

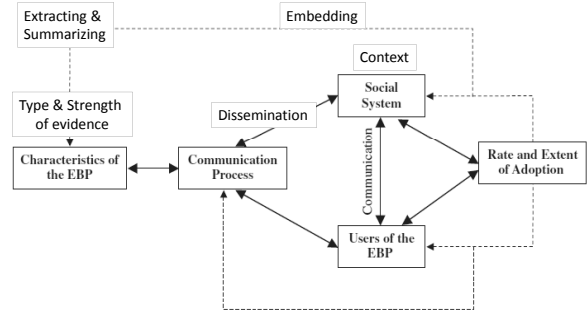
## Strategies to get Evidence into Practice Extracting-Summarizing-Embedding

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Associate Professor  
University of Washington School of Nursing

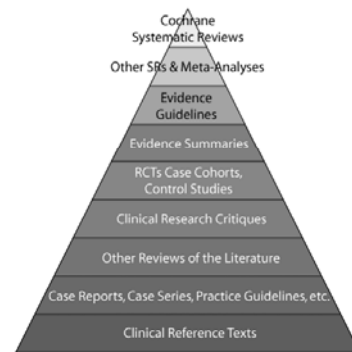
## Implementation Model



Titler 2010

## EXTRACTING

## Levels of Evidence



## PubMed Search

The screenshot shows the PubMed search interface. The search term 'Decubitus ulcer prevention' has been entered. The results are sorted by 'Recently Added' and show 1 to 20 of 4474 results. The first result is 'A New Model of Tracheostomy Care: Closing the Research-Practice Gap' by Clair JS, et al. The interface includes navigation options like 'Page 1 of 224' and 'Next', and filters for 'All (4474)' and 'University of Washington Online (5512)'. There are also sections for 'Clinical Queries results' and 'Titles with your search terms'.

# Meta-Search Engines

## TRIP

## SUMSearch

## SUMSearch

www.sumsearch.org

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### SUMSearch 2

Search **MEDLINE**, **DARE**, and **NGC** for:

Decubitus Ulcer Prevention

Connect search terms with 'AND'.

Focus:  Intervention  Diagnosis  None

Age:  Adult  Pediatrics  Either

Human only:  English only:  Require abstracts:

Max # iterations:  5  6 [Explain](#)

-  - Please click once.

### SUMSearch 2

Original studies
Systematic reviews
Guidelines

989 possible original studies PubMed found after 4 searches. The first 50 citations are:

- 1 **Hospital-acquired pressure ulcer prevalence-evaluating low-air-loss beds.**  
*J Wound Ostomy Continence Nurs* 2011 Jan-Feb;38:1-6. PMID: 21233661 . doi:10.1097/WON.0b013e318202e8bf

*Cite*

*Conclusion:* Seven of 11 HAPUs (63%) occurred in patients placed on low-air-loss beds. The prevalence of HAPU in patients placed on low-air-loss beds was no different from patients placed on standard hospital mattresses implemented by a variety of pressure redistribution devices. Further research is needed to determine the impact of specific strategies on prevention of HAPU.
- 4 **Assessing the adequacy of pressure ulcer prevention in hospitals: a nationwide prevalence survey.**  
*Qual Saf Health Care* 2011; . PMID: 21209147 . doi:10.1136/bmjqs.2010.043124

*Cite*

*Conclusion:* The implementation of pressure ulcer guidelines requires more attention. The pressure ulcer prevention used in practice should be re-evaluated on a regular basis.
- 5 **Effects of Using a High-Density Foam Pad Versus a Viscoelastic Polymer Pad on the Incidence of Pressure Ulcer Development During Spinal Surgery.**  
*Biol Res Nurs* 2010; . PMID: 21196422 . doi:10.1177/1099800410392722

*Cite*

*Conclusion:* However, there was no significant difference between the VP and the HDF pads regarding ulcer prevention. Because the cost of a VP pad is 250 times greater than that of an HDF pad of similar size, the VP pad should only be considered for use in high-risk patients.

### SUMSearch 2

**Original studies**      **Systematic reviews**      **Guidelines**

3 systematic review(s) from [Database of Abstracts of Reviews of Effects \(DARE\)](#) found.  
 286 possible systematic reviews found at PubMed.  
 1 possible systematic reviews found from PubMed ([View at PubMed](#))

Merged list:

1. **Risk assessment tools for the prevention of pressure ulcers.** Cochrane Database of Systematic Reviews: Reviews. 2008 DARE: [10000006471](#) PubMed: [search with title](#)
2. **Support surfaces for pressure ulcer prevention.** Cochrane Database of Systematic Reviews: Reviews. 2008 DARE: [10000001735](#) PubMed: [search with title](#)
3. **[Decubitus ulcer prevention expert standard—excerpts from implementation: on the path to continuous improvements].** Pilegr Z. 2007 PMID: [17416186](#) (DARE summary if available), Cite

### Evaluation of an Individual Study

- **What was the purpose of the study?**
  - Was it clear and easy to understand?
- **Who was studied**
  - What were the inclusion/exclusion criteria?
  - How were the subjects randomized?
  - Were the groups balanced in any way?
- **Intervention/Control**
  - What was the intervention – was it clearly outlined?
  - Were there any factors left out that would have been useful in understanding how the study was undertaken?
  - **Could you replicate the study given the information provided?**
- **Outcome variables**
  - What were the outcome variables?
  - Did the outcomes allow the investigators to meet the objectives of the study?
- **Results**
  - What were the results of the study?
  - Were the results supported by the data?
  - Do you agree with the interpretation of the results?
- **Implications**
  - **How would you apply this information in your practice (is it feasible)?**
  - **Would you recommend this article/clinical practice to your colleagues?**

**EVIDENCE-BASED PRACTICE Step by Step**

By Ellen Fineout-Overholt, PhD, RN, FAAP, FAAN, Bernadette Mazurek Melnyk, PhD, RN, CPNP/Pediatric, FAAP, Susan B. Silliman, DNP, RN, CNE, and Kathleen M. Williamson, PhD, RN

**Searching for the Evidence**  
*Strategies to help you conduct a successful search.*

**Critical Appraisal of the Evidence: Part I**  
*An introduction to gathering, evaluating, and recording the evidence.*

**Critical Appraisal of the Evidence: Part II**  
*Digging deeper—examining the “keeper” studies.*

**Critical Appraisal of the Evidence: Part III**  
*The process of synthesis: seeing similarities and differences across the body of evidence.*

## SUMMARIZING

### Summary Table

| Study Info   | Purpose   | Sample  | Intervention   | Outcomes   | Results   | Feasibility/use   |
|--------------|---|---|--|--|---|---|
| Meade (2006) | Q1-2 hr rounds on pt satisfaction and safety  | 14 hospitals  | 1-2 hour rounds                                      | Patient satisfaction                                 | ↓ Falls<br>↓ Call light use<br>↑ Patient satisfaction | No details on rollout of intervention   |
| Woodward     | Decrease patient uncertainty regarding nurse availability, fall rates, satisfaction, call light use | ? Not specified   | 1-2 hour rounds<br>Charge Nurse completed rounds 4Ps | Patient satisfaction<br>Falls<br>Charge nurse survey | ↓ Falls<br>↓ Call light use<br>↑ Patient satisfaction | ?Charge nurse Theoretical framework<br>No survey of charge nurse satisfaction |
| Gardner      | Test model of practice that optimized the role of HA<br>Test hourly rounds                          | Med-surg Australia<br>123 pts (68 experimental ward/61 control) | Q1 hr rounds by HA<br>Standardized protocol          | Pt satisfaction<br>Practice environment              | Pt satisfaction (NS)                                  | Pt satisfaction survey developed<br>No benefit from intervention              |

| Grade of Recommendation   | Benefits vs Risk & Burdens  | Methodological Quality  |
|---|---|---|
| 1A: Strong recommendations/high-quality evidence                    | Benefits clearly outweigh risk and burdens or vice versa  | RCTs without important limitations or overwhelming evidence from observational studies  |
| 1B: Strong recommendation moderate quality evidence                 | Benefits clearly outweigh risk and burdens, or vice versa   | RCTs with important limitations (inconsistent results, methodological flaws, indirect or imprecise) or exceptionally strong evidence from observational studies |
| 1C: Strong Recommendation, low quality or very low quality evidence | Benefits clearly outweigh risk and burdens, or vice versa   | Observational studies or case series  |
| 2A: Weak recommendation, high quality evidence                      | Benefits closely balanced with risk and burden  | RCTs without important limitations or overwhelming evidence from observational studies  |
| 2B: Weak recommendation, moderate quality evidence                  | Benefits closely balanced with risk and burden  | RCTs with important limitations (inconsistent results, methodological flaws, indirect or imprecise) or exceptionally strong evidence from observational studies |
| 2C: Weak recommendation, low quality or very low quality evidence   | Uncertainty in the estimates of benefits, risks and burden: benefits, risk and burden may be closely balanced | Observational studies or case series  |

Guyatt C, et al. Grading Strength of Recommendations and Quality of Evidence in Clinical Guidelines. Report From an American College of Chest Physicians Task Force. *CHEST* 2006; 129:174-181

### Stetler: Levels of Evidence

| Level and Quality of Evidence | Type of Evidence  |
|-------------------------------|---|
| I                             | Meta analysis or systematic review of multiple controlled studies or clinical trials  |
| II                            | Individual experimental studies with randomization  |
| III                           | Quasi-experimental studies (nonrandomized controlled single group, pre-post, cohort, time series, or matched case design)     |
| IV                            | Nonexperimental studies, such as comparative and correlational descriptive research as well as qualitative studies            |
| V                             | Program evaluation, research utilization, quality improvement projects, case reports, or benchmark data                       |
| VI                            | Opinions of respected authorities or the opinions of expert committee – may include textbooks and clinical product guidelines |

### American Association of Critical Care Nurses Evidence-Leveling System

|         |   |
|---------|---|
| Level A | Meta-analysis of multiple controlled studies or meta-synthesis of qualitative studies with results that consistently support a specific action, intervention or treatment |
| Level B | Well designed controlled studies, both randomized and nonrandomized, with results that consistently support a specific action, intervention, or treatment                 |
| Level C | Qualitative studies, descriptive or correlational studies, integrative reviews, systematic reviews, or randomized controlled trials with inconsistent results             |
| Level D | Peer-reviewed professional organizational standards, with clinical studies to support recommendations   |
| Level E | Theory-based evidence from expert opinion or multiple case reports  |
| Level M | Manufacturers' recommendations only   |

Armola Crit Care Nurse 2009

# EMBEDDING

## Evidence-Based Policies and Procedures



Policy and Procedure Manual

References: Guidelines for Documenting

N-A-13.003

### A. Research References:

Research references should be footnoted as R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, etc. in the body of the policy, procedure or document where the citation takes place. Specific footnote information should then be listed at the end of the document.

Example:

#### Research References:

- R<sub>1</sub> Goode, C.J., Titler, M., Rakel, B., Ones, K.S., Kleiber, C., Small, S., & Triolo, P.K. (1991). A meta-analysis of effects of heparin flush and saline flush: Quality and cost implications. *Nursing Research*, 40, 423-430.

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### B. Literature References:

Literature references can be cited in two ways:

1. If an entire document is based on an article(s), the literature reference may be noted as such at the end of the document.
2. If a specific statement or section is based on information in the literature, that section should be footnoted as L<sub>1</sub>, L<sub>2</sub>, etc. with the specific footnote information noted at the end of the document.

Example:

#### Literature References:

- L<sub>1</sub> Danek, G.D. & Norris, E.M. (1992). Pediatric IV catheters: Efficacy of saline flush. *Pediatric Nursing*, 10(2), 111-113.

### C. National Guideline References:

1. If an entire document is based on published guidelines, the National Guideline Reference may be noted as such at the end of the document.
2. If a specific statement or section is based on information in the guideline, that section should be footnoted as N1, N2, etc. with the specific footnote information noted at the end of the document.

Example:

- N1 Herr, K. et al. (2000). *Evidence-Based Guideline: Acute Pain Management in the Elderly*. AHRQ #1R01 HS10482-01. Agency for Healthcare Research and Quality.

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## What About Checklists?

THE CHECKLIST MANIFESTO • HOW TO GET THINGS RIGHT

ATUL GAWANDE

BESTSELLING AUTHOR OF  
RETURN AND COMPLICATIONS



## What About Checklists?

A checklist is 'a formal list used to identify, schedule, compare or verify a group of elements or . . . used as a visual or oral aid that enables the user to overcome the limitations of short-term human memory' (Weiser 2010)

A checklist is a list of action items, tasks or behaviors arranged in a consistent manner, which allows the evaluator to record the presence or absence of the individual items listed. A sound checklist highlights the essential criteria that should be considered in a particular area. (Hales 2008)

**ATUL GAWANDE**  
BESTSELLING AUTHOR OF  
*REFUSE AND COMPLICATIONS*  
Disruptive Medicine



| World Health Organization<br><b>SURGICAL SAFETY CHECKLIST (FIRST EDITION)</b>   |  |   |
|---|--|---|
| Before induction of anaesthesia   | Before skin incision   | Before patient leaves operating room  |
| <b>SIGN IN</b><br><input type="checkbox"/> PATIENT HAS CONFIRMED<br>• IDENTITY<br>• SITE<br>• PROCEDURE<br>• CONSENT<br><input type="checkbox"/> SITE MARKED/NOT APPLICABLE<br><input type="checkbox"/> ANAESTHESIA SAFETY CHECK COMPLETED<br><input type="checkbox"/> PULSE OXIMETER ON PATIENT AND FUNCTIONING<br>DOES PATIENT HAVE A:<br>KNOWN ALLERGY?<br><input type="checkbox"/> NO<br><input type="checkbox"/> YES<br>DIFFICULT AIRWAY/ASPIRATION RISK?<br><input type="checkbox"/> NO<br><input type="checkbox"/> YES AND EQUIPMENT/ASSISTANCE AVAILABLE<br>RISK OF +500ML BLOOD LOSS<br>(CHILDEN IN CHILDREN)?<br><input type="checkbox"/> NO<br><input type="checkbox"/> YES AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED | <b>TIME OUT</b><br><input type="checkbox"/> CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE<br><input type="checkbox"/> SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM<br>• PATIENT<br>• SITE<br>• PROCEDURE<br>ANTICIPATED CRITICAL EVENTS<br><input type="checkbox"/> SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNSPECIFIED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?<br><input type="checkbox"/> ANAESTHESIA TEAM REVIEWS: ARE THERE ANY PATIENT-SPECIFIC CONCERNS?<br><input type="checkbox"/> NURSING TEAM REVIEWS: HAS STERILITY INCLUDING INDICATOR RESULTS BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS?<br>HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NOT APPLICABLE<br>IS ESSENTIAL IMAGING DISPLAYED?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NOT APPLICABLE | <b>SIGN OUT</b><br><input type="checkbox"/> NURSE VERBALLY CONFIRMS WITH THE TEAM<br><input type="checkbox"/> THE NAME OF THE PROCEDURE RECORDED<br><input type="checkbox"/> THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT (OR NOT APPLICABLE)<br><input type="checkbox"/> HOW THE SPECIMEN IS LABELLED (INCLUDING PATIENT NAME)<br><input type="checkbox"/> WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED<br><input type="checkbox"/> SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT |
| THIS CHECKLIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONS AND MODIFICATIONS TO FIT LOCAL PRACTICE ARE ENCOURAGED.   |  |   |

## Rules from the Aviation Industry

- Succinct items (✓ vs algorithm or procedure)
- No more than 1 page
- Sentences simple and clear, yet maintain professional language of the field
- Cluttering and coloring is limited
- Items amenable to verbal confirmation
- **Checklists associated with actions that allow corrections or modifications to ensure safety**

Hales 2008/Weiser 2010/Winters 2010

| World Health Organization<br><b>SURGICAL SAFETY CHECKLIST (FIRST EDITION)</b>   |  |   |
|---|--|---|
| Before induction of anaesthesia   | Before skin incision   | Before patient leaves operating room  |
| <b>SIGN IN</b><br><input type="checkbox"/> PATIENT HAS CONFIRMED<br>• IDENTITY<br>• SITE<br>• PROCEDURE<br>• CONSENT<br><input type="checkbox"/> SITE MARKED/NOT APPLICABLE<br><input type="checkbox"/> ANAESTHESIA SAFETY CHECK COMPLETED<br><input type="checkbox"/> PULSE OXIMETER ON PATIENT AND FUNCTIONING<br>DOES PATIENT HAVE A:<br>KNOWN ALLERGY?<br><input type="checkbox"/> NO<br><input type="checkbox"/> YES<br>DIFFICULT AIRWAY/ASPIRATION RISK?<br><input type="checkbox"/> NO<br><input type="checkbox"/> YES AND EQUIPMENT/ASSISTANCE AVAILABLE<br>RISK OF +500ML BLOOD LOSS<br>(CHILDEN IN CHILDREN)?<br><input type="checkbox"/> NO<br><input type="checkbox"/> YES AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED | <b>TIME OUT</b><br><input type="checkbox"/> CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE<br><input type="checkbox"/> SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM<br>• PATIENT<br>• SITE<br>• PROCEDURE<br>ANTICIPATED CRITICAL EVENTS<br><input type="checkbox"/> SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNSPECIFIED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?<br><input type="checkbox"/> ANAESTHESIA TEAM REVIEWS: ARE THERE ANY PATIENT-SPECIFIC CONCERNS?<br><input type="checkbox"/> NURSING TEAM REVIEWS: HAS STERILITY INCLUDING INDICATOR RESULTS BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS?<br>HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NOT APPLICABLE<br>IS ESSENTIAL IMAGING DISPLAYED?<br><input type="checkbox"/> YES<br><input type="checkbox"/> NOT APPLICABLE | <b>SIGN OUT</b><br><input type="checkbox"/> NURSE VERBALLY CONFIRMS WITH THE TEAM<br><input type="checkbox"/> THE NAME OF THE PROCEDURE RECORDED<br><input type="checkbox"/> THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT (OR NOT APPLICABLE)<br><input type="checkbox"/> HOW THE SPECIMEN IS LABELLED (INCLUDING PATIENT NAME)<br><input type="checkbox"/> WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED<br><input type="checkbox"/> SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT |
| THIS CHECKLIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONS AND MODIFICATIONS TO FIT LOCAL PRACTICE ARE ENCOURAGED.   |  |   |

**SAFE  
PATIENTS,  
SMART  
HOSPITALS**

How One Doctor's Checklist  
Can Help Us Change Health Care  
from the Inside Out

Peter Pronovost, M.D., Ph.D.,  
and Eric Vohr

**Technical work** answers problems with known answers and is skill and knowledge based

- Easy to identify
- Often lend themselves to quick and easy solutions
- Often solved by an authority or expert
- Requires change in just one or a few places; often contained within organizational boundaries
- People are generally receptive to technical solutions
- Solutions can often be implemented quickly – even by edict

Heifetz & Laurie Harvard Business Review 1997

**Adaptive work** is required when our deeply held beliefs are challenged, when the values that made us successful before become less relevant and when legitimate, yet competing perspectives emerge

- Difficult to identify (easy to deny)
- Require changes in values, beliefs, roles, relationships and approaches to work
- People with the problem do the work of solving it
- Require change in numerous places; usually crosses organizational boundaries
- People often resist even acknowledging adaptive challenges
- Solutions require experiments and new discoveries; they can take a long time to implement and cannot be implemented by edict

**Heifetz & Laurie - Harvard Business Review 1997**

| Leading Change            |   |  |   |
|---------------------------|---|--|---|
|                           | Executive Leaders   | Team Leaders   | Staff   |
| <b>Engage adaptive</b>    | <p><b>How Do I Make the World a Better Place?</b></p> <ul style="list-style-type: none"> <li>➤ How do I create an organization that is safe for patients and rewarding for staff?</li> <li>➤ How does this strategy fit our mission?</li> </ul>   | <p><b>How Do I Make the World a Better Place?</b></p> <ul style="list-style-type: none"> <li>➤ How do I create a unit that is safe for patients and rewarding for staff?</li> <li>➤ How do I touch their hearts?</li> </ul>  | <p><b>How Do I Make the World a Better Place?</b></p> <ul style="list-style-type: none"> <li>➤ Do I believe I can change the world, starting with my unit?</li> <li>➤ Can I help make my unit safer for patients and a better place to work?</li> </ul>                           |
| <b>Educate technical</b>  | <p><b>What Do I Need to Know?</b></p> <ul style="list-style-type: none"> <li>➤ What is the business case?</li> <li>➤ How do I engage the Board and Medical Staff?</li> <li>➤ How can I monitor progress?</li> </ul>   | <p><b>What Do I Need to Know?</b></p> <ul style="list-style-type: none"> <li>➤ What is the evidence?</li> <li>➤ Do I have executive and medical staff support?</li> <li>➤ Are there tools to help me develop a plan?</li> </ul>  | <p><b>What Do I Need to Know?</b></p> <ul style="list-style-type: none"> <li>➤ Why is this change important?</li> <li>➤ How are patient outcomes likely to improve?</li> <li>➤ How does my daily work need to change?</li> <li>➤ Where do I go for support?</li> </ul>            |
| <b>Execute adaptive</b>   | <p><b>What Do I Need to Do?</b></p> <ul style="list-style-type: none"> <li>➤ Do the Board and Medical Staff support the plan and have the skills and vision to implement?</li> <li>➤ How do I know the team has sufficient resources, incentives and organizational support?</li> </ul> | <p><b>What Do I Need to Do?</b></p> <ul style="list-style-type: none"> <li>➤ Do the Staff know the plan and do they have the skills and commitment to implement?</li> <li>➤ Have we tailored this to our environment?</li> </ul>   | <p><b>What Do I Need to Do?</b></p> <ul style="list-style-type: none"> <li>➤ Can I be a better team member and team leader?</li> <li>➤ How can I share what I know to make care better?</li> <li>➤ Am I learning from defects?</li> </ul>   |
| <b>Evaluate technical</b> | <p><b>How Will I Know I Made a Difference?</b></p> <ul style="list-style-type: none"> <li>➤ Have resources been allocated to collect and use safety data?</li> <li>➤ Is the work climate better?</li> <li>➤ Are patients safer?</li> <li>➤ How do I know?</li> </ul>                    | <p><b>How Will I Know I Made a Difference?</b></p> <ul style="list-style-type: none"> <li>➤ Have I created a system for data collection, unit level reporting, and using data to improve?</li> <li>➤ Is the work climate better?</li> <li>➤ Are patients safer?</li> <li>➤ How do I know?</li> </ul> | <p><b>How Will I Know I Made a Difference?</b></p> <ul style="list-style-type: none"> <li>➤ What is our unit level report card?</li> <li>➤ Is the unit a better place to work?</li> <li>➤ Is teamwork better?</li> <li>➤ Are patients safer?</li> <li>➤ How do I know?</li> </ul> |
|                           |   |  | © Quality and Safety Research Group, Johns Hopkins University   |

| What's In It For Me?  |           |
|---|-----------|
| Risk of SARS Associated with Inconsistent Use of PPE (Lau 2004) |           |
| <b>PPE</b>  | <b>OR</b> |
| N95 mask or paper facemask                                      | 2.0       |
| Goggles   | 6.4       |
| Gown  | 8.9       |
| Gloves  | 20.5      |
| <b># Equipment inconsistently used and caring for SARS pt</b>   |           |
| • 0   | 1.0       |
| • 1 to 2  | 5.4       |
| • ≥ 3   | 7.9       |
| <b># Equipment inconsistently used /caring for general pt</b>   |           |
| • 0   | 1.0       |
| • 1 to 2  | 4.9       |
| • ≥ 3   | 10.8      |

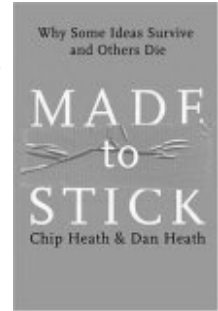
## The Law of Epidemics

- **The Power of Context**
  - "Epidemics are sensitive to the conditions and circumstances of the times and places in which they occur."
- **The Stickiness Factor**
  - The specific content of a message that renders its impact memorable
- **The Law of the Few**
  - "The success of any kind of social epidemic is heavily dependent on the involvement of people with a particular and rare set of social gifts."
  - 80/20 rule

Gladwell: The Tipping Point

## Making Your Message Sticky SUCCESS

- Principle 1. **Simplicity**
- Principle 2. **Unexpectedness**
- Principle 3. **Concreteness**
- Principle 4. **Credibility**
- Principle 5. **Emotions**
- Principle 6. **Stories**



INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY MAY 2009, VOL. 30, NO. 5

ORIGINAL ARTICLE

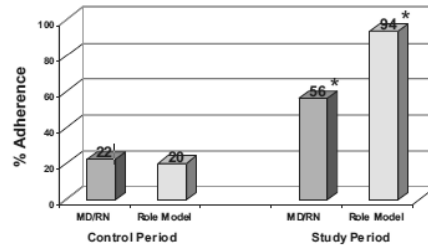
### A Qualitative Exploration of Reasons for Poor Hand Hygiene Among Hospital Workers: Lack of Positive Role Models and of Convincing Evidence That Hand Hygiene Prevents Cross-Infection

- **MDs**
  - **Importance of hand hygiene for self-protection**
  - Lack of evidence for efficacy of hand hygiene in preventing cross infection
- **RN/MDs**
  - **Personal beliefs about efficacy of hand hygiene**
  - **Norms provided by senior hospital staff**
    - "If you arrive here and no one washes their hands...yes, I think you copy that behavior. You think that's what they do so that must be right"
- **Medical Students**
  - **Copy behaviors of their superiors – including noncompliance**

Erasmus *Infect Control Hosp Epidemiol* 2009; 30:415-419

### Hand hygiene adherence is influenced by the behavior of role models

James Schneider, MD; David Moromisato, MD; Beth Zemetra, RN; Lisa Rizzi-Wagner, RN; Niurka Rivero, MD; Wilbert Mason, MD; Florida Imperial-Perez, RN; Lawrence Ross, MD



Pediatr Crit Care Med 2009 10 (3): 360-363





## References

- Armola RR et al. AACN levels of evidence: What's new? *Crit Care Nurse*, 2009, 29, 70-73
- Fan E et al. How to use an article about quality improvement. *JAMA*, 2010, 304(20), 2279
- Goeschel CA. Nursing leadership at the crossroads: Michigan--minimizing catheter related blood stream infections. *Nursing in Critical Care*, 2011, 16(1), 35
- Hales B et al. Development of medical checklists for improved quality of patient care. *International Journal for Quality in Health Care* 2008; 20 (1), 22-30
- Heifetz RA, Lurie DL. The work of leadership. *Harvard Business Review*, 1997 (Jan-Feb), 124-134
- Pronovost P, et al. The Science of Translating Research into Practice in Intensive Care. *Am J Resp Crit Care Med*, 2010, 182, 1463
- Titter MG. Translation science and context. *Research and Theory for Nursing Practice*: 2010, 24(1), 35-55
- Weiser TG. Perspectives in quality: designing the WHO Surgical Safety Checklist. *International Journal for Quality in Health Care* 2010; 22(5), 365-370
- Winters BD et al. Clinical review: Checklists - translating evidence into practice. *Critical Care* 2009, 13:210

### AJN – EBP Series

- Melnyk BM et al. Evidence-based practice: step by step: igniting a spirit of inquiry: an essential foundation for evidence-based practice. *Am J Nurs*. 2009 Nov;109(11):49-52.
- Melnyk BM, et al. Evidence-based practice: step by step: the seven steps of evidence-based practice. *Am J Nurs*. 2010 Jan;110(1):51-3
- Stillwell SB, et al. Evidence-based practice, step by step: asking the clinical question: a key step in evidence-based practice. *Am J Nurs*. 2010 Mar;110(3):58-61
- Stillwell SB, et al. Evidence-based practice, step by step: searching for the evidence. *Am J Nurs*. 2010 May;110(5):41-7
- Fineout-Overholt E et al. Evidence-based practice step by step: Critical appraisal of the evidence: part I. *Am J Nurs*. 2010 Jul;110(7):47-52.
- Fineout-Overholt E et al. Evidence-based practice, step by step: critical appraisal of the evidence: part II: digging deeper--examining the "keeper" studies. *Am J Nurs*. 2010 Sep;110(9):41-8
- Fineout-Overholt E et al, Evidence-based practice, step by step: Critical appraisal of the evidence: part III. *Am J Nurs*. 2010 Nov;110(11):43-51
- Fineout-Overholt E et al. Following the evidence: planning for sustainable change. *Am J Nurs*. 2011 Jan;111(1):54-60