Competencies and the Physician of the Future

Jeanette Mladenovic, M.D.
Education Grand Rounds
10/04
Objectives

- Competencies in the continuum of physician education.
- Understanding systems-based practice and practice-based improvement.
- Challenge the boundaries of our approach to medical education.
THE PATH

MD
Certification
Maintenance of Certification

UME ➔ GME ➔ CME
The Eight Domains of Competence
SUNY, Downstate.

SUNY Downstate’s domains of competence delineate the attitudes, knowledge and skills that students should possess upon graduation from this medical school. Upon graduation from SUNY Downstate, the student will have demonstrated the following:

- PROFESSIONALISM
- A KNOWLEDGE OF BASIC SCIENCE THAT FORMS THE BASIS OF CLINICAL MEDICINE
- EFFECTIVE COMMUNICATION
- BASIC CLINICAL SKILLS
- AN UNDERSTANDING OF HEALTH MAINTENANCE AND DISEASE PREVENTION
- AN AWARENESS OF HEALTHCARE IN THE CONTEXT OF COMMUNITY AND SOCIETY
- INFORMATION MANAGEMENT
- A COMMITMENT TO LIFE-LONG LEARNING
Competency-Based Accreditation and Certification

ACGME Competencies
- Medical Knowledge
- Professionalism
- Communication & Interpersonal Skills
- Patient Care
- Systems-Based Practice
- Practice-Based Learning & Improvement

Certification
- Secure Exam
- Faculty Ratings
- MiniCEX Logs
- License
- Practice Improvement

MOC
- Secure Exam
- Peer-Patient Clinical Skills
- License Appointment
- Practice Improvement
Continuum of Clinical Skills

EB therapeutic, diagnostic reasoning

Diagnostic Reasoning

Data Gathering

Learning the language
Continuum of Learners

- Master
- Expert
- Post GME
- Novice
- UGE, GME

Who?
Lifelong Learning, Assessment and Improvement: Physician Commitment

- Fundamental new concept for certification and maintenance of certification
- Habits and skills are learned throughout GME - but begin in UGE!
- Basis for *Continuous Professional Development*
- The professional method for adapting to change
Lessons Learned About Competence

Competence

- develops along a continuum
- is more than knowledge and skill
- is more than just knowing the rules
- Is a habit

Does competence = excellence?
The hardest conviction is to get into the minds of the beginner that the education in which he is engaged is not a college course, not a medical course, but a life course.

Sir William Osler
ACGME Competencies

Accountability

Professionalism

Medical Knowledge

Cognitive Test

Systems-Based Practice

Portfolio Assessment

Focused Assessment of Performance

Patient & Peer Assessment

Patient Care

Interpersonal & Communication Skills

Practice-Based Learning & Improvement

Tracking

Tracking

Courtesy L. Blank
Documentation

- Web-based evaluations
- Competency cards
- Narrative reflection
- Global rating forms
- Semi-annual performance reviews
- Tracking

Courtesy L. Blank
The Newest Competencies

Practice-based Learning and Improvement:

Residents are expected to use scientific evidence and methods to investigate, evaluate, and improve patient care practices. (IMWG)

Goals for physician development:

1. Develop willingness to learn from errors to improve care
2. Use Information technology to support decision making
3. Identify areas for improvement and implement strategies to enhance knowledge, skills and attitudes, and care processes
4. Analyze and evaluate practice experiences to continually improve quality of care.
Resident Competency

- Identify needs within resident’s patient population
- Use measurement to show changes have improved patient care
- Demonstrate how to use several cycles of change to improve care delivery
- Apply CQI to local population of patients.

Ogrinc, Academic Medicine, 2003
The Newest Competencies -2

Systems Based Practice

Residents are expected to demonstrate an understanding of the contexts and systems in which health care is provided, and the ability to apply this knowledge to improve and optimize health care. (IMWG)

Goals for Physician Development:

1. Understand, access, and utilize resources, providers, and systems necessary to provide optimal care
2. Understand the limitations and opportunities inherent in various practice and delivery systems and develop ways to optimize care for the patient
3. Apply evidence-based, cost-conscious strategies for prevention, diagnosis, and treatment
4. Collaborate with other members of the health care team to assist patients to deal effectively with complex systems.
Resident “Competency”: SBP

- Health care as a system: understand and describe reactions of a system perturbed by change initiated by the resident

- Collaboration: contribute to the interdisciplinary effort

- Social context/accountability: identify community resources for quality improvement.

Ogrinc, Academic Medicine, 2003.
Basic Curricula – QI

- IOM’s definition and criteria for quality (STEEPE)

- Understand the rubrics of quality measurement (Donebedian)
  - Structure, process, outcomes

- Learn how to apply the following tools:
  - PDSA, Flowcharts, FMEA
  - Aim and Mission Statements
IOM Competency Model

Overlap of Core Competencies for Health Professionals, IOM, 2003
Examples of Systems Based Practice

- **Anesthesia**: interactive curriculum on SBP in effectiveness of operating room, with MCQ and faculty feedback
- **OB-GYN**: Development of standardized orders in L and D for induction and looking at effectiveness
- **Surgery**: Turning M and M into a systems-based exercise to address errors
- **Family Medicine**: anonymous self-reporting of errors
- **Internal Medicine**: reorganization into firm system; leadership partners rotation.
- **ER**: using microsystems model to provide seamless flow of chest pain patients.
- **Common**: Aseptic Technique, web-based SBP curricula with MCQ; safety curricula

Synopsis, abstracts – ACGME conference, 2004
Practice Improvement Module (PIM)

**Collect Data**
- Chart review
- Patient survey
- Practice review

**Plan to Improve**
- Synthesize and review data
- Practice Improvement Plan

**Test Change**
- Impact
Preventive Cardiology

Click the arrow beside the section you wish to enter.

DATA COLLECTION
- Select and Survey Patients
- Review Charts
- Examine Your Practice Routines

IMPROVEMENT PLAN
- Analyze Summary to Develop Plan
- Pilot Plan and Report Results

To complete this module, the ABIM will communicate with you by e-mail. Please provide your current e-mail address at www.abim.org.
ABIM policy specifies that contact information may be used solely for Board business.
Patient ID: ___

You must enter a Patient Identifier to enable the buttons on the right.

**PATIENT IDENTIFIER (for your use only):**

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>What is the date of the patient's most recent visit?</td>
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<td>Month</td>
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<td></td>
<td>January</td>
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<td>2.</td>
<td>What is the patient's gender?</td>
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<td></td>
<td>Male</td>
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<td>3.</td>
<td>What was the patient's age at the last visit?</td>
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<td>4.</td>
<td>Does this patient have any of the following risk factors for future coronary heart disease (CHD) events?</td>
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<tr>
<td></td>
<td>Prior CHD or CHD Risk Equivalents:</td>
<td>Yes</td>
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<td></td>
<td>Prior MI</td>
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<td></td>
<td>Other clinical CHD</td>
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<tr>
<td></td>
<td>Symptomatic carotid artery disease</td>
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<td></td>
<td>Peripheral artery disease</td>
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<td></td>
<td>Abdominal aortic aneurysm</td>
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<tr>
<td></td>
<td>Diabetes mellitus</td>
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<td></td>
<td>Other Risk Factors:</td>
<td>Yes</td>
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<td></td>
<td>Current cigarette smoking</td>
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<td></td>
<td>Hypertension</td>
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<td></td>
<td>Elevated LDL cholesterol or on lipid-lowering medication</td>
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<td></td>
<td>Low HDL cholesterol (&lt;40 mg/dL)</td>
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<td>Age (men ≥45 years, women ≥55 years)</td>
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<td></td>
<td>Family history of premature CHD</td>
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<td></td>
<td>Overweight or obesity</td>
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<tr>
<td>HDL cholesterol</td>
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<td>-----------------</td>
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<tr>
<td>Triglycerides</td>
<td>mg/dL</td>
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</table>

0. Has a screening test for type 2 diabetes been done?
   - Yes
   - No
   - Not applicable

9. What is your assessment of the patient's ten-year risk of developing myocardial infarction or coronary death?
   - <10%
   - 10-20%
   - >20%

10. Which of the following interventions have been prescribed for this patient? (Check all that apply.)
    - Dietary saturated fat and cholesterol restriction
    - Dietary sodium restriction
    - Increased fruits, vegetables and/or soluble fiber
    - Calorie restriction as part of a weight reduction program
    - Increased exercise or physical activity
    - Aspirin or other antiplatelet or anticoagulant therapy
    - Beta blocker therapy
    - ACE inhibitor or ARB therapy
    - HMG-CoA reductase inhibitor (statin) or other lipid-lowering therapy
    - Smoking cessation support
    - None of the above

11. Do any of the following limit the patient's ability to engage in self-care?
    - Psychiatric illness or cognitive impairment
    - Problems with adherence
    - Other medical conditions
    - Social factors

END OF REVIEW FOR THIS PATIENT
Click <NEW PATIENT> to begin the next chart review. Once you have reviewed at least 25 charts, click <REVIEW/SUBMIT> to submit your data to the ABIM.
### INFORMATION MANAGEMENT

1. **Does your practice currently use an electronic medical record system?**
   - **Yes**
   - **No**
   - How long has the electronic medical record system been in use? **<3 months**

2. **Patient medical records contain ...**
   - a problem list that is regularly reviewed and updated.
   - an allergy list that is updated when indicated.
   - a medication list that is reviewed and updated at every visit.
   - a display of key lab results that shows trends, goals, and variation over time.
   - a display of key clinical findings that shows trends, goals, and variation over time.
   - an integrated treatment plan that documents and guides treatment decisions of the team.
   - a treatment plan that includes the patient's self-care program.

3. **Medical record templates or reminders prompt members of the practice team to document ...**
   - the appropriate history and physical examination findings.
   - current smoking status.
   - nutrition history, goals, and progress.
   - exercise/physical activity history, goals, and progress.
   - symptoms and functional status.
   - problems with medications and treatments.

4. **The medical record system provides ...**
   - patient care protocols for intensifying therapy when treatment goals have not been reached.
   - reminders to consider ACE inhibitors or ARBs, beta blockers, and statins for all post-MI patients.
   - reminders to consider aspirin for all patients at increased risk for CHD, including patients with diabetes who are over age 30.
### 4. The medical record system provides ...

<table>
<thead>
<tr>
<th>Description</th>
<th>Yes</th>
<th>+/-</th>
<th>No</th>
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<tbody>
<tr>
<td>... patient care protocols for intensifying therapy when treatment goals have not been reached.</td>
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<tr>
<td>... reminders to order lipid testing at appropriate intervals.</td>
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</table>

### 5. The medical record system ...

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<thead>
<tr>
<th>Description</th>
<th>Yes</th>
<th>+/-</th>
<th>No</th>
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<tbody>
<tr>
<td>... automatically follows up to reschedule cancelled and no-show visits.</td>
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<td>... provides members of the team with up-to-date patient data.</td>
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<tr>
<td>... provides members of the team with key decision support.</td>
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<td>... provides information to physicians covering nights and weekends.</td>
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<tr>
<td>... provides information from ambulatory records needed by hospital staff when patients are admitted to the hospital.</td>
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<td>○</td>
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<td>... provides a hospital discharge summary and other relevant information prior to follow-up contacts.</td>
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<td>○</td>
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<tr>
<td>... can readily identify patients with a specific diagnosis (such as CHD).</td>
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<tr>
<td>... can be queried to answer quality improvement questions.</td>
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<tr>
<td>... displays laboratory data for groups of patients (e.g., LDL level for patients with diabetes).</td>
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<tr>
<td>... displays clinical data for groups of patients (e.g., smoking status for patients with hypertension).</td>
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<tr>
<td>... displays medications prescribed for groups of patients, such as those with hypertension.</td>
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Quality Improvement Questions

Quality improvement questions generally ask for specific clinical outcomes (such as blood pressure or LDL cholesterol level) or processes (such as measuring height, timely lipid testing, or prescribing a statin) for groups of patients (such as those with established CHD).
**IMPORTANT!** You must wait at least TWO WEEKS after submission of your Practice Improvement Plan to submit the Impact section. Upon completion of this section, ABIM will issue credit for one self-evaluation module toward your recertification.

To complete this section:

1. **Describe one** change you have made to meet the goals in your Practice Improvement Plan (to review your plan, return to the menu and go to the Plan section).
2. **Answer questions** about the impact of the change in your practice.
3. **Submit** your answers to the ABIM through the Internet.
Reasons for GME workforce

- Providers for medically underserved
- Hospital incentives
- Enormous cost of replacing residents

*Education experiential….*
Internal Pressures on the Educational Environment

- Strained by limited resources  (even in a mission-based medical school....)
- New sights of training, new types of teachers  
  (..who may or may not get promoted)
- New content to meet the changing population  (cultural diversity, geriatrics, ethics, complementary medicine....)
- New thinking: competencies not processes  
  (..just when we figured out the rules..)

......enough to push faculty to their limits.....
External Pressures on the Educational Environment

- Increased knowledge = Greater Complexity
- Fiscal Constraint = Increased productivity
- Societal Needs = Safety Concerns
- Changing Mores = Hours limitations
- Care changing = Fewer traditional venues
The Lightbulb.....

There is less Training Opportunity!!!
Our Trainees and Our Training Programs:

- Practice in a high stakes environment
- Permit plenty educational dead space
- Educate based on what’s available, not what is needed.
- Judge competence by length of time.

……..
"The ringing in your ears?...I think I can help."
Revolution in Educational Needs

- New Curricula (and new skills?)
- New Tools for assessment and evaluation
- New ways to acquire the skills and competencies
- New ways to maintain our skills and competencies
- New faculty, faculty development, rules for faculty
- New relationships to each other
- New relationships to accrediting bodies
Example: IM of the future

- Fosters educational innovation in expert programs
- Contributes to armamentarium of tools
- Use outcomes as measurement of competencies.
- Education inextricably linked to performance improvement
- Decreases dependency on external accrediting body

- General requirements form backbone, remainder open to innovation
- Requires evaluation of new educational experiences
- Process requirements replaced with outcomes measures
- PDs and faculty must participate in hospital PI
- Site visit infrequent, yearly update report.
New Paradigm for Training

1. Requires institutional commitment
2. Faculty intensive at some level
3. Will Challenge our traditions
4. Will elevate the role of educator in our institutions
Academy of Educators of the Future

- Create a culture of support and recognition for medical education and medical educators
- Develop a core faculty, who teach, engage in curricular innovations and develop new assessment tools
- Engage in research in educational outcomes
- Foster interdisciplinary sharing: access to ideas, tools, and faculty to address the common physician competencies
“Remember,
The future isn’t what it used to be...”

Alias, Yogi Berra