Disclosure

- **UpToDate** clinical decision support resource
  - Wolters Kluwer Health

- **UpToDate** contributions within **Pediatrics**
  - Depression in children and adolescents
  - Treatment of adolescent depression
  - Suicidal behavior in children and adolescents
Educational Objectives

Participants will be able to:

1. Describe key principles and processes of quality improvement
2. Describe the utility of the QI approach for improvement of clinical practice with anxiety & depressive disorders, including bridging the research-practice gap
3. Identify 3 metrics to improve the quality of their own clinical practice in keeping with the Institute of Medicine’s aims for our nation’s health care system
“If you have to be naked, you had better be buff”

Tapscott & Ticoll
The Naked Corporation: How the age of transparency will revolutionize business
Overview/Agenda

• Overview Quality Improvement (QI)
  - Institute of Medicine (IOM) seminal reports
  - Introduction to QI Science principles & methods

• Illustrate QI’s potential for improvement of patient care for anxiety & depressive disorders
  - Relate QI to clinical activities & mindset already familiar to CBT and behavior therapists
History of QI movement

• Seminal IOM reports:
  - *To Err is Human: Building a Safer Health Care System* (1999)
    • Reframed medical error as a chronic threat to public health
  - *Crossing the Quality Chasm: A New Health System for the 21st Century* (2001)
    • “Between the healthcare we have and the healthcare we could have lies not just a gap, but a chasm”

• Healthcare reform efforts / healthcare costs
What is Quality?

• IOM: The degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge
Quality Gap

• Evidence of quality problems
  - Variation in services
  - Underuse of services
    • Evidence-based practices
  - Overuse of services
    • Higher expenditures & more procedures are not related to better outcomes (Dartmouth Atlas Project – 2009)
  - Misuse (e.g., errors, negligence)
    • Adverse events, “never events”
  - Disparities in quality
## Institute of Medicine (IOM) Quality Dimensions

<table>
<thead>
<tr>
<th>Dimensions/Aims</th>
<th>Definition</th>
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<tr>
<td>Safe</td>
<td>Avoid injuries to patients from the care that is intended to help them</td>
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<tr>
<td>Effective</td>
<td>Provide services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit</td>
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<tr>
<td>Patient Centered</td>
<td>Provide care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions</td>
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<tr>
<td>Timely</td>
<td>Reduce waits and sometimes harmful delays for both those who receive and those who give care</td>
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<tr>
<td>Efficient</td>
<td>Avoid waste, including waste of equipment, supplies, ideas, and energy</td>
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<tr>
<td>Equitable</td>
<td>Provide care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status</td>
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• Improving the patient experience of care
  - including both quality and satisfaction
• Improving the health of populations
• Reducing the per capita cost of health care

Quality/Cost = Value
Recap

• Transparency / Data on outcomes
• What outcomes? IOM & IHI aims
• Complex systems / human factors
Quality Improvement (QI)

• CHANGE: Not “more of the same”
  - All improvement requires change, but not all change will result in an improvement
  - Use data to improve healthcare – in daily work

• SYSTEMS: Central law of improvement
  - “Every system is perfectly designed to get the results it gets”
    - Paul Batalden, M.D.

Improvement depends on much more than having the right scientific evidence at hand – it requires change at the level of systems of care and knowledge about how to make changes.
Model of Improvement
Framework for Improvement Initiatives
The Model for Improvement

- Provides structure for diagnosing and treating systems of care

- Model for developing, testing, implementing and spreading change that yields improvement
  - Three Fundamental Questions define the endpoint
  - Plan-Do-Study-Act (PDSA) iterative cycles
  - Spread improvement / Implementation to foster adoption
Model of Improvement:
3 Fundamental Questions

**AIM**
- WHAT ARE WE TRYING TO ACCOMPLISH?
  - Specific, Measureable, Achievable, Realistic, Time-bound (SMART)

**MEASURES**
- HOW WILL WE KNOW THAT CHANGE IS AN IMPROVEMENT?
  - Outcome, Process, & Balancing Measures

**CHANGES**
- WHAT CHANGES CAN WE MAKE THAT WILL RESULT IN IMPROVEMENT?
Process Analysis / Planning Tools

• Harness power of teams (systems thinking)
  - Learn about processes of care (Where are we now?)
  - Build shared vision (Where do we want to go?)

• Tools
  - Brainstorming
  - Cause & Effect (aka Fishbone diagram)
  - Key Driver diagram*
  - Gap Analysis (aka Spider diagram)*
  - Benchmarking / learning from others
Key Driver Diagram

**Aim:**

**Primary Drivers**

**Secondary Drivers**

**Measures:**
- Aim/Primary Driver-Outcome Measure(s):
  1.
- Secondary Drivers-Process measure(s)
  1.
  2.

Name: __________________________
University/Organization Name: __________________________
Project Title: __________________________
Health System Sponsor Name: __________________________
Team Members: __________________________
# Gap Analysis

(AHRQ toolkit – www.ahrq.gov)

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<thead>
<tr>
<th>Best Practice</th>
<th>Best Practice Strategies</th>
<th>How Your Practices Differ From Best Practices</th>
<th>Barriers to Best Practice Implementation</th>
<th>Implement? Y or N &amp; Why</th>
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PDSA Cycle

**PLAN**
- Objectives
- Questions/Predictions
- Plan for test/cycle

**DO**
- Carry out plan
- Document your observations / data collection

**STUDY**
- Review data
- Compare to prediction
- Summarize learning

**ACT**
- Refine/change
- Next cycle
PDSA - Therapy

**PLAN**
Case Formulation / Treatment Plan

**DO**
Implement Plan with Progress Monitoring

**STUDY**
Evaluate Progress Benchmarking / TIB

**ACT**
Refine Treatment Plan as Needed
A Series of PDSA Cycles

- **Very Small Scale Test**
- **Follow-up Tests / New Conditions**
- **Wider-Scale Tests of Change**
- **Implementation of Change**

**Plan**

**Do**

**Study**

**Act**

DATA
Improvement of Practice: Anxiety & Depression

- Evaluate practice with IOM dimensions & IHI aims in mind
- Consider the complex systems of care
  - Integrated health care / population health
  - Take into account:
    - Power of teams / systems thinking
    - Realities of human factors (*To Err is Human* - IOM 1999)
- Hardwire systems to support quality
  - Refine processes to set up for success
    - Guidelines / treatment algorithms (decision-support)
    - Flow of daily work (technology, environment structure, communication)
    - Systematic / data driven problem solving (rapid / iterative PDSA cycles)
For more information about QI

• Institute for Healthcare Improvement
  - [www.IHI.org](http://www.IHI.org) / IHI’s Open School

• Agency for Healthcare Research & Quality
  - [www.ahrq.gov](http://www.ahrq.gov)

• *The improvement guide: A practical approach to enhancing organizational performance*
  - Langley, Moen, Nolan, Nolan, Norman, Provost
  - Based on Model for Improvement framework
  - Other frameworks: Lean Improvement, Six-Sigma
Thanks!