

# The Roles of Assessment in Supporting the Development of Competence

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John Norcini, Ph.D.

FAIMER

# Overview

Assessment can play an important role in the development of competencies that improve patient care

- Challenges in healthcare
- Person-centered care
- Roles of assessment in supporting the development of competence





# Background: Capacity

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- Not enough educational capacity to produce the needed healthcare workers
  - Shortfall of 13M workers (WHO)
    - Migration
    - Maldistribution
    - Poor production
  - Low income countries are particularly affected
  - Worker density associated with mortality/morbidity



# Background: Quality

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- Quality is often compromised and this is associated with patient outcomes
  - 40% of US admissions result in harm to patients
  - Race/income disparities
  - Absence of evidence-based standards
  - Continuity of care lacking





## Background: Person-Centered Care

- Person-centered care can address these twin challenges

"Providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions."  
(IOM)



## Background: Person-Centered Care

- Respect for patients' preferences
- Coordination/integration of care
- Information & education
- Physical comfort
- Emotional support
- Involvement of family & friends
- Transition & continuity
- Access to care

*IOM and the Picker Institute*



## Background: Person-Centered Care

- Systematic review finds a positive association with
  - Health outcomes
  - Adherence to recommendations
  - Preventive care
  - Resource utilization

*Doyle et al, 2013*

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- Assessment can support the move to person-centered care
  - Enables change by signaling which competencies are important
  - Enhances and creates learning when it is formative
  - Ensures competence when it is summative

## Assessment and Person-Centered Care

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# Enables Change

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- Assessment has a significant educational effect
  - It signals what is important and valued
  - It motivates trainees to prepare in a fashion that has educational benefit
  - It is destructive if not aligned with curricula



# Enables Change

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- Assessment can enable the transition to person-centered care
  - Indicating the needed competencies
  - Supporting their acquisition
  - Ensuring that they have been acquired
- If not assessed, it undermines change
  - It will not be given priority in learning





# Enables Change

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- Interprofessional learning and collaborative practice (IPLC) is an example (WHO, 2010)
  - Increases access, appropriate use of specialists, positive health outcomes, safety...
  - Decreases complications, length of hospital stay, conflict among caregivers, admissions, errors, mortality...



# Enables Change

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- Assessment of IPLC competence lays the groundwork for change
  - Written tests of the roles of healthcare workers
  - Tests of attitudes
    - Jefferson Scale of Attitudes toward Physician-Nurse Collaboration
  - Simulation of teams
  - Peer assessment





# Enables Change

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- While it enables changes, assessment of IPLC does not create change
  - Practice has not changed
    - There are not enough clinical placements that model IPLC well
    - There are too few good role models
    - What is learned, is not used

# Enhances and Creates Learning

- Assessment is the basis for feedback
  - General education
    - Feedback has large effect on learning (ES=.79)
  - Postgraduate trainees and practicing doctors
    - Small-moderate effects

*Hattie, 1999; Jamtvedt et al, 2006*



# Enhances and Creates Learning

- Assessment creates learning by requiring active retrieval
  - Students read a passage
    - Group 1 took three tests on the passage
    - Group 2 re-read the passage three times
    - On a test one week later, Group 1 did better
  - Replicated in and out of medical education

*Roediger & Karpicke, 2006*



# Enhances and Creates Learning

- In this context, formative assessment (assessment for learning) is a powerful force for change
  - Guides and creates learning
  - Increases educational efficiency
- But we are not taking advantage of it...





# Enhances and Creates Learning

- Summative assessment used for feedback
  - Designed to provide an overall estimate of learning
    - Lack specific information about strengths and weaknesses
    - Lack ties to specific educational interventions
    - Impact trainees' attitudes



# Enhances and Creates Learning

- Formative assessment used for summative decisions
  - Common in workplace-based assessment
    - Trainees are told the purpose is formative but the results are used for promotion decisions
    - Trainees realize its summative and treat it that way
    - Creates the wrong environment for learning



# Enhances and Creates Learning

- Formative assessment is regarded as low stakes
  - Standards for good measurement are often ignored
    - Leads to unreliable feedback
    - Creates educational inefficiencies



# Ensures Competence

- National assessment programs are central to ensuring competence
  - Workforce competent in person-centered care is the foundation for changing practice
  - Exam performance is associated with the outcomes of care





# Ensures Competence

- Exam performance associated with patient outcomes
  - Adjusted mortality
    - Cardiologists, internists, family medicine (AMI): -15% to -19% RR
    - Cardiologists, internists, family medicine (AMI, CHF): -6% RR
    - Licensure scores: All IMGs (AMI, CHF) -4% RR per SD

*Norcini et al, 2002-2017*



# Ensures Competence

- Performance declines with time since medical school
  - Knowledge, adherence to standards, patient outcomes
  - Sizeable effect
    - 15-25% increase in relative risk for mortality in AMI, CHF, CABG
    - Represents a failure to keep up, not a cognitive decline

*Choudhry et al., 2005; Norcini et al., 2002-2017*

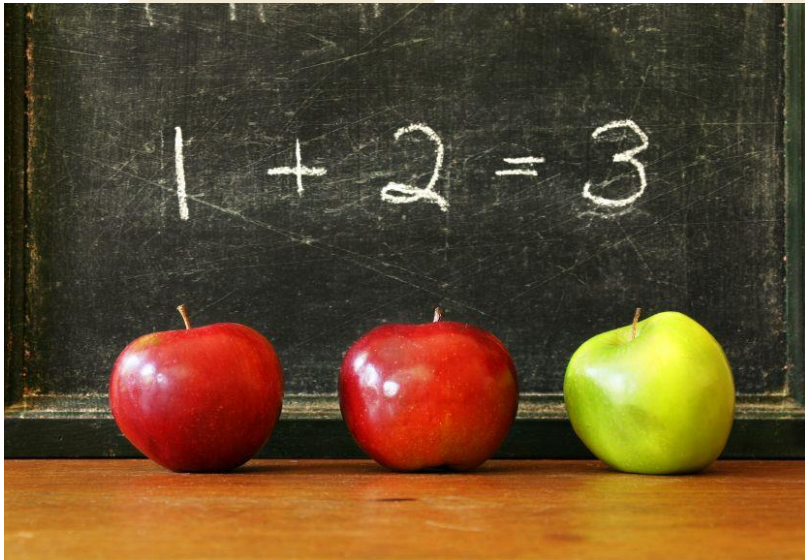


# Ensures Competence

- National examinations
  - Incorporation of person-centered care will ensure competence
  - Time-limited certificates will ensure competence throughout a career
  - Failure to include person-centered care will lessen the need to learn, teach, apply it



# Summary



- Assessment plays a central role in adopting person-centered care
  - Enables change by indicating important competencies
  - Enhances and creates learning when it is used for formative purposes
  - Ensures competence when it is used for summative purposes