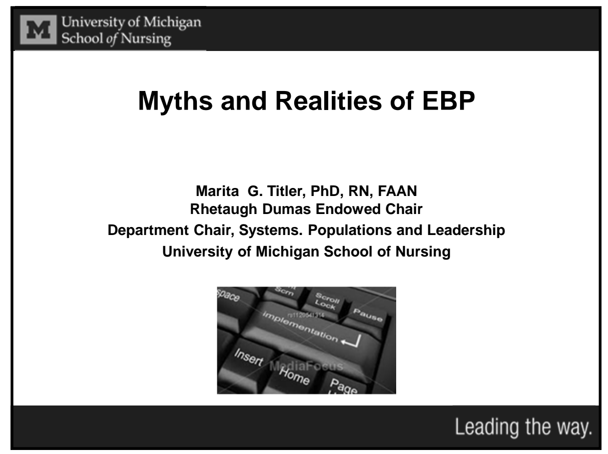
University of Michigan
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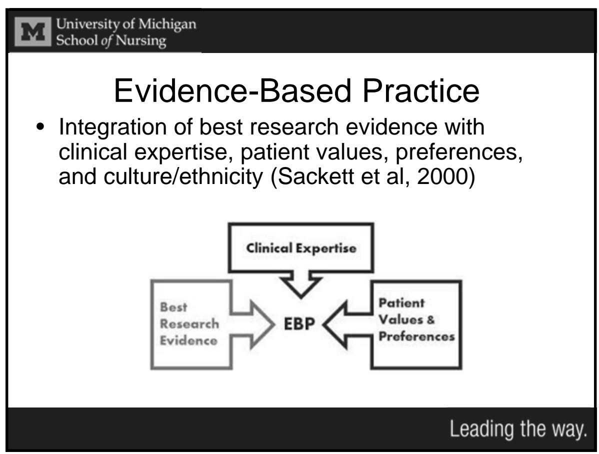
Myths and Realities of EBP
Marita G. Titler, PhD, RN, FAAN
Rhetaugh Dumas Endowed Chair
Department Chair, Systems. Populations and Leadership
University of Michigan School of Nursing
Leading the way.


University of Michigan
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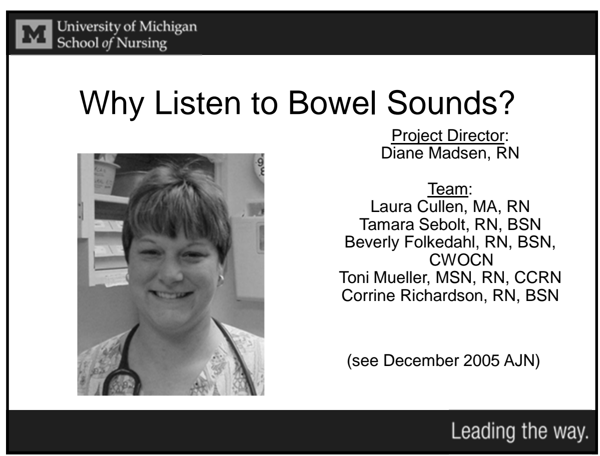
Evidence-Based Practice
• Integration of best research evidence with clinical expertise, patient values, preferences, and culture/ethnicity (Sackett et al, 2000)
Clinical Expertise
Best Research Evidence
EBP
Patient Values & Preferences
Leading the way.


University of Michigan
School of Nursing
Why Listen to Bowel Sounds?
Project Director:
Diane Madsen, RN
Team:
Laura Cullen, MA, RN
Tamara Sebolt, RN, BSN
Beverly Folkedahl, RN, BSN, CWOCN
Toni Mueller, MSN, RN, CCRN
Corrine Richardson, RN, BSN
(see December 2005 AJN)
Leading the way.

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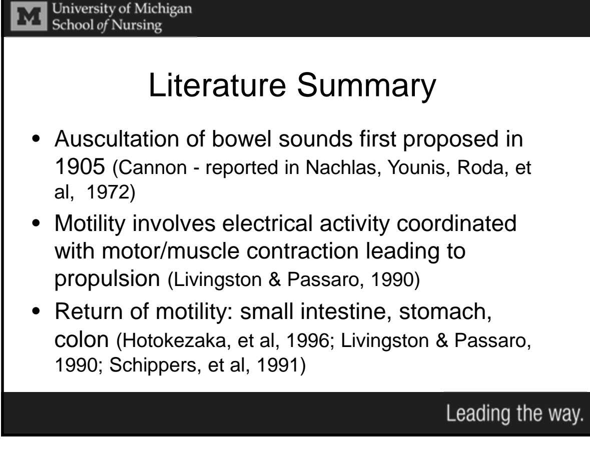
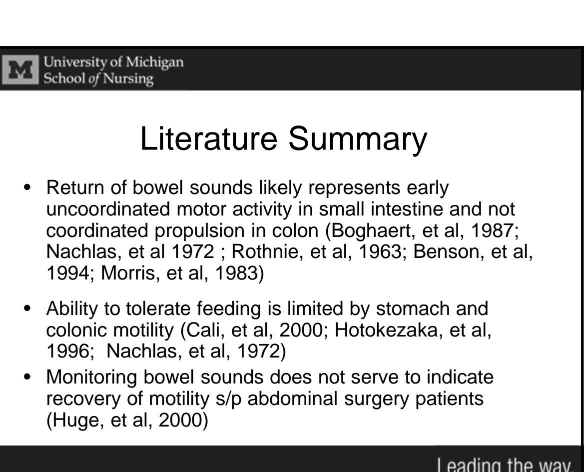
School of Nursing
Why Listen to Bowel Sounds?
TRADITION
Leading the way.


University of Michigan
School of Nursing
Literature Summary
• Auscultation of bowel sounds first proposed in 1905 (Cannon - reported in Nachlas, Younis, Roda, et al, 1972)
• Motility involves electrical activity coordinated with motor/muscle contraction leading to propulsion (Livingston & Passaro, 1990)
• Return of motility: small intestine, stomach, colon (Hotokezaka, et al, 1996; Livingston & Passaro, 1990; Schippers, et al, 1991)
Leading the way.


University of Michigan
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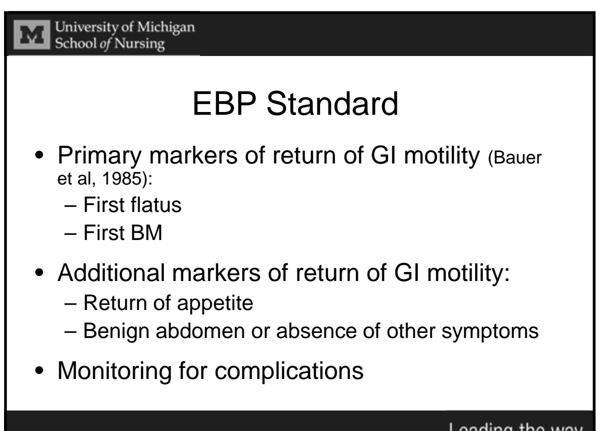
Literature Summary
• Return of bowel sounds likely represents early uncoordinated motor activity in small intestine and not coordinated propulsion in colon (Boghaert, et al, 1987; Nachlas, et al 1972 ; Rothnie, et al, 1963; Benson, et al, 1994; Morris, et al, 1983)
• Ability to tolerate feeding is limited by stomach and colonic motility (Cali, et al, 2000; Hotokezaka, et al, 1996; Nachlas, et al, 1972)
• Monitoring bowel sounds does not serve to indicate recovery of motility s/p abdominal surgery patients (Huge, et al, 2000)
Leading the way.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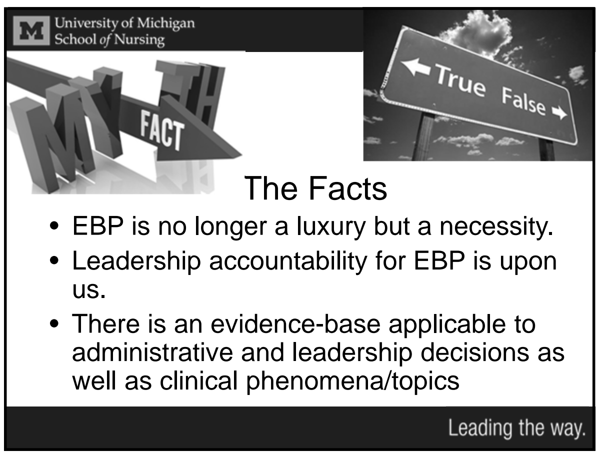
EBP Standard
• Primary markers of return of GI motility (Bauer et al, 1985):
– First flatus
– First BM
• Additional markers of return of GI motility:
– Return of appetite
– Benign abdomen or absence of other symptoms
• Monitoring for complications
Leading the way.


University of Michigan
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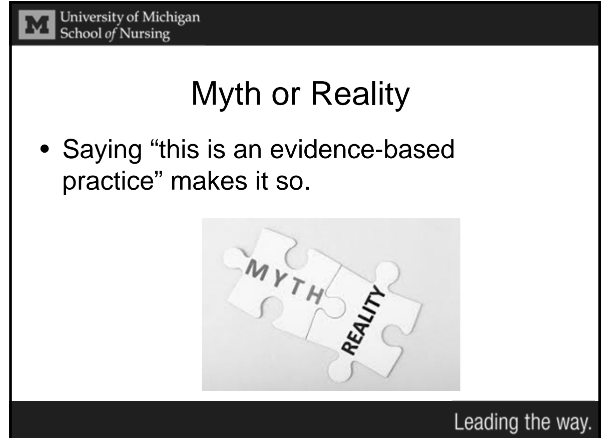
MYTH
FACT
True
False
The Facts
• EBP is no longer a luxury but a necessity.
• Leadership accountability for EBP is upon us.
• There is an evidence-base applicable to administrative and leadership decisions as well as clinical phenomena/topics
Leading the way.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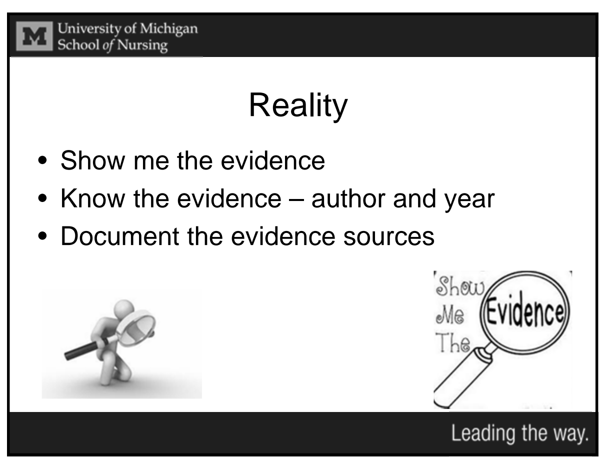
Myth or Reality
• Saying "this is an evidence-based practice" makes it so.
MYTH
REALITY
Leading the way.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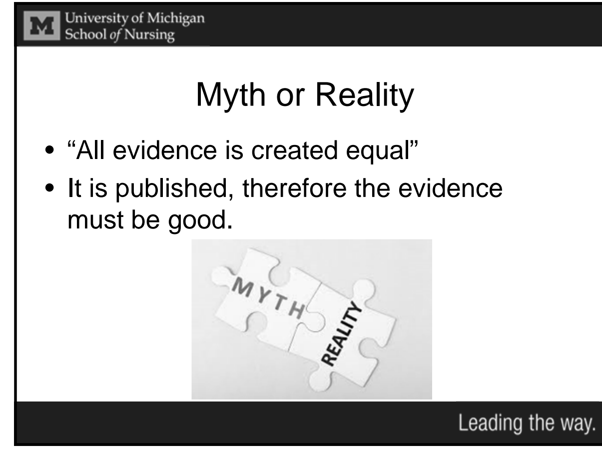
Reality
• Show me the evidence
• Know the evidence – author and year
• Document the evidence sources
Show Me The Evidence
Leading the way.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Myth or Reality
• "All evidence is created equal"
• It is published, therefore the evidence must be good.
MYTH
REALITY
Leading the way.

University of Michigan
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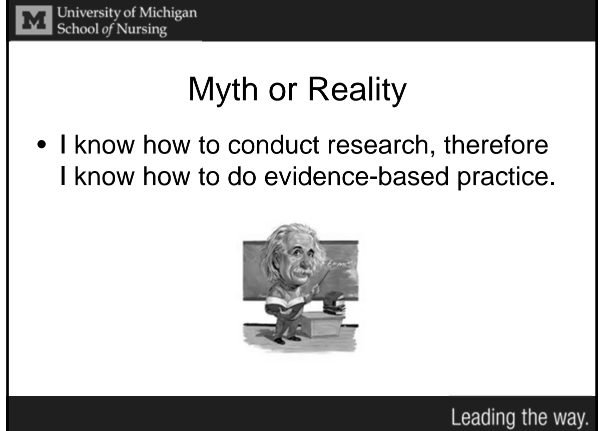
Reality
Systematic Reviews and Meta-analyses
Randomized Controlled Double Blind Studies
Cohort Studies
Case Control Studies
Case Series
Case Reports
Ideas, Editorials, Opinions
Animal research
In vitro ('test tube') research
Must critically appraise all evidence sources
Leading the way.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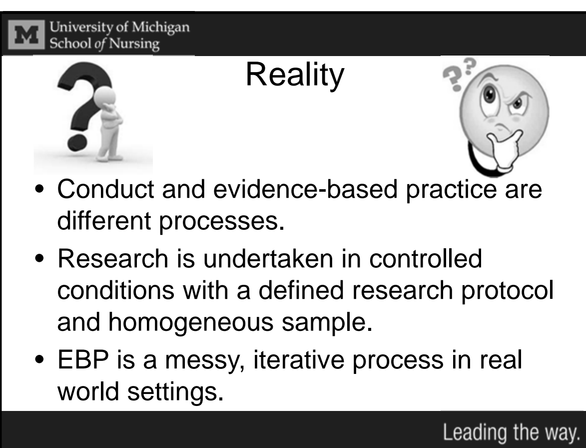
Myth or Reality
• I know how to conduct research, therefore I know how to do evidence-based practice.
Leading the way.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Reality
• Conduct and evidence-based practice are different processes.
• Research is undertaken in controlled conditions with a defined research protocol and homogeneous sample.
• EBP is a messy, iterative process in real world settings.
Leading the way.

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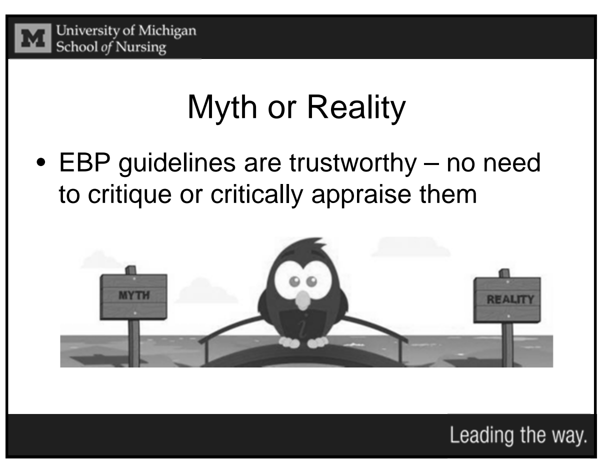
Researchers
• Very helpful in critical appraisal process and synthesis of the evidence
• Caution: Tendency to view EBP questions and evaluation through a research lens.
Leading the way.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Myth or Reality
• EBP guidelines are trustworthy – no need to critique or critically appraise them
MYTH
REALITY
Leading the way.

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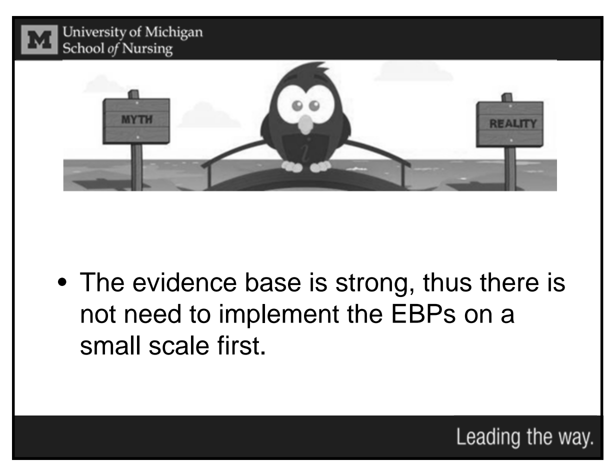
CLINICAL PRACTICE GUIDELINES WE CAN TRUST
Reality: Critique Guidelines
• Appraisal of Guidelines for Research & Evaluation (AGREE) Instrument
– It can be accessed at www.agreetrust.org
– Site has many great tools and learning modules
Leading the way.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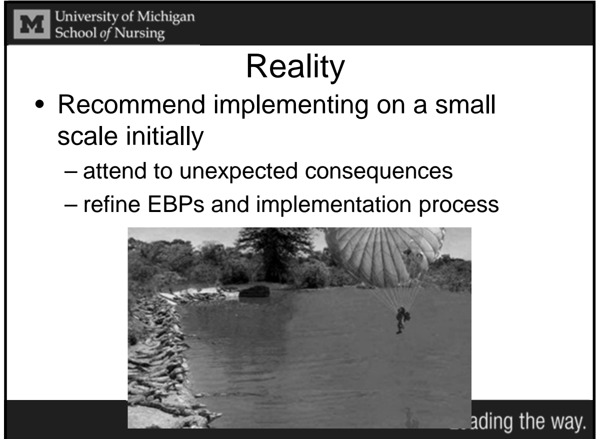
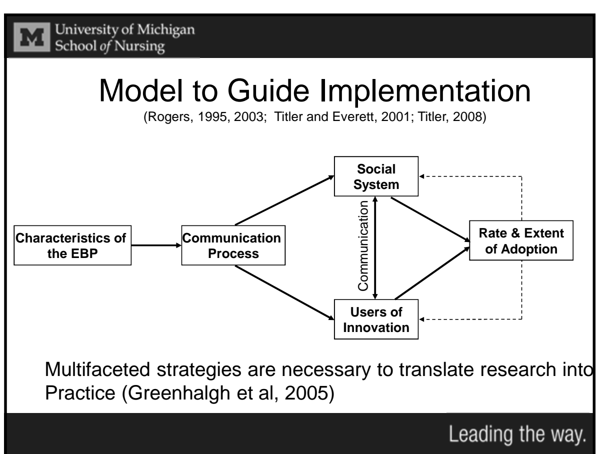
MYTH
REALITY
• The evidence base is strong, thus there is not need to implement the EBPs on a small scale first.
Leading the way.





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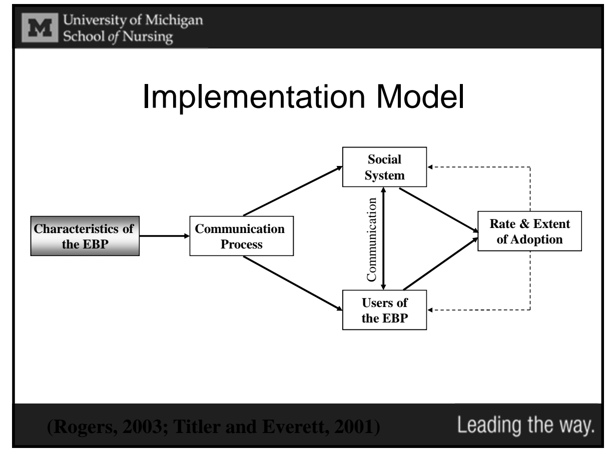
General Illusions about Implementation

- We just need to tell them what to do
  - "I told them what to do and they don't change"
- Clinicians will remember the change once they are told
  - Once should be enough
  - Clinicians can be more watchful so they will remember to use the new way
- I just need to find the one right way to implement a practice change.
- Implementation is an event.

Leading the way.



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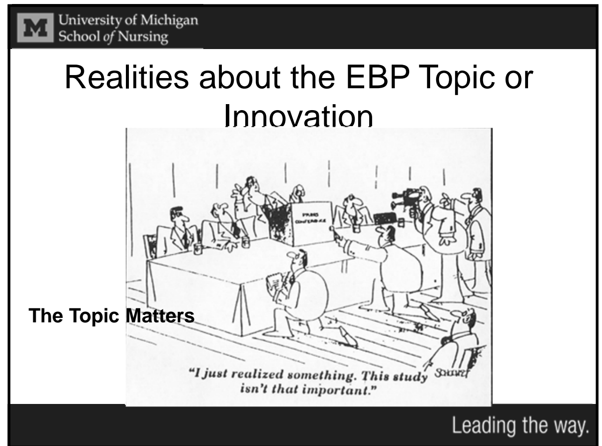
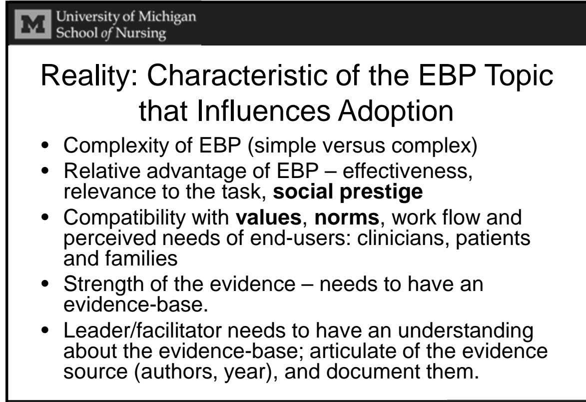
Myths

- Dissemination of trustworthy practice guidelines promotes use of EBPs.
- The evidence is strong, thus clinicians will change their practice – we just have to show them the evidence.
- Clinicians care about the EBP topic (e.g. fall prevention; CAUTI)
- An EBP standard will change practice

Leading the way.





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Reality: Important Principle

- Attributes of the EBP topic as perceived by users and stakeholders (e.g. ease of use, valued part of practice) are neither stable features nor sure determinants of their use.
- Rather it is the interaction among the characteristics of the EBP topic, the intended users, and a particular context of practice that determines the rate and extent of adoption.

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Reality: Strategies for adoption related to characteristics of the EBP topic

- Creating interest and excitement about the EBP topic.
- Practitioner review and use of the EBPs to fit the local context - localization.
- Use of quick reference guides and decision aides
- Use of clinical reminders – CDS; electronic reminders.

(Balas et al, 2004; Berwick, 2003; Bradley et al, 2004; Fung et al, 2004; Grimshaw et al, 2006; Guihan et al, 2004;Wensing, et al, 2006)

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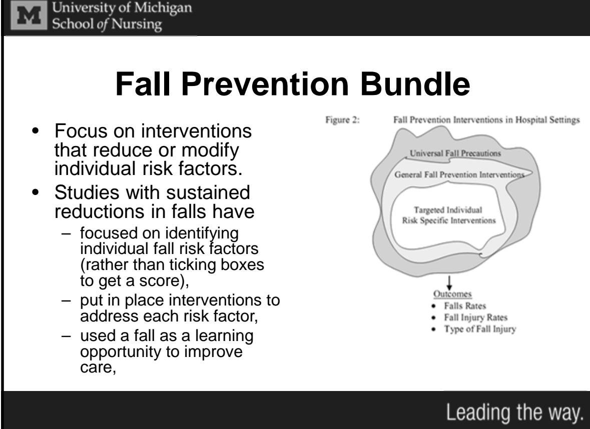

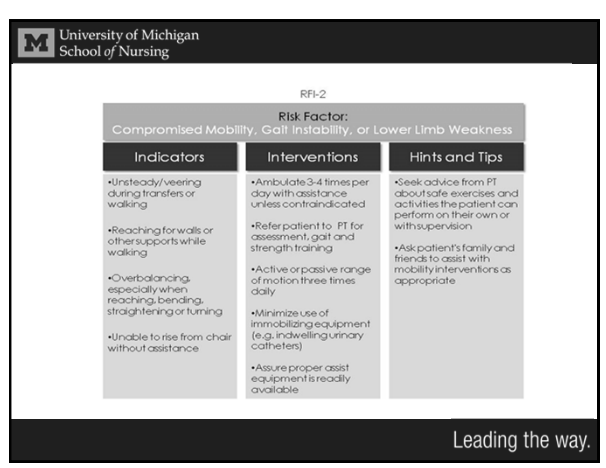

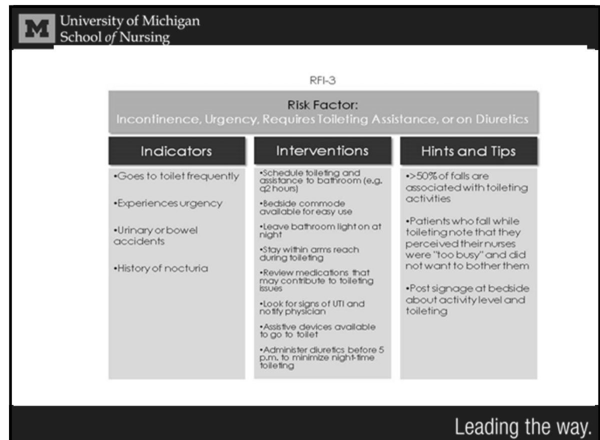

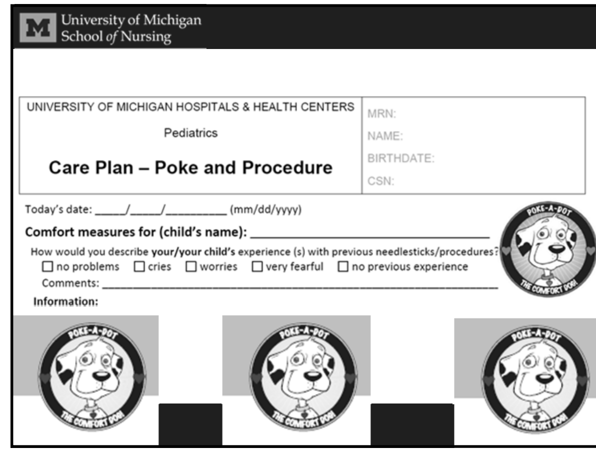

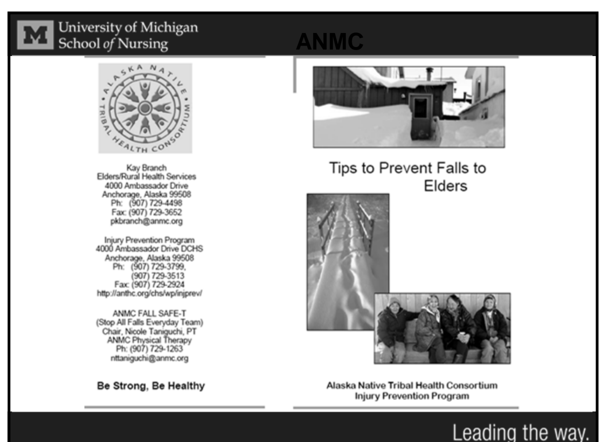

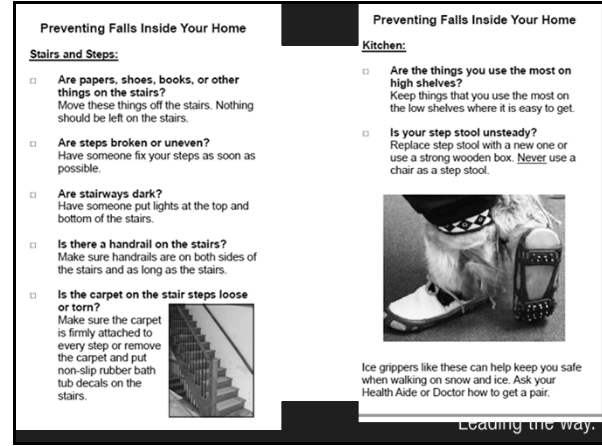

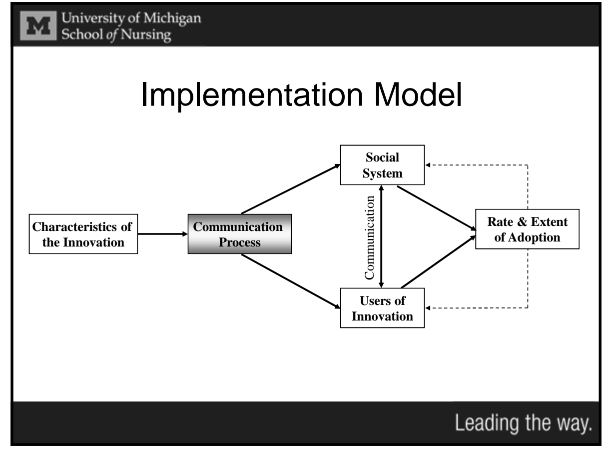

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Myths

- We stay abreast of the latest evidence in our practice.
- It is feasible to know all of the latest evidence for healthcare practice.
- Clinicians learn about new evidence from?
- We just need to educate them about the EBP – didactic presentation preferred.
- Focus on nursing practice

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Realities

- Most clinicians learn about the evidence from a trusted colleague
- Explosion of evidence today: know evidence sources (e.g. AHRQ.gov); use EBP guidelines (critique them 1st)
- Electronic world – use search engines (not just google scholar)
- Education is necessary but not sufficient to change practice (attend to both knowledge and skills)

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Realities

- Interdisciplinary and trans-disciplinary perspective of the EB practice (multiple disciplines)
- Who will be influenced by the EBP? Who will be users of the EBPs? Stakeholders
- Patient centered

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Reality: Communication factors that influence adoption

- Interpersonal communication channels
- Methods of communication
- Social networks of users

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Communication

The Stickiness Factor:

There is a simple way to package information that, under the right circumstances, can be irresistible. Memorable ideas spur us to action. (Gladwell, 200)

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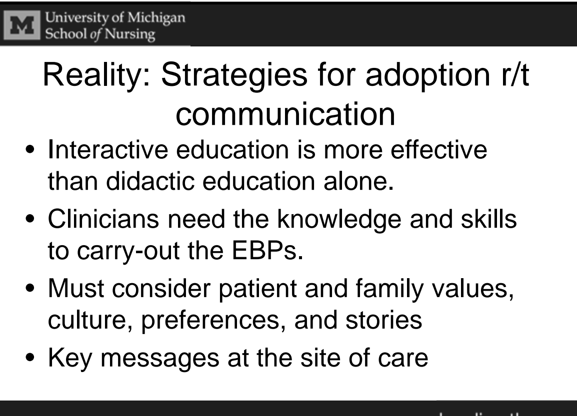
DID YOU KNOW?
Each year, 610 people are hospitalized for Traumatic Brain Injury (TBI) in Alaska
Leading the way.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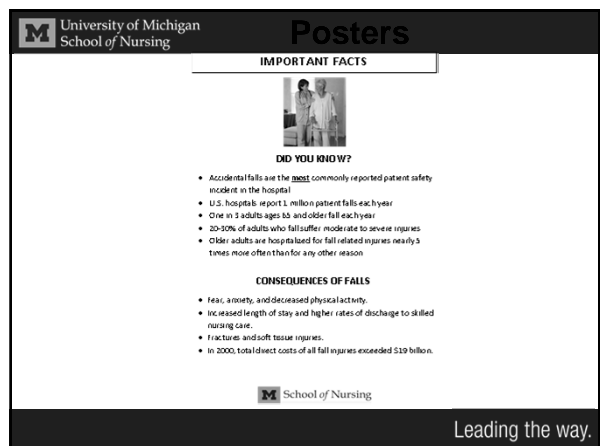
Reality: Strategies for adoption r/t communication
• Interactive education is more effective than didactic education alone.
• Clinicians need the knowledge and skills to carry-out the EBPs.
• Must consider patient and family values, culture, preferences, and stories
• Key messages at the site of care
Leading the way.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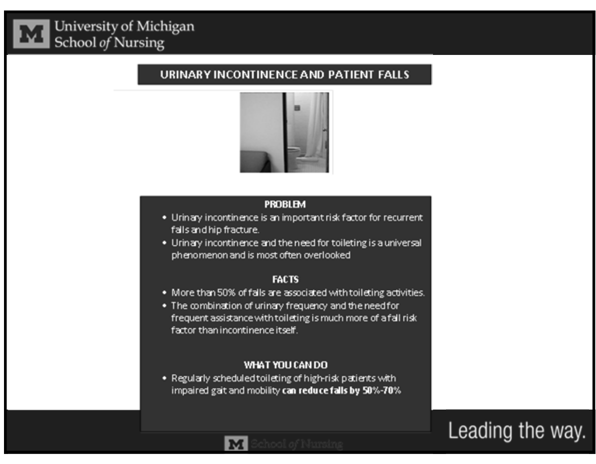
Posters
IMPORTANT FACTS
DID YOU KNOW?
• Accidental falls are the most commonly reported patient safety incident in the hospital
• U.S. hospitals report 1 million patient falls each year
• One in 3 adults ages 65 and older fall each year
• 20-30% of adults who fall suffer moderate to severe injuries
• Older adults are hospitalized for fall related injuries nearly 5 times more often than for any other reason
CONSEQUENCES OF FALLS
• Fear, anxiety, and decreased physical activity.
• Increased length of stay and higher rates of discharge to skilled nursing care.
• Fractures and soft tissue injuries.
• In 2000, total direct costs of all fall injuries exceeded $19 billion.
School of Nursing
Leading the way.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School of Nursing
URINARY INCONTINENCE AND PATIENT FALLS
PROBLEM
• Urinary incontinence is an important risk factor for recurrent falls and hip fracture.
• Urinary incontinence and the need for toileting is a universal phenomenon and is most often overlooked
FACTS
• More than 50% of falls are associated with toileting activities.
• The combination of urinary frequency and the need for frequent assistance with toileting is much more of a fall risk factor than incontinence itself.
WHAT YOU CAN DO
• Regularly scheduled toileting of high-risk patients with impaired gait and mobility can reduce falls by 50%-70%
Leading the way.

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DAYS WITHOUT A PATIENT FALL
Leading the way.

DATA
PREVENTION
STAFF
EDUCATION

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Reality: Communication Strategies

- Opinion leaders
- Change champions – in unit/clinic
- Educational outreach/academic detailing – topic expert; meets one-on-one with practitioners in their setting (“site visits” with rounding)

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Opinion Leaders

- Clinical experts who are influential among their peers and set the standard
- Effective in changing behaviors of clinicians because their colleagues trust them to evaluate the EBP and local situation
- Practitioner within specific discipline, (e.g. RN or MD)

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Identifying an Opinion Leader

- May need an opinion leader from each discipline
- Viewed by colleagues as technically competent
- Well-respected and influential
- Trusted to judge the fit between the innovation and the local situation

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Role of Opinion Leaders

- Model practice
- Influence their peers
- Oversee and plan for education of staff
- Alter the norms or expected behaviors of the group
- Affect organizational structure to support practice

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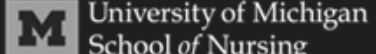

Change Champions

- Practitioners within the local group setting (clinic, unit) who are passionate about promoting the EBP
- Partners with opinion leaders to foster the use of EBPs by their peers, educating and demonstrating use of the new practice in everyday care

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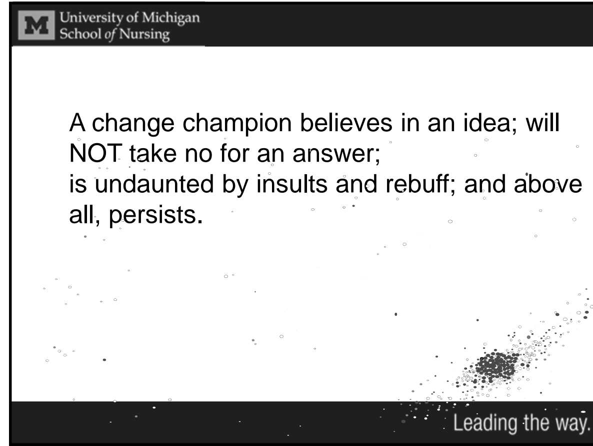

A change champion believes in an idea; will NOT take no for an answer;
is undaunted by insults and rebuff; and above all, persists.

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Selecting Change Champions

- Clinical experts
- Passionate about the EBP topic and committed to providing quality care
- Positive working relationships with other healthcare professionals
- Persistent about implementation of the EBP
- Focus at the unit, clinic, CBO level

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Role of Change Champions

- Encourage peers to adopt the innovation
- Arrange demonstrations
- Orient staff to the EBP
- One-on-one point of care coaching
- Act as "resident expert" in the EBP, modeling the practice
- Coordinate with opinion leaders to foster adoption of the EBPs

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Educational Outreach

- Educated person who meets 1:1 with practitioners in their setting to provide information about the EBPs, address questions, and provide positive comments about aligning practice with the evidence .
- Feedback on provider performance
- Consultation on issues
- Who does this?
- Opinion leader
- **Consistent person/consistent message**

Greenhalgh et al 2005, Feldman et al 2005, Horbar et al 2004, Jones et al 2004, Loeb et al 2004, McDonald et al 2005, Murtaugh et al 2005, Titler et al 2006b, O'Brien et al 1997, Hendryx et al 1998.

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Outreach visits

- *What I was thinking is her site visits. … was very inspirational to the staff. … is very inspiriting and it really motivated people to think outside the box, or "How can we be better at this?"*
- *And after she rounded on the units, we would meet in a room and talk more about our audits that we would provide her and looking at our really risk factors and our interventions and how we were doing with those. That was useful for the team.*

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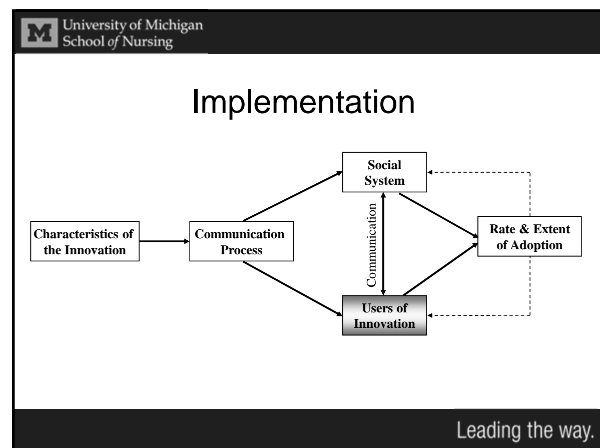
Implementation



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Myths

- Clinicians will adopt EBPs at about the same pace
- I just have to get those resistors on board.
- Focus on the resistors first and others will follow
- "If I build it, they will come" AKA: If I tell them, they will do it!

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The Faces of Resistors

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Reality

"Because implementation of a new practice almost invariably requires changing how things are done, it affects multiple individuals from multiple specialties and their interrelationships"

(Lucian Leape, 2005)

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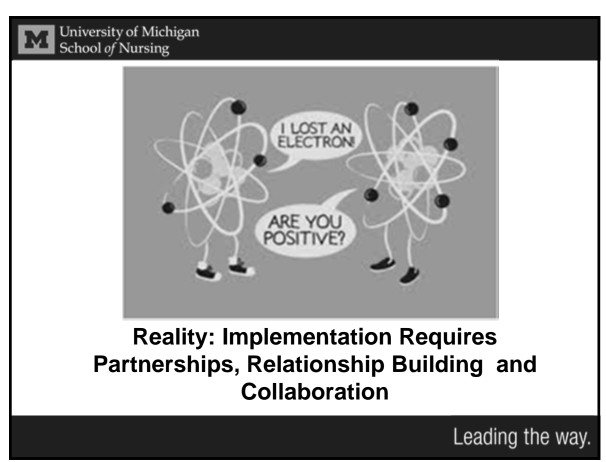

Reality: Implementation Requires Partnerships, Relationship Building and Collaboration

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Reality: Who are/will be the Users of the Evidence-Based Practice

- Nurses
- Physicians
- Patients
- Family caregivers
- Respiratory Therapists
- Physical Therapists
- Pharmacists
- Others

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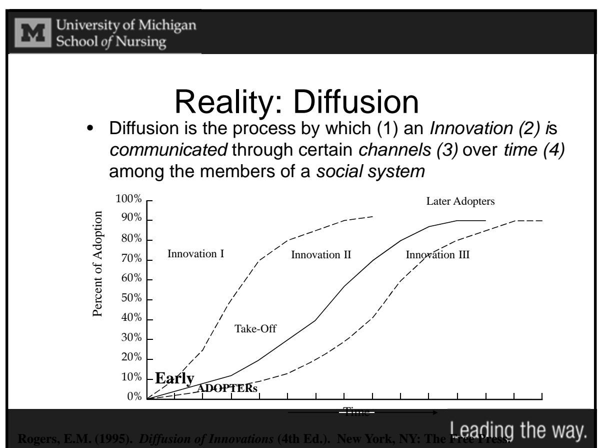

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Reality: Implementation Strategies to address users of the EBP

- Performance gap assessment – beginning of the change; indicators related to EBP topic.
- Audit and feedback – during the practice change. Discussions rather than passive reports
- Trying the practice –plan as part of the implementation process.

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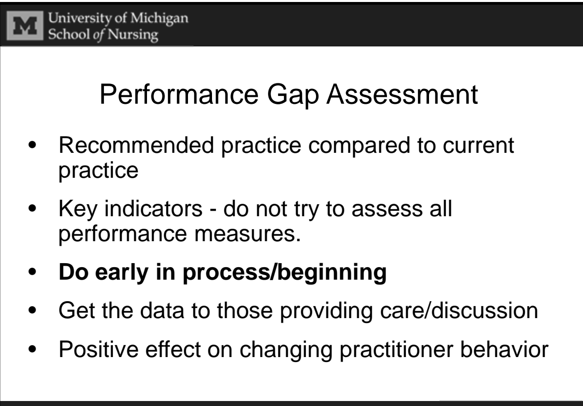

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Performance Gap Assessment – Pain Management

90
80
70
60
50
40
30
20
10
0

ATC analgesia | Pain intensity <3 | Demeraol use | PCA

Benchmark
Hospital A
Hospital B

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Reality: Audit and Feedback

- Effective Strategy
- Improved effectiveness in combination with other strategies
- Keep feedback actionable
- Link with organizational quality improvement structure and processes
- Data perceived by the clinician as important and valid.
- Timely, individualized, non-punitive feedback

Bradly, et al, 2004; BootsMiller, et al., 2004; Dranitsaris, et al., 2001; Dulko, D. 2007; Hysong, et al., 2006; Morrison, et al., 2006; Pineros, et al., 2004; Won, et al., 2004; Wright, et al., 2007

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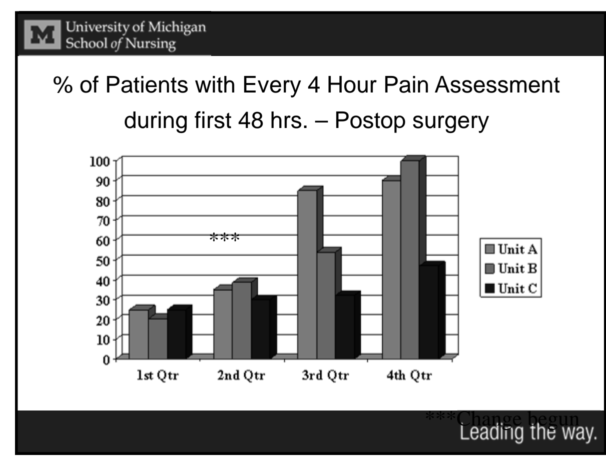
YOUR SPEED
47
Leading the way.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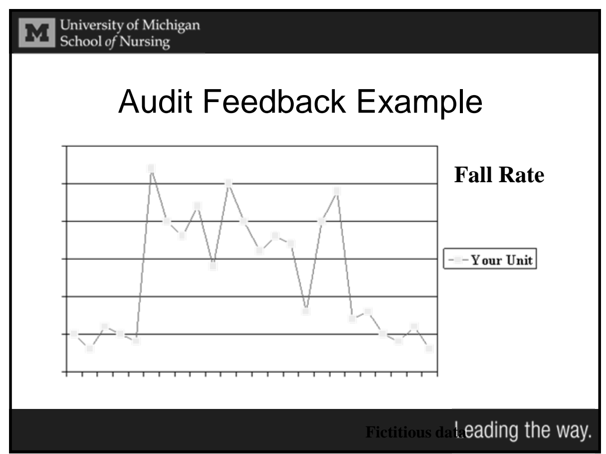
School of Nursing
% of Patients with Every 4 Hour Pain Assessment during first 48 hrs. – Postop surgery
100
90
80
70
60
50
40
30
20
10
0
***
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
Unit A
Unit B
Unit C
***Change begun
Leading the way.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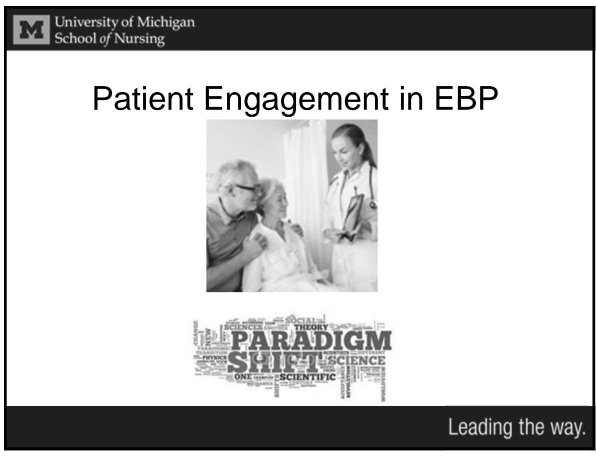
Audit Feedback Example
Fall Rate
Your Unit
Fictitious data
Leading the way.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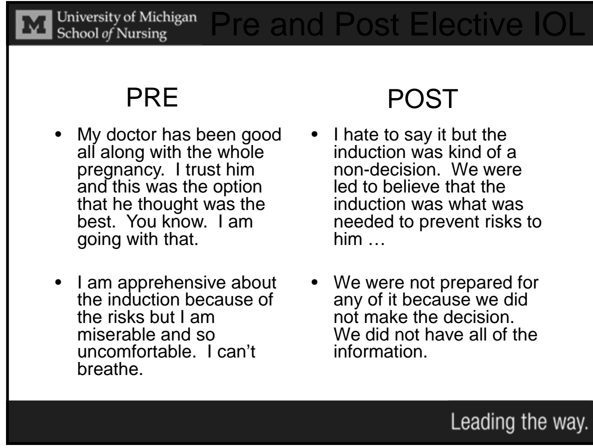
Patient Engagement in EBP
PARADIGM
SHIFT
SCIENCE
SCIENTIFIC
THEORY
Leading the way.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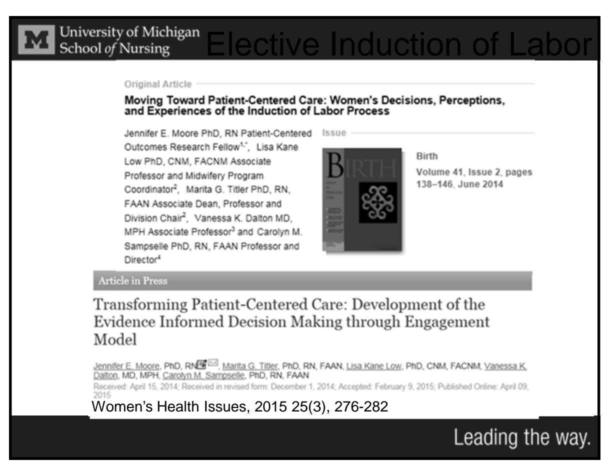
Pre and Post Elective IOL
PRE
POST
• My doctor has been good all along with the whole pregnancy. I trust him and this was the option that he thought was the best. You know. I am going with that.
• I am apprehensive about the induction because of the risks but I am miserable and so uncomfortable. I can't breathe.
• I hate to say it but the induction was kind of a non-decision. We were led to believe that the induction was what was needed to prevent risks to him …
• We were not prepared for any of it because we did not make the decision. We did not have all of the information.
Leading the way.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Elective Induction of Labor
Original Article
Moving Toward Patient-Centered Care: Women's Decisions, Perceptions, and Experiences of the Induction of Labor Process
Jennifer E. Moore PhD, RN Patient-Centered Outcomes Research Fellow[1,*], Lisa Kane Low PhD, CNM, FACNM Associate Professor and Midwifery Program Coordinator[2], Marita G. Titler PhD, RN, FAAN Associate Dean, Professor and Division Chair[2], Vanessa K. Dalton MD, MPH Associate Professor[3] and Carolyn M. Sampselle PhD, RN, FAAN Professor and Director[4]
Issue
BIRTH
Birth
Volume 41, Issue 2, pages 138–146, June 2014
Article in Press
Transforming Patient-Centered Care: Development of the Evidence Informed Decision Making through Engagement Model
Jennifer E. Moore, PhD, RN, Marita G. Titler, PhD, RN, FAAN, Lisa Kane Low, PhD, CNM, FACNM, Vanessa K. Dalton, MD, MPH, Carolyn M. Sampselle, PhD, RN, FAAN
Received: April 15, 2014; Received in revised form: December 1, 2014; Accepted: February 9, 2015; Published Online: April 09, 2015
Women's Health Issues, 2015 25(3), 276-282
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Principles

- Engagement of key stakeholders in EBP is important to address issues important to them.
- Evidence-informed consumers of healthcare is essential part of translating research into practice.
- Engagement of patients in shared decision-making about healthcare treatments is needed to improve quality of care.

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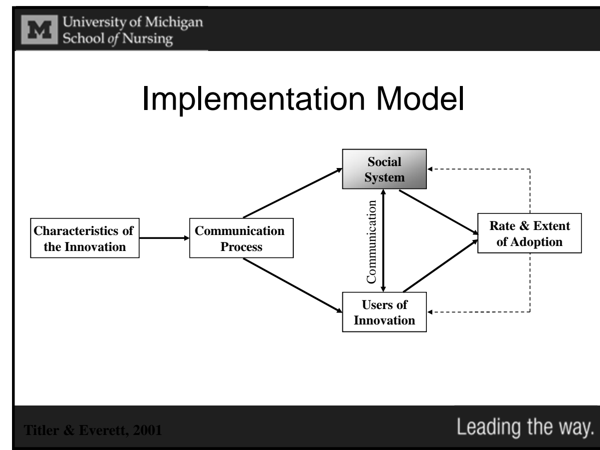

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Myths

- "One size fits all"
- Practice cultures are the same or similar in our organization.
- Changing practice is the NM's responsibility

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Reality: Organizational factors that affect adoption

- Learning culture
- Leadership
- Capacity to evaluate the impact of the EBP during and following implementation
- Effective implementation needs both a receptive climate and a good fit with intended users needs and values

(IOM 2001, McGlynn et al 2003, Stetler 2003, Rogers 2003a, Bradley et al 2004a, Ciliska et al 1999, Morin et al 1999, Fraser 2004a, 2004b, Vaughn et al 2002, Anderson et al 2003, Anderson et al 2004, Anderson et al 2005, Batalden et al 2003, Denis et al 2002, Fleuren et al 2004, Kochevar & Yano 2006, Litaker et al 2006, Cullen et al 2005a Redman 2004, Scott-Findlay & Golden-Biddle 2005)

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Creating Capacity: Learning Organizations

- Successful learning organizations have leaders who are devoted to developing capacity for the future and EBP.
- Development of people in the organization is a major factor of looking beyond the moment, and moving beyond reactive approaches to problems.
- Systems approaches to addressing challenges and opportunities

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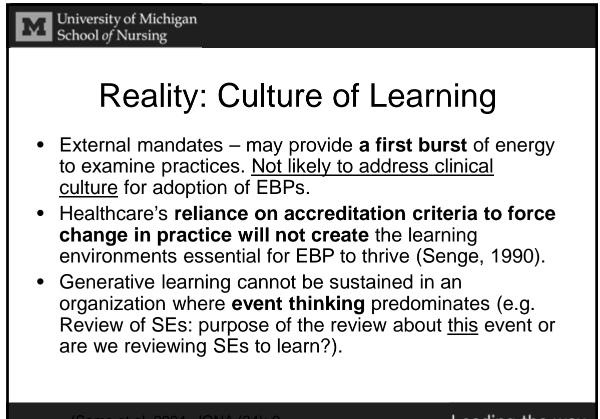

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Reality: Culture of Learning

- External mandates – may provide **a first burst** of energy to examine practices. Not likely to address clinical culture for adoption of EBPs.
- Healthcare's **reliance on accreditation criteria to force change in practice will not create** the learning environments essential for EBP to thrive (Senge, 1990).
- Generative learning cannot be sustained in an organization where **event thinking** predominates (e.g. Review of SEs: purpose of the review about this event or are we reviewing SEs to learn?).

(Sams et al, 2004, JONA (34): 9

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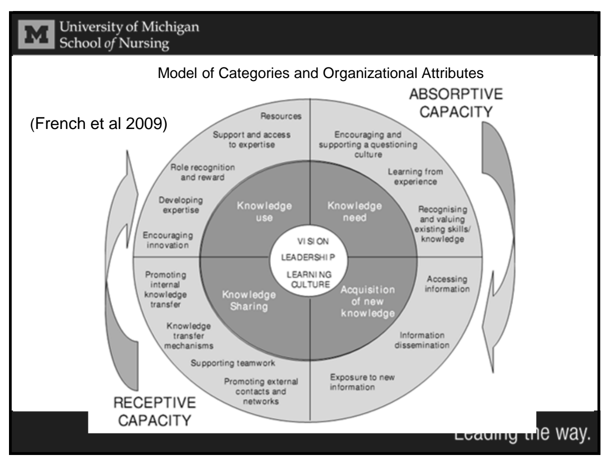

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Reality: Organizational Strategies to Promote Adoption of EBPs

- Professional roles – expect EBP in each role
- Performance criteria aligned with use of EBPs.
- Multidisciplinary teams
- Policies/procedures/documentation
- Technology for knowledge management to support patient care

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Reality: Resources and Governance Structure

- Access to experts
- Knowledge and skills to promote EBP with staff nurses (e.g. APN)
- Know process to follow
- Primary accountability – in which group/committee/council does this work reside?

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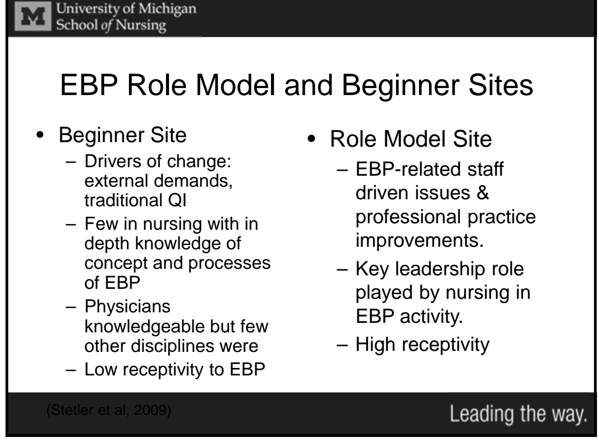

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EBP Role Model and Beginner Sites

- Beginner Site
  - Drivers of change: external demands, traditional QI
  - Few in nursing with in depth knowledge of concept and processes of EBP
  - Physicians knowledgeable but few other disciplines were
  - Low receptivity to EBP
- Role Model Site
  - EBP-related staff driven issues & professional practice improvements.
  - Key leadership role played by nursing in EBP activity.
  - High receptivity

(Stetler et al, 2009)

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"Institutionalize" EBP as a Normal Part of Work (Stetler et al, 2009)

- Role model site: Deliberately and strategically building the capacity to implement and institutionalize EBP over a period of 5 years.
  - Why/motivation for EBP clear
  - How or methods of strategic EBP change
  - What including operationalized infrastructures for EBP
- Beginner site: EBP rarely seen as an ongoing explicit priority or vision.

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Role model site: Context to create and sustain EBP

Management

- Creating and sustaining a clear vision
- Role modeling
- Developing supportive relationships
- Mentoring

Leadership

- Beyond isolated projects
- Fabric of organization
  - Building structures
  - Provision of resources
  - Monitoring progress
  - Providing feedback
  - Changing formal leaders who did not "fit" with the strategic vision.

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Transformative

- *We've really transformed the culture …*
- *I think as a system, we're so much better now*
- *I think this has created a teamwork that I've not seen before.*
- *But I personally feel we've made a much safer place for our patients, because we've made people aware for multiple different ... you know all of the different disciplines that work with the patient are now much more aware of the fall risk of the patient.*

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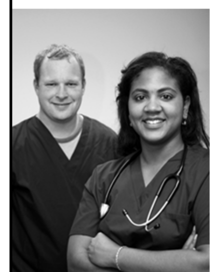
- HIGH PERFORMING UNITS



- Managers of high performing units discussed their active participation in translating research findings to their staff.
  - Part of staff nurse's EBP team
  - Finding the research to support an initiative

Shever et al

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Expectations for Nurse Managers

- Only managers of high performing units (4 of 5) discussed expectations that were set for them - low performing units did not.

Shever et al

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Clinical Context for Evidence-Based Practice
Bridie Kent and Brendan McCormick

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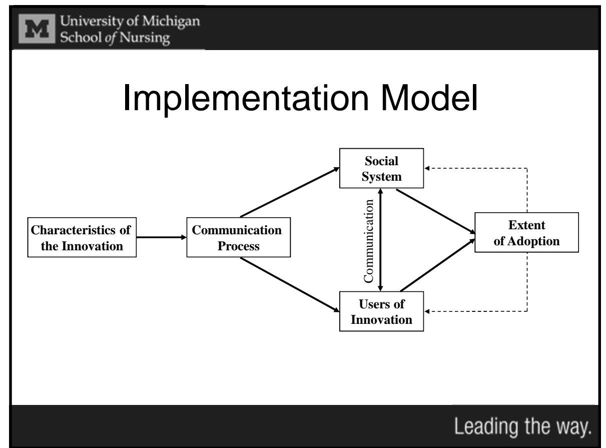

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Reality: Need to Evaluate & Demonstrate Impact

- Outcomes – decrease VAP
- Processes – e.g. oral care, HOB elevated
- Staff knowledge and attitudes
- Cost savings; cost avoidance
- Qualitative impact: patient stories
- Part of QI program

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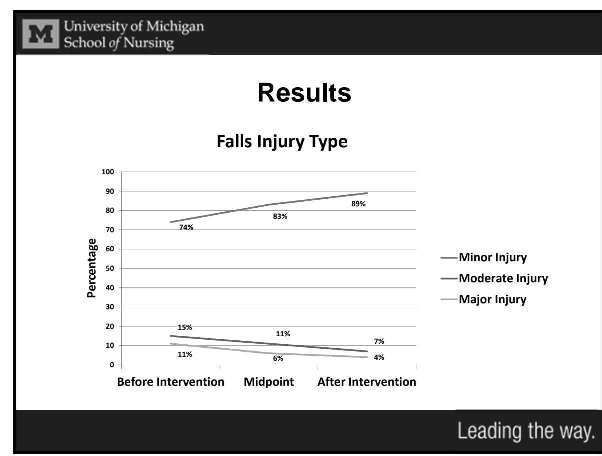

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Summary

- Noted multiple myths about EBP work
- Presented realities of EBP work especially for implementation
- EBP work requires partnerships, teams and engagement of all key stakeholders
- Sticky messages
- Implementation is a process not an event requiring multiple strategies

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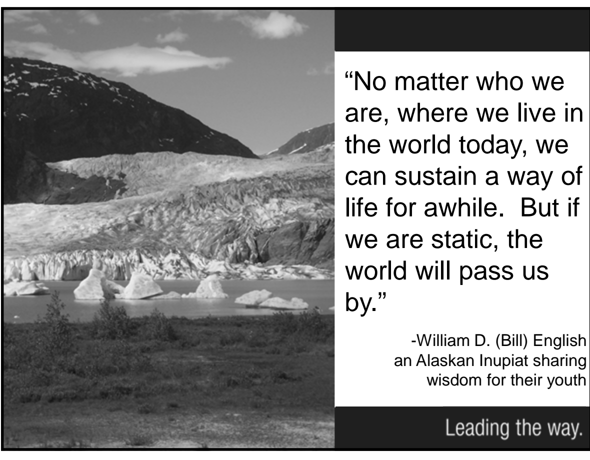

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A Big
THANK
YOU!
Questions and Comments
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