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Workplace environments and making change in medical systems

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The Problem

- Big movement for guideline-based and evidence-based care
- Motivation goes way back to “small area variation” studies
  - 7-fold differences in tonsillectomy rates among New England states
  - In Maryland around 1980: more likely to have head CT if lived near Cumberland, more likely to have hysterectomy if lived on the Eastern Shore, more likely to have urethral dilatation if live near Frederick

The Problem

- Clinicians know what is “right” but find many reasons not to do it
- Simply disseminating guidelines does not work
- Many reasons behind failure
- Need to draw on many fields to find solutions

Preparing Materials

- Need to be visually appealing
- Need to be simple to use
- Requires participation of target audience in drawing them up
  - Interactive process of “storyboarding”

Different Modes of Clinician Thinking

- Guidelines are “logic models,” decision-trees, hypothetico-deductive
- Clinicians generally don’t think that way
  - Work by pattern recognition
  - Pursue things considered most likely until get feedback that formulation is incorrect
  - Conception of what is correct can lead to failure to see evidence of failure!

Example of Thinking Patterns

- Deductive approach to ADHD
  - Assess symptoms, consider fit with various diagnostic possibilities, sequentially “rule in” or “rule out” various options
- Pattern recognition
  - “Hyperactive” child “looks like” ADHD – treat with medication and see what happens

Other Problems with Thinking Patterns

- Clinicians like to think scientifically but distrust scientists
  - Question motivation
  - Feel researchers are out of touch with need to function in environment marked by uncertainty
  - Greer: Science is abstract and open-ended; practice is concrete and forces closure.

Problems with Guideline Content (Cabana)

- Current wisdom at odds with guidelines
- Lack of outcome expectancy
  - Not convinced it will work
  - Not convinced it is any better
  - Doesn’t meet needs
- Lack of self-efficacy
  - Don’t have skills or materials needed

Problems with Guideline Content (Crabtree)

- Problem not patient oriented
  - Resist guidelines with more holistic approach
- Don’t see scope of information as what would normally be collected in standard encounter
- May have “disease” versus prevention orientation

Problems with Change in General

- “Competing demands”
  - That’s nice, but other changes have higher priority
- Demand-control (Karasek)
  - Workers “strained” when have many demands but perceive little freedom
  - Doctors’ biggest complaint is loss of autonomy
  - Low-autonomy reduces openness to change

Difficulty Teaching People New Skills

- Learners' choices of education topics
  - What they like, not what they need to know
  - Attend for reasons beyond educational
    - Respite
    - Social
- Learner satisfaction a poor judge of information transfer
  - "Dr. Fox" lecture

What Does Seem to Work?

- Emphasize research/science base
- Participatory (but low risk) learning activities
  - This is a major “bind” in teaching designs
- Recognize different learning styles
  - Have a variety available
- Peer to peer teaching
  - “ratifies” what authorities say

Peer-to-Peer Processes

- Multi-step process
  - Hear something interesting
  - Wait to see if peers approve, are using
  - Want to be part of consensus
- So clinical innovation often requires someone who will “break ground”
  - Need to recruit opinion leader
  - But one who acts, not just person in authority

Giving Feedback

- Feedback is a critical step in most “quality assurance” programs
- “Closing the loop” -- what are the results of what you have done
- Doesn't always work
  - Ignored
  - Resisted
  - Heard but makes things worse

Who Gives Feedback

- Self-generated from reflection
- Individuals in authority
- “360-degree”
- Unrelated others
- Clients

Influences on Attention to Feedback

- Credibility of source
  - Objectivity, expertise
- Accountability to do something with info
  - Feel responsibility for outcome
- Novelty and utility of information
  - New information
  - Simple enough to act on

Influences on Attention to Feedback

- Variation from expectation
  - Small differences from expectation ignored
  - Large deviations tend to be dismissed as inaccurate
- “Source” of problem
  - Like good news related to inherent traits
  - Avoid bad news about inherent traits
  - Attend to bad news about modifiable traits

Feedback and Goals

- Pay attention to feedback when buy into the goal of getting it
- Characteristics of useful goals
  - Non-trivial (more difficult evokes better performance, but attainable)
  - Specific – give me a precise target
  - Attractive – buy into desired outcome
  - Withstands challenge of competing goals

Characteristics of Successful Feedback Programs

- Involve staff in planning!
- Prior agreement on goals and responsibility for outcomes
- Accepted measurement tool
- Credible information sources
- Provides new and useful information
- Focuses on modifiable factors

But Need to Think bigger

- What is a medical practice? (Crabtree)
  - “An adaptive system” with specific strengths and weaknesses
  - Composed of people who communicate with each other, have various skills
  - Change in one part impacts others
  - Has a values and expertise that influence approach to change

What Is a Practice

- Multiple goals
  - Care for patients
  - Provide for livelihood and careers of each staff member
  - Provide social environment for staff
  - Provide intellectual environment for staff
  - May include larger societal goals

Readiness for Change

- Staff role expectations
  - Clear? Flexible?
- Quality of intra-staff communication
- Sense of common goals
- Efficiency
- Perception of work burden

Catalysts for Change

- “Bee in the bonnet” person
- Major change in environment
  - Different patient population
  - Change in economic environment
- Role models/outside innovators

Summary for Implementing Change

- One size does not fit all
  - Need to address organization's specific characteristics
- Simultaneous focus on individuals and systems
- Goals are key
  - What are they now?
  - What new ones might be endorsed?