Handoff Educational Strategies and Tactics



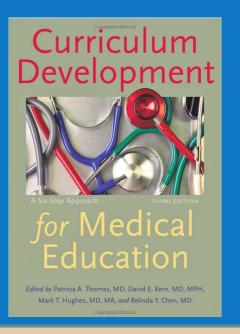
Lee Ann Riesenberg, PhD, MS, RN, CMQ

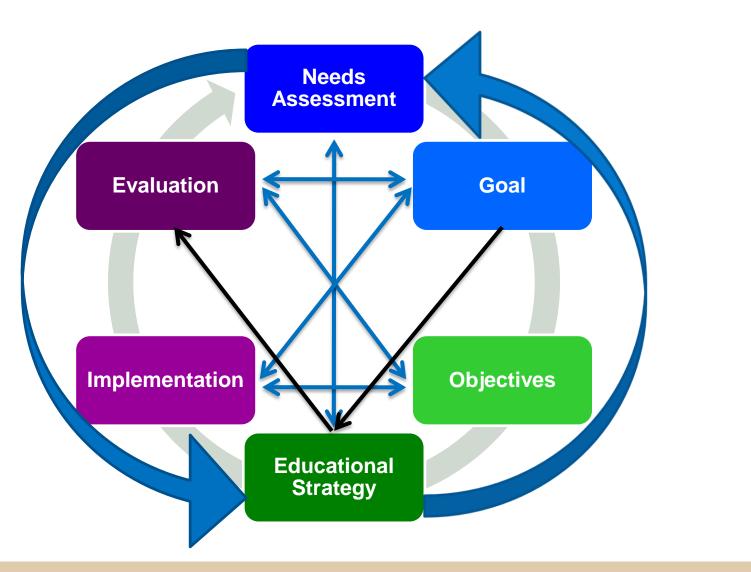
Professor and Associate Director Education Department of Anesthesiology and Perioperative Medicine The University of Alabama at Birmingham, School of Medicine, Birmingham AL



Knowledge that will change your world

Curriculum Development Process





- Adapted from Thomas PA, Kern DE, Hughes MT, Chen BY (ed). Curriculum Development for Medical Education: A Six-Step Approach. 3rd ed. Baltimore MD: Johns Hopkins University Press; 2016.
- Rourke L, Boyington C. A workshop to introduce residents to effective handoffs. Clin Teach 2015;12:99-102.

Needs Assessment

CRNA handoff requirements



• AANA: Standard VII¹

Evaluate the patient's status and determine when it is safe to **transfer the responsibility of care**. Accurately report the patient's condition, including all essential information, and **transfer the responsibility of care** to another qualified healthcare provider in a manner that assures continuity of care and patient safety.

COA²

Competency for entrance into practice - Verification by the program that a student has acquired knowledge and skills in patient safety, perianesthetic management, critical thinking, **communication** and professionalism.

 American Association of Nurse Anesthetists. Standards for nurse anesthesia practice. Available at: http://www.aana.com/resources2/professionalpractice/Pages/Standards-for-Nurse-Anesthesia-Practice.aspx. Accessed August 30, 2017.
Council on Accreditation of Nurse Anesthesia Education Programs. Available at: http://home.coa.us.com/accreditation/Documents/2004%20Standards%20for%20Accreditation%20of%20Nurse%20Anesthesia%20Educa tional%20Programs,%20revised%20June%202016.pdf Accessed August 29, 2017. GME handoff requirements



Accreditation Council for Graduate Medical Education (ACGME)

- Ensure a common site-based process for handoffs
- Provide education on transitions of care for residents, fellows, and faculty
- Ensure that faculty supervise and evaluate resident/fellow handoffs using direct observation that demonstrates progression from the need for direct supervision to indirect supervision
- Provide periodic faculty monitoring of resident/fellow handoffs throughout training

ACGME Clinical Learning Environment Review (CLER) Program. Available at:

https://www.acgme.org/acgmeweb/tabid/436/ProgramandInstitutionalAccreditation/NextAccreditationSystem/ClinicalLearningEnvironmentRev iewProgram.aspx. Accessed August 30, 2017.

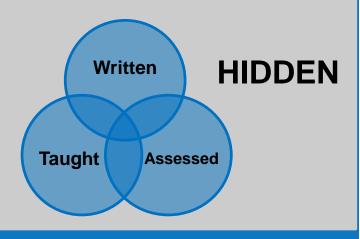
Handoff readiness



- Entering interns' prior education and preparation for handoffs
 - 2005-2014: <10%¹ of medical schools formally taught handoff education to 35%²⁻⁴
 - 2017: 76% reported some form of education; with almost half (48%) indicating this was for one hour or less⁵

Solet DJ, et al. *Acad Med* 2005;80(12):1094-99.
Arora VM, et al. *J Gen Intern Med* 2013;28(8):994-998.
Allen S, et al. *Acad Med* 2014;89(10):1366-1369.
Stojan JN, et al. *Med Teach* 2015;37(3):281-288.
Davis R, et al. Am J Med Qual 2017; doi: 10.1177/1062860617719128. [Epub ahead of print]

Hidden Curriculum



- Most current handoff education came from on-the-job training
- Culture eats strategy for lunch
- Hidden curriculum devours handoff education 24/7

- Hafferty FW. Beyond curriculum reform: confronting medicine's hidden curriculum. Acad Med 1998;73(4):403-407.
- Petrovic MA, Aboumatar H, Baumgartner WA, et al. Pilot implementation of a perioperative protocol to guide operating room-to-intensive care unit patient handoffs. J Cardiothrac Vasc Anesth 2012;26(1):11-16.

Goal

Achieve safe, effective, efficient perioperative patient care transitions (handoffs)

Objectives

Implementation

Paradigm shift



 Interdisciplinary group responsible for handoffs^{1,2}

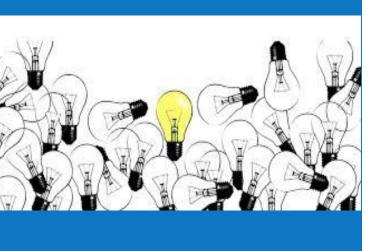
Plan

Identify champions³ (Innovators)
Use quality improvement principles
Implement system improvement

Horwitz LI, et al. An institution-wide handoff task force to standardize and improve physician handoffs. BMJ Qual Saf 2012;21(10):863-871.
Klaber RE, Macdougall CF. Maximising learning opportunities in handover. Arch Dis Child Educ Pract Ed 2009;94:118-122.
O'Toole JK, et al. Placing faculty development front and center in a multisite education initiative. Acad Ped 2014;14(3):221-224.

Educational Strategy

Faculty development



- Can't assume they learned how to give an effective handoff^{1,2}
- Educational strategy
 - Provide hands-on instruction relevant to their practice and time efficient²
 - Teach: how to teach, observe, and assess²
 - Provide time²
 - Develop incentives³
- 1. Klaber RE, Macdougall CF. Maximising learning opportunities in handover. Arch Dis Child Educ Pract Ed 2009;94:118-122.
- 2. O'Toole JK, et al. Placing faculty development front and center in a multisite education initiative. Acad Ped 2014;14(3):221-224.
- 3. Held MR, et al. Pediatric residency program handover. Acad Ped 2014;14(6):610-615.

Proven educational strategies



- Standardization¹ and didactic² are not enough
- Deliberate practice: practice with observation and feedback³⁻⁵
- Simulation, standardize patient encounters, roleplay essential⁶
- In-person simulation produces better results than video-based, or computer-based⁷
- Videos of good and bad provide anchors⁸
- Intervention bundles have been successful⁹

Antonoff MB, et al. Am J Surg 2013;205(1):77-84.
Sawatsky AP, et al. Teach Learn Med 2013;25:279-84.
Weinger MB, et al. Anesth Analg 2015;121:957-71.
Zendejas B, et al. J Surg Educ 2011;68(6):465-71.

9. O'Toole JK, et al. Acad Ped 2014;14(3):221-224.

2. DeRienzo CM, et al. Acad Med 2012;87(4):403-410.

- 4. Pukenas EW, et al. J Clin Anesth 2014;26:530-8.
- 6. Davis J, et al. J Grad Med Educ 2017;9:18-32.
- 8. Calaman S, et al. Acad Med 2016;92(2):204-9.7.

Feedback and Evaluation Feedback tool: example

Handoff Assessment Form (Sign-Out PROVIDER)

Evaluator: ______ Evaluatee: _____ Date Given:_____

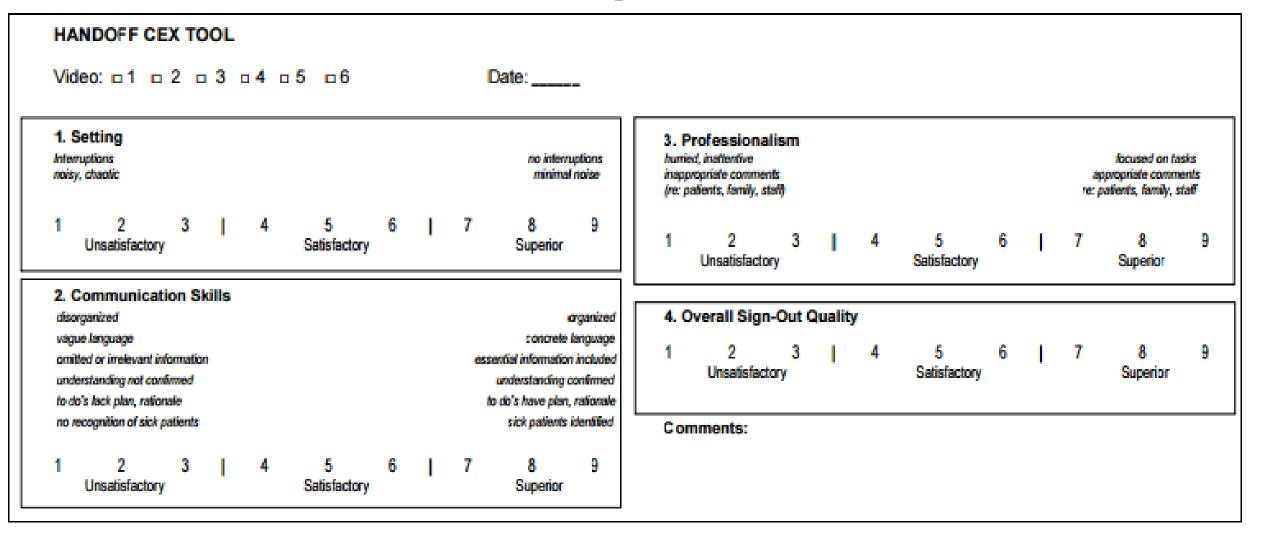
FOR EACH PATIENT PLEASE CHECK THE FOLLOWING:

Patient #____

Did the provider give: 1. Condition of the patient (sick, not-sick) □ YES 2. Code status **D** YES 3. Identifying data (age, gender, diagnosis) 4. General hospital course (brief summary of course) 5. New events that day (new events, tests, treatments) 6. Overall health status (improving, worsening) 7. Anticipatory guidance with clear plan, rationale 8. Follow-up tasks with clear plan, rationale 9. Time for questions or clarifications

Sawatsky AP *et al*. The effects of deliberate practice and feedback to teach standardized handoff communication on the knowledge, attitudes, and practices of first-year residents. Teach Learn Med. 2013;25(4):279-284.

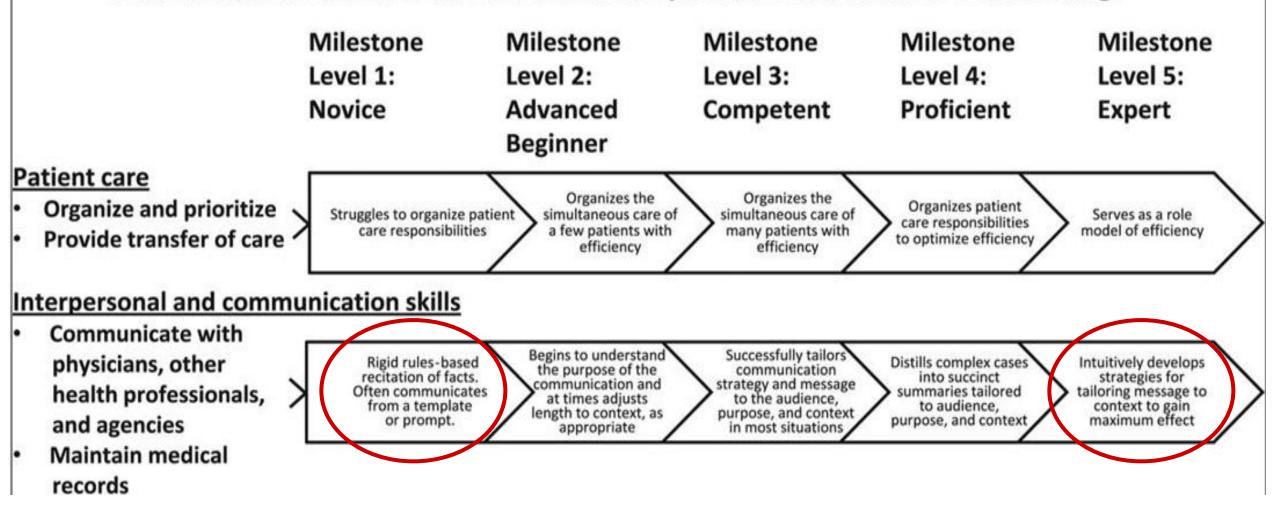
Evaluation tool example: Handoff Mini-CEX



Arora VM et al. Using standardized videos to validate a measure of handoff quality: the handoff mini-clinical examination exercise. J Hosp Med. 2014;9(7):441-446.

Entrustable Professional Activity (EPA)

EPA: Facilitate handovers to another health care provider either within or across settings



Calaman S, Hepps JH, Bismilla Z, et al. The creation of standard-setting videos to support faculty observation of learner performance and entrustment decisions. Acad Med 2016;92(2):204-209.

Acknowledgements



Robyn Davis, Program Manager, Medical Education Outcomes and Research, Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL

Emma O'Hagan, MLIS, Assistant Professor and Clinical Research and Education Librarian, Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL

Shivani Jagdish Patel, 3rd-year pre-med undergrad, University of Alabama at Birmingham, Birmingham, AL

Miles A Grigorian, 3rd-year pre-med undergrad, University of Alabama at Birmingham, Birmingham, AL

Joshua Davis, 1st-year emergency medicine resident, Penn State Hershey Medical Center, Hershey, PA

Matthew Mardis, 3rd-year medical student, University of South Alabama College of Medicine, Mobile, AL

 Catherine Roach, 4th-year medical student, Medical University of South Carolina, Charleston, SC, and a Foundation for Anesthesiology Education and Research Summer Research Fellow, University of Alabama at Birmingham, Birmingham, AL
Cater Elliott, 1st-year anesthesiology resident, University of Alabama at Birmingham, Birmingham, AL

Ana Hosseinzadeh Maleki, MBBS, research assistant, Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL

Questions

