END GAME

How long is long enough?
How good is good enough?

David Page MS, NREMT-P
Outcome
Defining and assessing professional competence

Ronald M Epstein; Edward M Hundert

JAMA; Jan 9, 2002; 287, 2; Research Library
pg. 226
The Quest for Competence

By David Page

EMS Magazine; Sept. 2008

pg. 78

www.emsresponder.com
Outcome Project

Enhancing residency education through outcomes assessment

Version 1.1
September 2000

http://www.acgme.org/outcome/
Day 1: Street-ready?
Real World

In short:

**Perform**

Hunt J; Dewey’s Philosophical Method and Its influence on his philosophy of education; Article in “The Theory of Experiential Education”, Second Edition; Association for Experiential Education, Boulder, Colorado; P84
Current model... PASS
State Certification
National Certification
GET A JOB
Impermanent

- Do you achieve competency?
Competence
competency serves as a value of autonomy.

Decision Making Ability

- demonstrated appreciation of the risks and benefits
Competence… What is it to you?

• Knowledge
• Skills
• Attributes
Operational competence
Operational Competency

• Certified
• Insurable Driver
• Mapping
• Physically fit
  – Lifting
  – Eye sight
  – Hearing
Behaviorally Competent

- Dependable
- Well prepared
- Takes initiative
- Identifies tasks
- Completes tasks
- Dress/Appearance
Clinical Competence
Knowledge

Cognition
The eye does not see what the mind does not know.

- Author Unknown
Cognitive

- Learning from experience
- Generating questions
- Recognizing gaps in knowledge
- Self directed acquisition of new knowledge

Defining and assessing professional competence
Ronald M Epstein; Edward M Hundert
JAMA; Jan 9, 2002; 287, 2; Research Library
pg. 226
Therapeutic Judgment

- When to
- When not to
- When to modify
- When to stop
- How often to try
- Recognize success/failure

Grubbs, KC; Current Status of Clinical Education in Paramedic Programs: A descriptive research project; Prehospital Disaster Medicine; October-December 1997 pp17-23
TOOLBOX OF ASSESSMENT METHODS®

A Product of the Joint Initiative

ACGME Outcomes Project
Accreditation Council for Graduate Medical Education

American Board of Medical Specialties (ABMS)

http://www.acgme.org/outcome/

Version 1.1
September 2000
# ACGME Competencies: Suggested Best Methods for Evaluation

<table>
<thead>
<tr>
<th>Competency</th>
<th>Required Skill</th>
<th>Evaluation Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Record Review</td>
<td>Chart Stim. Recall</td>
</tr>
<tr>
<td>Patient Care</td>
<td>Caring and respectful behaviors</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Interviewing</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Informed decision-making</td>
<td>1</td>
</tr>
</tbody>
</table>
Multiple Choice Questions
(Properly constructed)
Operational Competency

- Certified

Current pass rates for National Registry?

The Effect of Paramedic Student Internship Experience on Performance on the National Registry of Emergency Medical Technicians Exam

Josh Salzman, MA, EMT-B; Justin Dillingham, MPA, NREMT-P; Jenny Kobersteen, RN; Koren Kowalski, EMT-P
Regions Hospital, St. Paul, MN; Oregon Health & Science University, Portland, OR; The George Washington University, Washington, D.C.

INTRODUCTION: Paramedic students are often exposed to numerous patient contacts during their required internship experience. There is no research examining paramedic student performance on the NREMT-W. Therefore, the purpose of this study was to determine if the number of ALS runs and ALSC contacts, ALS leads attended, ALS leads watched, and ALS leads observed were associated with passing the NREMT-W. A prospective review of patient contacts was performed for 144 paramedic students in 2016-2017. The number of ALS runs and ALSC contacts, ALS leads attended, and ALS leads watched were associated with passing the NREMT-W (OR = 1.015, 95% CI = 1.000-1.006).

HYPOTHESIS: Hypothesis: The number of ALS runs and ALSC contacts, ALS leads attended, and ALS leads watched were associated with passing the NREMT-W.

METHODS: A national database of prospectively reported internships was used to determine if the number of ALS runs and ALSC contacts, ALS leads attended, and ALS leads watched were associated with passing the NREMT-W. Paramedic programs may want to evaluate the number of ALS runs and total PC's their students are currently completing. Additional research is needed to determine if a specific combination of field internship variables exists that can increase the likelihood of paramedic students passing the NREMT-W.
Skills
Beaver Skills Lab
Great Skills
Wilson ME,
Assessing Intravenous cannulation and tracheal intubation training;
Anaesthesia 1991 Volume 46, pages 578-579
All IV Attempts for Student Id = 2977
From 1999-01-01 To 2006-12-31  Number of Attempts = 100
Endotracheal Intubation
DEFINING THE "LEARNING CURVE" FOR PARAMEDIC STUDENT ENDOTRACHEAL INTUBATION

Henry E. Wang, MD, MPH, Samuel R. Seitz, MEd, RN, NREMT-P, David Hostler, PhD, NREMT-P, Donald M. Yealy, MD

PREHOSPITAL EMERGENCY CARE 2005;9:156–162
There is no correlation between the quantity of clinical ETI attempts/successes and the success of a student's first field attempt.
No research!

Shameless plug
South of the River Driving School
EFFECTS OF TRAINING TASK REPETITION ON RETENTION AND TRANSFER OF MAINTENANCE SKILL

Joseph D. Hagman

Submitted by:
Milton S. Katz, Chief
TRAINING TECHNICAL AREA

Approved by:
E. M. Johnson, Director
ORGANIZATIONS AND SYSTEMS RESEARCH LABORATORY

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
5001 Eisenhower Avenue, Alexandria, Virginia 22333

Office, Deputy Chief of Staff for Personnel
Department of the Army

May 1980
How good is good enough?
Consistent

SIMPLE:
70%
7 of 10 consecutive leads successful
How long?
As long as it takes
Really... When?

are they done....
“Unfortunately the variety and complexity of learning conditions and the dearth of basic or applied research in allied health education have engendered an immature evaluative methodology, often lacking sufficiently valid or reliable criteria for assessing outcomes.”

Craig Scanlan
Ford, CW: Clinical Education for the Allied Health Professions, St. Louis: Mosby, 1978
Triple Jumps
Triple Jump

• Case Presentation
• Independent literature search
• Oral/Written evaluation

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pg. 226
360° Eval.

Peer  Patient  Supervisor  Self
Teach Andy to fish for himself...

Habits...

- Recognize knowledge gaps
- Seek out information
  - Expert consultation
  - Textbook and research
Can the patient assess competency?
• Ratings of
  – Communications
  – Satisfaction

Linked to:

Biomedical Outcomes

Emotional Distress
Health care use
Check one: I was the ⡪ Patient ⡮ Family Member

Thank you for your assistance is providing feedback to the Paramedic Intern who just took care of you. Please take a moment to complete this form and return it to the paramedic preceptor, nurse, or simply mail it back. The address and postage are already provided on the card. Thank you.

5 = Strongly Agree; 4 = Agree; 3 = Disagree; 2 = Strongly Disagree; 1 = Not attempted

<table>
<thead>
<tr>
<th>Interest in Patient as a Person; The paramedic student:</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Attended to my physical comfort during interview, exam and treatment</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2 Communicated caring, including learning my name, and addressing me with respect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Listened carefully</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Made me feel like I could tell him/her anything, even something personal</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5 Created a positive rapport including identifying him/herself, and making eye contact</td>
<td></td>
<td></td>
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</table>
Self Evaluation
Student Self-evaluation in Clinical Education

LAURA CARWILL AND JAMES MURRELL

Several authors have written about the importance of self-assessment in clinical education. Through self-assessment, students may experience increased satisfaction with the educational process and demonstrate greater personal autonomy.

METHODS: Students were given self-assessment instruments as part of their education. The instruments were designed to elicit feedback from the students on their own performance and to help them identify areas for improvement.

RESULTS: The self-assessment instruments were well-received by the students. They found the instruments to be helpful in identifying areas for improvement and in providing a means for them to reflect on their own performance.

CONCLUSIONS: Self-assessment is an important tool in clinical education. It allows students to evaluate their own performance, identify areas for improvement, and develop a sense of personal autonomy.

BACKGROUND: Current methods of evaluating medical students include traditional grades and standardized patient evaluations. These methods are often criticized for not providing feedback to the students on their own performance.

METHODS: Students were given self-assessment tools and asked to evaluate their own performance. The self-assessment tools included a review of their medical records, a self-assessment questionnaire, and a written reflection.

RESULTS: Students found the self-assessment tools to be helpful in evaluating their own performance. They reported that the tools allowed them to reflect on their own performance and identify areas for improvement.

CONCLUSIONS: Self-assessment is an important tool in clinical education. It allows students to evaluate their own performance, identify areas for improvement, and develop a sense of personal autonomy.

Student self-assessment can be an important complement to traditional evaluation. Through self-assessment, students may experience increased satisfaction with the educational process and personal autonomy. Developing an evaluation tool is a complex process that requires careful consideration of the educational environment and the needs of the students.

METHODS: A self-assessment tool was developed for medical students. The tool included a review of the student's medical records, a self-assessment questionnaire, and a written reflection.

RESULTS: The self-assessment tool was well-received by the students. They found the tool to be helpful in evaluating their own performance and in identifying areas for improvement.

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Self Evaluation

- Linked to self-esteem in those not trained to self-evaluate
- Student must be trained to do it
- Constant calibration
- Criteria must be clear
Goal of evaluation:

Continued learning
How good is good enough?
Relativity
“Put your hand on a hot stove for a minute and it seems like an hour.

Sit with a pretty girl for an hour, and it seems like a minute. THAT’s relativity”

- Albert Einstein
Entry Level
Good enough that they can BECOME GREAT

Self-directed learners
Affective
Affective/Moral

- Tolerance of ambiguity and anxiety
- Emotional intelligence
- Respect for patients
- Responsiveness to patients and society
- Caring
How do you inspire others to be great?
Deming:

“Workers will attempt to exceed expectations, even if it hurts them or the organization”
Culture
PRIDE
Imprint

On their role models

Debbie Akers
NAEMSE Heroes Award
Winner 2008
BE

a role model
Thanks!
dpage@ehs.net