Competency Based Education: Linking advancement to competency based assessment

Sudeep K. Aulakh, MDCM, FRCPC
Michael J. Rosenblum, MD, FACP
Baystate Medical Center, Tufts University
Baystate Medical Center

- 659 beds, established 1883
- Springfield, MA
- Community academic program/Tufts
- 50+ IM residents (est. 1948)
- 32 Med-peds residents
- 10 residencies/16 fellowships
- Original EIP program 2006
Objectives

➢ Describe a competency-based training model

➢ Identify key transitions in training

➢ Design assessment tools for advancement based on the behaviors/skills needed to perform key transitions
Chronology Vs. Competency
Balancing Education and Patient Care

Education

Future Care

Autonomy
Resident

Supervision
Attending

Patient Care

Present Care
Our journey to Competency based progression

2004: wards (inpatient) restructured into three distinct transitions (Learner, Manager and Teacher)

Manager: builds on competencies mastered as Learner and prepares the resident for subsequent responsibilities as Teacher

Stepping stone for the development of competency based milestones

2006: ACGME Educational Innovations Project (EIP) focusing on quality and outcomes in residency training
Redesign of inpatient Teams

Manager R2

Manager R1

Manager R3

Teacher R3

Learner R1

Learner R1

R3

R2

R1

R1
Competency-Based Advancement System

Learner (is dependent)  ➔  Manager (independent)  ➔  Teacher (has dependents)

PGY-1 ➔ PGY-2 ➔ PGY-3
Key inpatient transitions

- **Learners**: foundational skills and knowledge (building *knowledge*)
  - stabilize patients
  - competent with simple
  - initial treatment/diagnosis
  - when to call for help
  
  *Dependent with Direct Supervision*

- **Managers**: build on foundational skills through complex cases (building *experience/confidence*)

  *Independent with Indirect Supervision*

- **Teachers**: begin to master complex cases, are flexible and have the experience to teach Learners effectively
  - *(own the education of the next generation)*

  *Independent with Oversight*
Supervision

- **Learners**: require **Direct** onsite supervision from Teachers/Faculty

- **Managers**: have **Indirect** supervision-with immediate onsite back-up from Faculty

- **Teachers**: Oversight from faculty, no onsite backup necessary (but recommended!)
Learner

Patient Care

Supervision

Autonomy

UME CME

CME

Supervision

Autonomy
Manager themes

- Resident-attending relationship is unique:
  collegial and collaborative
  flexible autonomy: supervision

- “community of practice”

- Universal skill set:
  Advanced management
  Leadership
  Confidence

Now competent to actively focus their energies on teaching.
Teacher
Community of practice

Learner

Teaching experience

Knowledge and systems experience

Teacher

Management experience

Manager
Milestones provide reference points along the road. This can be used to reassure travelers that the proper path is being followed, and to indicate either distance traveled or the remaining distance to a destination.
Concept and development

- Internist of the “future”
- Roadmap of expectations and steps (educator/learner)
- Standardize evaluations
- Recognize strengths/weaknesses early
- **Cannot** increase workload
BH Milestones (37)

Fundamentals of the internist (11)

ACGME core competencies (6)
Demonstrates prioritization skills across medical care

On the basis of pre-rounding on one's panel, can create and implement an efficient workflow for optimum patient care

Milestone #18: Patient Care

SBP

Novice

* Does not consider competing priorities (acuity, location, discharge or new patient) when deciding the workflow

* With prompting can help develop order of care for a panel of patients based on multiple variables (e.g., stability, availability of labs, D/C status)

* Can independently develop order of care for a patient or patient panel based on medical issues

* Can direct care of patients with reference to availability of laboratory results or discharge status

* Can direct learner to put together an efficient order of managing a patient or a panel of patients
# Additive Milestone

## Rapport

<table>
<thead>
<tr>
<th>#</th>
<th>Competency</th>
<th>Fundamental skills/behaviors</th>
<th>Novice</th>
<th>Advanced Beginner</th>
<th>Competent</th>
<th>Proficient</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Interpersonal &amp; Communication Skills</td>
<td>Effectively Establishes rapport To what extent does the resident demonstrate the essential skills of rapport building in interactions with patients and their families? <strong>Essential Skills:</strong> Elicits and responds to patient's concerns Shows positive regard Uses empathic statements Uses facilitative non-verbal communication</td>
<td>Fails in any of the essential skills</td>
<td>Inconsistent in any of the essential skills</td>
<td>Consistent with most of the essential skills in uncomplicated interactions</td>
<td>Consistent with all of the essential skills in most interactions</td>
<td>Consistent with all of the essential skills in challenging interactions</td>
</tr>
</tbody>
</table>
Workshop Breakout Session I
Part One

Identify key transitions in your training program.
Choose one transition and list 5 behaviors/skills a trainee must demonstrate before they can perform this task independently.
Assessing core competencies

Putting it into practice

- Key transitions (entrustable professional activities)
- Milestones (behaviors and skills)

- Assessment tools
  - ambulatory advancement criteria
  - mini CEX/TEX
  - end of rotation evaluations
February day at clinic

Dr. J is seeing a complicated patient with diabetes, hypertension, COPD and depression for the 2\textsuperscript{nd} time.

The patient is scheduled for a DM focused visit.

Dr. J ‘s impression is that the patient has poorly controlled DM and presents to you an excellent plan to start long acting insulin.
What year is this resident?
Visit Part II

Upon entering the room to confirm the “story” you notice that the patient appears ill.

You start by asking, “how are you feeling?”

The patient states that in general she is well but since lunchtime she has had nagging chest pressure, nausea and some shortness of breath.
Discussion

- What year is this resident?

- Is this resident competent for *indirect* supervision?
"I don't make house calls. My mom won't let me leave the yard."
<table>
<thead>
<tr>
<th>Ambulatory</th>
<th>First 6 months</th>
<th>Remainder of residency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>Discuss case</td>
<td>+/- Discuss case</td>
</tr>
<tr>
<td></td>
<td>Verify findings</td>
<td>+/- Verify findings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+/- Patient still here</td>
</tr>
</tbody>
</table>
Key transitions in ambulatory training

- See patients with indirect supervision
  - *without in-room supervision for every case*

- Allow patients to leave before precepting
Ambulatory Learner-Manager-Teacher Model

- **Learners**: have **Direct** supervision
  - Faculty member sees every patient

- **Managers**: have **Indirect** supervision
  - Faculty member does not see every patient

- **Teachers**: **Oversight** from faculty
  - Allow patients to leave before precepting
Competency-based assessment

Fundamental requirements:

- Define behaviors/skills (milestones) essential for the task
- Develop objective, criterion-based assessment
Our Challenge

Create a tool that focused on observable behaviors and skills to facilitate:

- early recognition of strengths and areas for improvement
- determine readiness for advancement

Tool must be

- owned by the residents
- easily used by all ambulatory faculty
Ambulatory Advancement Criteria

- Objective confirmation of the skills and behaviors
  - Consistently demonstrate the skill/behavior

- Mapped back to our milestones and the ACGME six core competencies

- 360° evaluation process

- An integral component of the evaluation process to determine readiness for advancement
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Milestone: Demonstrates patient-centered interviewing using the Invite, Listen, Summarize format

- **Failure** - Frequently does not use these skills
- **Needs work** - Inconsistently uses these skills
- **Competent** - Consistently uses Invite & Listen; Summarizes in a reporter fashion
- **Proficient** - Consistently uses all three skills, Summarizes interpreted information
- **Expert** - Consistently uses all three skills, Summarizes interpreted information in complex cases
Ambulatory Learner Advancement Criteria

**Interpersonal communications:**

- Able to set a clear agenda early in the visit
- Solicits the patient agenda. Uses open ended questions at the onset of the encounter.
- Is observed checking for understanding
- Is able to identify the conflict when shared decision making is a challenge
Ambulatory Learner Advancement Criteria
Ambulatory Learner-Manager-Teacher Model

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Ambulatory Manager Advancement Criteria

Interpersonal Communications:

- Effectively delivers bad news
- Informed decision making with controversial evidence (i.e., prostate cancer screening)
<table>
<thead>
<tr>
<th>Pain Visit</th>
<th>Needs Improvement</th>
<th>Satisfactory</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussed current pain management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewed current medication regimen/therapeutics</td>
<td>Yes</td>
<td></td>
<td>No (What is missing)</td>
</tr>
<tr>
<td>Reviewed previous treatment (initial visit)</td>
<td>Yes</td>
<td></td>
<td>No (What is missing)</td>
</tr>
<tr>
<td>Discussed changes in therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussed social support structure (initial visit)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewed goals of patient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate F/U interval</td>
<td>Yes</td>
<td></td>
<td>No (What is missing)</td>
</tr>
</tbody>
</table>

Comments:

Resident Signature

Evaluator Signature
Workshop Breakout Session II

Design objective and observable criterion based evaluations for advancement for a key transition in your training program

- How
- Where
- Who
Teacher Advancement Criteria

**Academic Skills**
- Effectively gives feedback to Learner/MS following Ambulatory Morning Report
- Effectively utilizes the “1 minute preceptor” model while supervising MS

**Clinical Leadership**
- Role models exemplary behavior
- Fosters teamwork during patient care sessions
Ambulatory Learner
End of 6 month evaluation
Milestone: Demonstrates patient-centered interviewing using the Invite, Listen, Summarize format

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Competency Based Advancement

- Formative Feedback
- Summative Evaluation

- Individualized learning
  - educational plan (remediation plans)
  - acceleration plan
Questions?

- Sudeep.Aulakh@bhs.org
- Michael.Rosenblum@bhs.org