The Challenge: Bringing the Evidence to the Bedside”

Linda R. Greene, RN, MPS,CIC
Manager, Infection Prevention
UR Highland Hospital
Rochester, NY
linda_greene@urmc.rochester.edu

Objectives

- Discuss why evidence based practices are not always followed
- Describe why technical and cultural aspects of infection prevention are important
- Identify ways to bring evidence to the bedside
Given the complexities inherent in translating evidence into practice, evidence-based practices are unfortunately not necessarily immediately applied in patient care settings.

Studies suggest that certain infection prevention practices are not commonly used in some hospitals, even with evidence demonstrating that these practices substantially reduce infection risk.

“While most hospitals have polices in place to prevent health care-associated infections, clinicians often fail to follow evidence-based guidelines established to prevent these infections.”


**Gaps in Practice**

- Identified ambiguity
- Uncertainty
- Lack of norms and expectations
- Guideline characteristics—not easy to use, not convenient, cumbersome, confusing
Why Don’t We Do It?

Broken Escalator

Bridging the Gap

Technical Work

Adaptive Work (CUSP)

Sweet Spot
Technical Work

- Can be solved with existing science or technology “knowledge based”
- Issues or challenges for which there is “an answer”
- Examples:
  - Summarizing the evidence
  - Educating staff and senior leaders
  - Evaluation: Are patients safer?

Heifetz, Leadership Without Easy Answers

Adaptive Challenges

- Require a change of values, attitudes or beliefs
- “Behavior based”
- Examples:
  - Engagement
  - Execution
Chasing Zero Infections: Strategies to Reduce CAUTI & CLABSI

March 9, 2016

Florida Hospital Association

Basic Framework

- Engage
- Evaluate
- Educate
- Execute

First Step

- Engaging staff
- Most people need to feel what they are doing is important
- They need to “connect the dots between processes and outcomes”
Engagement

1. **Connection** refers to how far people see and feel a link between what matters to them and what matters to the organisation.
2. **Content** refers to how far the actual tasks people do are enjoyable and challenge them.
3. **Context** is how far the way the organisation operates and the physical environment in which people work make them feel supported.
4. **Climate** refers to how far the way we do things around here encourages people to give of their best.


Engaging: Administration

- Align project and institutional aims and existing projects
- Executive adoption
- Skin in the game
Must Connect to Both the Mind and the Heart

Evidence and data win the mind

Stories win the heart

There is nothing more compelling than telling a story!

The Power of Connection

"Facts bring us to knowledge, but stories lead to wisdom."

Dr. Rachel Naomi Remen
“Plans and actions should always focus on others’ hearts as much or more than their minds. Behaving with passion, conviction, optimism, urgency, and a steely determination will trump an analytically brilliant memo every time.”
Examples

Plastics Rounds

The Team:

- Nurse manager or charge nurse
- Infection Prevention
- MD
- Nurses caring for the patient

Why Call Them “Plastics Rounds”
Expected Outcome

- Enhance and hardwire critical thinking
- Educate in real time
- Review patient specific data to make real time improvements

Barriers - Competing Priorities at the Bedside

Bedside Care:
- Patient Education
- Family Dynamics
- Charting
- Activities of Daily Living

Quality Outcomes:
- Fall Prevention
- Pressure Ulcer Prevention
- CLABSI/CAUTI Prevention
- Patient Experience
Best Practice

- Fosters interdisciplinary collaboration
- Conversation at the bedside
- Patient and family engagement
- Mentoring of nurses - supports critical thinking

Mentoring and Critical Thinking

- Why does the patient have the plastic?
- Does the patient still need it?
- Is it being properly maintained?
Ask The Questions

“If it can’t be removed today, then when?”

---

### Appropriate Indications

<table>
<thead>
<tr>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute urinary retention without bladder outlet obstruction (i.e. medication related urinary retention)</td>
</tr>
<tr>
<td>Acute urinary retention with bladder outlet obstruction due to non infectious, non traumatic causes</td>
</tr>
<tr>
<td>Chronic urinary retention with bladder outlet obstruction</td>
</tr>
<tr>
<td>Stage 3 or 4 or unstageable pressure ulcers or otherwise similarly severe wounds that cannot be kept clear of incontinence despite wound care and other urinary management strategies</td>
</tr>
<tr>
<td>Urinary incontinence in patients who nurses find it difficult to provide skin care despite other urinary management strategies and available resources (i.e. turning causes hemodynamic or respiratory instability, strict prolonged mobility such as unstable spine or pelvic fracture, strict temporary immobility such as vascular catheterization, or excess weight ( &gt; 300 lb) from severe edema or obesity)</td>
</tr>
<tr>
<td>Hourly measurement of urine that is needed to provide treatment and cannot be assessed by other urine collection methodologies</td>
</tr>
</tbody>
</table>
Inappropriate Indications

Urinary incontinence when nurses can turn/provide adequate skin care including intact skin, dermatitis, stage 1 or 2 pressure ulcer and closed deep tissue injury

Routine use in ICU without indication

Foley placement due to risk for fall

Post-void residual urine volume assessment

Random 24 hour urine collection samples for sterile or unsterile specimens

Patient/family request with not other urine difficulties in non-dying patient

Patient ordered bedrest without strict mobility criteria

Preventing urinary tract infection in patients with fecal incontinence or diarrhea; or painful urination in patients with urinary tract infection
Lines

- Is the line being used for difficult blood draws?
- May wish to stop and think
- Ask the question?
- Use of PICC lines for blood draws in non-acute areas

Houdini

Use **Houdini** to assess the need for the catheter daily

Does your patient have:
- Hematuria, gross?
- Obstruction, urinary?
- Urologic surgery?
- Decubitus ulcer – open sacral or perineal wound in incontinent pt.?
- I&O for hourly management or hemodynamic instability?
- No code/comfort care/hospice care?
- Immobility due to physical constraints?
  - Unstable fractures, IABP, epidural catheter, femoral nerve block, etc.

If not – remove the catheter!

Source  Jessica Potts, Carolyn Tichenor, Carol Vance APIC Conference 2015
What We’ve Found

• Nursing reluctance – especially with urinary catheters
• Need nursing champions
• Presence of a physician helps the process
• Ability to intervene in the moment
• Patient and family engagement

CAUTI Barriers

• Physician reluctance – i.e. Cardiology
• Nursing opportunities – daily weights
• Alternatives to initial catheterization
• Opportunities to foster growth of new nurses
Implement Interventions

- Forcing functions and constraints
- Automation and computerization
- Standardization and protocols
- Checklists and double check systems
- Rules and policies
- Education / Information
- Be more careful, be vigilant

A Look at Hardwiring CAUTI

Only allowed

Defaults to whatever indication you clicked
Urinary Obstruction

Next click on an indication...I show screenshots of each here

Indications, Orders, and Alternatives

To order an indwelling urinary catheter, begin by selecting the indication for use.

- Acute urinary retention or bladder outlet obstruction
- Consider tamsulosin / flaxseed
- Consider voiding trial after 24h on therapy w/ decatheterization protocol
- Remove Foley in 24h
- Bladder scan q4-8h and straight catheterization for volume > 350cc

☐ tamsulosin (FLOMAX) 24 hr capsule
☐ flaxseed (PRINCIPAL) tablet
☐ Bladder scan
☐ Straight cath
☐ *URMC Adult - Urinary Catheter Order Panel (CAUTI)

- Need for accurate measurement of urinary output in critically ill patients
- Assist in healing open perineal or perineal wounds in incontinent patients
- Patient requires prolonged immobilization
- To improve comfort for end of life care
- Perioperative use for selected surgical procedures

Intake and Output

Second indication on list

- Need for accurate measurement of urinary output in critically ill patients
  - Patient will have q1h documentation of output – if yes, proceed to Foley orders
  - Patient will not have q1h documentation of output
    - Foley catheter not indicated, consider:
      - Place condom catheter in males
      - Bedside urinal
      - Bedside commode
      - Straight cath protocol q4-8h
      - Daily weight measurements

☐ Vital signs
☐ 4-6-6 HOURS
☐ Insert catheter (specify)
☐ Condom catheter
☐ Straight cath
☐ Daily weights
☐ *URMC Adult - Urinary Catheter Order Panel (CAUTI)
Open Wounds

Third indication on list

- Assist in healing open sacral or perineal wounds in incontinent patients
  - Patient is being followed by Wound Specialist – If yes, proceed to foley orders
  - Patient is not followed by Wound Specialist
    - Order consultation with Wound Specialist
    - Consider alternatives to foley placement
      - Place condom catheter in males
      - Bedside urinal
      - Bedside commode
      - Straight cath protocol q4-8h
      - Daily weight measurements

Bringing Evidence to the Bedside

- Establish interdisciplinary team with key stakeholders
- Set expectations for consistent participation
- Communicate importance of initiative and impact to patients
- Identify and implement core prevention strategies
- Monitor adherence, on an ongoing basis, to core prevention strategies
- Complete a root cause analysis of each case to identify improvement opportunities
- Communicate results
- Celebrate successes
GAO Report

Interviewed six hospitals on implementation of evidence based practices.

Three main challenges:

1. Obtaining data to identify adverse events in their own hospitals. According to hospital officials, obtaining useful information on adverse events can be challenging because, substantial time and resources are required to gather the necessary data, among other things.


Challenge 2

2. Determining which patient safety practices should be implemented. Officials noted that they face challenges identifying which evidence-based patient safety practices should be implemented in their own hospitals, such as when only limited evidence exists on which practices are effective.
Challenge 3

3. Ensuring that staff consistently implement the practices over time. Officials from the selected hospitals told GAO that the hospitals face challenges ensuring that hospital staff consistently implement the hospitals’ patient safety practices; for example, hospitals must constantly monitor results to detect potential implementation problems.

<table>
<thead>
<tr>
<th>Dissemination</th>
<th>Diffusion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>“Spread of innovation is planned, formal, centralised and occurs through vertical hierarchies”</td>
</tr>
<tr>
<td><strong>Methods</strong></td>
<td>“Spread of innovation is unplanned, informal, decentralised and largely horizontal or peer-mediated”</td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td>Wide range of methods: presentation in conferences and seminar, leaflets, peer-reviewed publications, formal dissemination programmes, websites, etc.</td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td>Fewer resources required, as it happens more naturally and organically.</td>
</tr>
<tr>
<td></td>
<td>Effective if influential key people buy into the idea.</td>
</tr>
<tr>
<td><strong>Definition</strong></td>
<td>The message and means of communication used can be tailored depending on the target audience.</td>
</tr>
<tr>
<td><strong>Methods</strong></td>
<td>It usually attracts early adopters only.</td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td>Often the initial will of early adopters fades away before any action has</td>
</tr>
<tr>
<td></td>
<td>No control of the message and its reach.</td>
</tr>
</tbody>
</table>
Chasing Zero Infections: Strategies to Reduce CAUTI & CLABSI

March 9, 2016
Florida Hospital Association

The challenge is not starting, but continuing after the initial enthusiasm has gone.

Sustainability Factors

- Evaluation
- Knowledge into action
- Measurement
- Change management
- Innovation
- Culture
- Leadership
- Human factors
- Engagement
- Empowerment
Things You Can Do to Support Long Term Viability

Policy Development/institution wide/ across clinical disciplines
- Include in orientation for all relevant staff
- Include in annual competency review process
- Periodic audits; check to be sure it is routine practice
- Set up reliable supply chain (borrowing protocol; alert system)
- Quarterly review by executive partner
- Set up a learning network of peers

How to Start Planning

Practice audits—identify gaps in processes of care:
- Catheter insertion
- Catheter maintenance
- Surgical site prevention practices

Event audits

Process measures—trend performance:
- Compliance to SSI bundles
- Device utilization ratio (DUR)—goal is to reduce DUR over time

Outcome measures:
- Rates
- Non-infectious events
Institutionalization

- The program becomes a part of the standard of care in the hospital (only place the catheter based on appropriate indication, comply with proper insertion and maintenance, daily evaluation for need and removal when no longer needed)

- With time, modifications of the program may occur based on new evidence

Who is Responsible for Sustainability?

<table>
<thead>
<tr>
<th>Person</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Lead or Champion</td>
<td>Succession planning</td>
</tr>
<tr>
<td></td>
<td>System integration</td>
</tr>
<tr>
<td></td>
<td>Not a single person process</td>
</tr>
<tr>
<td></td>
<td>Making sure the &quot;right people&quot; are on the bus</td>
</tr>
<tr>
<td>Senior Management</td>
<td>Creation of dashboards and reports</td>
</tr>
<tr>
<td></td>
<td>Embed into culture</td>
</tr>
<tr>
<td></td>
<td>Create infrastructure</td>
</tr>
<tr>
<td>Front line Manager</td>
<td>Prioritize</td>
</tr>
<tr>
<td></td>
<td>Ensure front line staff are engaged</td>
</tr>
<tr>
<td></td>
<td>Ongoing results are shared</td>
</tr>
</tbody>
</table>