documentation of learning over time



HSU simulation equipment

- Resusci Anne Patient Simulator (Laerdal®)
 - Remote tablet managed
 - Vital signs
 - Chest rise (rate)
 - Carotid/radial pulses (rate)
 - Lung sounds
 - Blood pressure
 - Sounds (moan, cough, vomiting, speech)
 - Cost -- \$11,300 (funded through campus academic grant)
- Also video live model practical skills exams (lab)



HSU simulation equipment

- Video/Audio
 - Swann 4-camera security system with DVR (\$350)
 - GoPro camera (\$400)
 - Microphones (\$120)
- Moulage kit (\$300)



Patient presentation

Trying to improve 2 things:

- Presentation to preceptors
- Handoff to other personnel (EMS, MD, another AT, etc.)
- **Goal for provider(s):**
 - I know what's wrong
 - I know what to do
 - I know what to worry about
 - I see what you see

IMIST-AMBO

I – Identification

M – **M**echanism of injury

I – (medical) **I**mpact

S – **S**igns/vital signs

T – **T**reatment/Trends/response to

A – **A**llergies

M – **M**edications

B – **B**ackground History

O – **O**ther relevant info

Things we've learned...

- Students aren't as competent as believed with basic skills
- NOT comfortable with uncertainty
- Students report simulator provides more realism/interaction
- Moulage application aids realism
- Prebriefing, including familiarization with manikin is critical
- Use of a structured, handoff format helps interaction with other providers

