South Carolina On the CUSP: Stop CAUTI

Where Do We Go from Here?

* A Roadmap for Project Sustainability and Spread

February 6th, 2013
Objectives

- Understand project sustainability and how the gains South Carolina has made in this project can be sustained to support development and growth
- Review key components of project spread
- Discuss how to spread the intervention to other units or organizations
- Review available resources to support your sustainability efforts
What is Sustainability?¹

- Desired health benefits are maintained or improved
- The innovation (CAUTI prevention/reducing catheter use) loses its separate identity and becomes part of regular activities (institutionalization)
- Hospital staff provide ongoing support and expertise (building capacity)
Fig. 1. A framework for conceptualizing program sustainability.
Factors that Influence Sustainability

• Effectiveness
• Routinization and integration with existing programs/services (institutionalization)
• Program champions/leadership (building capacity)
• Socio-political considerations
Socio-political Considerations

- Public reporting
- National efforts: “Partnership for Patients” initiative
- Incentives of 3rd party payers
- State efforts
Effectiveness

- Periodic monitoring/evaluation and feedback
- Expanding the effort by also focusing on other areas
Periodic Evaluation and Feedback

• Periodic evaluation to monitor catheter use and CAUTI rates and to identify new or ongoing gaps for intervention
  – UC use point prevalence (with or without appropriate use): a snapshot of use over time, highlights the importance of keeping CAUTI prevention a priority
  – CAUTI rates
Proper insertion technique audits and maintenance of UC: identifies gaps in placement or maintenance

CAUTI events: evaluation of what has led to the event may help teams learn if any gaps were present
Feedback on Performance to Teams

- Urinary Catheter use and appropriateness
- CAUTI events
- Non-infectious events: hematuria, other trauma, pressure ulcers
Champions and Leadership (Building Capacity)$^3$

- Ongoing support and expertise for CAUTI prevention activities
- CUSP as part of ensuring broader expertise for identifying and implementing other patient safety practices
Planning for Sustainability

• Identify required resources post-implementation
• Identify mechanisms for integration of the process into daily work flow
• Identify the team that will be accountable for sustaining the work (who/how)
Planning for CAUTI
Project Sustainability

• Planning started when you began the project
• Project tools, resources and project implementation steps all support project sustainability
  – Examples include: CUSP Teams, multi disciplinary rounding, Learn from defects exercise, Team Check up Tool, HSOPS, etc.
• Identify what tools and processes you will adapt to fit your sustainability needs
What is Next?

- After project achievements are sustained at the local level, intervention is ready to spread to another location.
- Assess where your efforts will make the greatest impact:
  - Within your hospital
  - On your unit
  - Within a team
Opportunities for Further Improvement

- Expand and spread CAUTI prevention activities to other units
  - ED
  - PACU/OR
  - Intensive care
Multidisciplinary and Multi-departmental Efforts

PACU/OR
- Remove promptly after surgery before transfer out

ICU
- Evaluate for continued need
- Discontinue no longer needed before transfer out

Non-ICU
- Evaluate need on admission
- Evaluate for continued need

ED
- Avoid initial placement
- Reevaluate for continued need after patient stabilizes
Linking to Other Initiatives

• National (SCIP, public reporting)
• Reduction of pressure ulcers
• Reduction of immobility and falls
Addressing in the Broader Patient Safety Context

Part of Partnership for Patients

Venous thromboembolism?

Falls?

Pressure ulcers

Immobility

Urinary Catheter Harm

Increased Length of Stay

Patient discomfort

Trauma

CAUTI

5
Example of Successful Sustainability:
St. John Hospital and Medical Center

• Pilot for nurse driven multidisciplinary rounds to assess urinary catheter need
  1. Educated nurses on risks of the catheter and appropriate indications
  2. Updated hospital policies for urinary catheter placement and maintenance
  3. Involved all stakeholders: nurses, physicians, midlevel providers, ancillary services
  4. Involved multiple departments: non-ICU, ED, and ICU
5. Incorporated daily assessment of the urinary catheter as part of the nurses daily work.
6. Operationalized the evaluation of need by having twice weekly urinary catheter use fed back from non-ICU to Infection Prevention
7. Linked the work to safety efforts: SCIP, pressure ulcers, and immobility/ falls.
How Do We Sustain CAUTI Prevention?

- By demonstrating continuing effectiveness of CAUTI prevention activities and identifying other opportunities for additional improvement
- Institutionalization/routinization/integration of CAUTI prevention efforts
- Building and supporting internal champions and support
- Identifying ways to synergize or leverage the work in alignment with other external initiatives or pressures
• Definitions of Spread
  – Spreading takes the process from the narrow, segmented population(s) or group(s) and broadens it to include all the population(s) or group(s) that will use the process.”
  – Formalizing a process provides a reference to others; those new to the organization and those in the organization needing clarity about the specifics of the process.”
Why Spread?

• Health care culture is local
• Quality interventions target a process in small pilot projects usually on a local level (Lean Six Sigma, Plan-Do-Study-Act [PDSA])
• Safety interventions targeted at the unit level (CUSP)
• Shifting the paradigm—from hierarchical to team culture
Spread Framework

**Leadership**
- Topic is a key strategic initiative
- Goals and incentives aligned
- Executive sponsor assigned
- Day-to-day managers identified

**Setup**
- Target population
- Adopter audiences
- Successful sites
- Key partners
- Initial spread strategy

**Social System**
- Key messengers
- Communities
- Technical support
- Transition issues

**Better Ideas**
- Develop the case
- Describe the ideas

**Measurement and Feedback**

**Knowledge Management**
External Factors Affecting Spread

- Financial
- Legal
- Regulatory
- Public opinion
- Moral
- Organizational priorities
Internal Processes Affecting Spread

- Leadership
- Availability of resources
- Knowledge and skill set
- Organizational culture
- Ongoing improvement efforts
- Other priorities
The Champions (Physicians/Nurses)

- Identified during implementation
- Keeps the effort as a priority during sustainability
- Provide expertise in the topic
- Liaison with peers to promote best practice to reduce CAUTI risk
**Physician Supporters: Reasons for them to Support the Champion**

<table>
<thead>
<tr>
<th>Infectious Disease Specialists</th>
<th>Urologists</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reduce CAUTI.</td>
<td>• Reduce trauma (mechanical complications):</td>
</tr>
<tr>
<td>• Reduce antibiotic use.</td>
<td>1. Meatal and urethral injury</td>
</tr>
<tr>
<td>• Reduce potential of increased resistance and <em>Clostridium difficile</em> disease.</td>
<td>2. Hematuria</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hospitalists</th>
<th>Geriatricians</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Infectious and mechanical complications.</td>
<td>• Many elderly are frail.</td>
</tr>
<tr>
<td>• Potential catheter complications prolonging length of stay.</td>
<td>• Urinary catheters are placed more commonly in elderly inappropriately.</td>
</tr>
<tr>
<td>• Hospitalists care for a large number of patients. Their support may help significantly improve the appropriate use of the urinary catheter.</td>
<td>• Urinary catheters increase immobility and deconditioning risk, in addition to infection and trauma.</td>
</tr>
</tbody>
</table>
Physician Supporters: Reasons for them to Support the Champion

<table>
<thead>
<tr>
<th>Rehabilitation Specialists</th>
<th>Surgeons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The urinary catheter reduces mobility in patients: one point restraint.</td>
<td>• Surgical Care Improvement Project: Remove catheters by postop day 1 or 2.</td>
</tr>
<tr>
<td>• Rapid recovery (improvement in ambulation) may be hampered by the catheter (in addition to the other associated risks).</td>
<td>• Inappropriate urinary catheter use postoperatively will negatively affect the surgeon’s profile.</td>
</tr>
<tr>
<td></td>
<td>• Risk of infection and trauma related to the catheter.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intensivists</th>
<th>Emergency Medicine physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A significant opportunity is present upon transfer from the ICU to discontinue no longer needed devices, including urinary catheters.</td>
<td>• Up to half of the patients are admitted through the emergency department (ED).</td>
</tr>
<tr>
<td>• Intensivists can support the evaluation of catheter need before transfer to the ICU.</td>
<td>• Inappropriate urinary catheter placement is common in the ED.</td>
</tr>
</tbody>
</table>
## Nurse Supporters: Reasons for Them to Support the Champion

<table>
<thead>
<tr>
<th>Infection preventionists</th>
<th>Case managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reduce CAUTI.</td>
<td>• Less complications (mechanical or infectious) = lower cost</td>
</tr>
<tr>
<td>• Reduce antibiotic use.</td>
<td>• Early removal of catheter may reduce length of stay</td>
</tr>
<tr>
<td>• Reduce potential of increased resistance and <em>Clostridium difficile</em> disease.</td>
<td></td>
</tr>
<tr>
<td>Nurse manager</td>
<td>Physical therapists</td>
</tr>
<tr>
<td>• Leader and supporter to the bedside nurse (empowers the nurse)</td>
<td>• The urinary catheter reduces mobility in patients: one point restraint.</td>
</tr>
<tr>
<td>• Makes the appropriate urinary catheter use a priority and a safety issue</td>
<td>• Rapid recovery (improvement in ambulation) may be hampered by the catheter (in addition to the other associated risks).</td>
</tr>
<tr>
<td>• Addresses any barriers encountered by the bedside nurse</td>
<td></td>
</tr>
</tbody>
</table>
## Nurse Supporters: Reasons for Them to Support the Champion

<table>
<thead>
<tr>
<th>Intensive care unit (ICU) nurses</th>
<th>Wound care nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A significant opportunity is present upon transfer from the ICU to discontinue no longer needed urinary catheters.</td>
<td>• Urinary catheter use increases immobility, which in turn results in an increased risk of pressure ulcers.</td>
</tr>
<tr>
<td>• ICU nurse transferring the patient may evaluate catheter need before transfer out of the unit and discontinue unnecessary catheters.</td>
<td>• Wound care nurses may help in advising the bedside nurse on methods to reduce skin breakdown in patients with incontinence without using urinary catheters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency medicine (ED) nurse</th>
<th>Post-operative recovery nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Up to half of the patients are admitted through the emergency department (ED).</td>
<td>• Urinary catheters are commonly placed preoperatively for fluid management during the surgery.</td>
</tr>
<tr>
<td>• Inappropriate urinary catheter placement is common in the ED.</td>
<td>• Post-operative recovery nurses evaluate the catheter for continued need and promptly remove no longer needed catheters.</td>
</tr>
<tr>
<td>• Promoting appropriate placement of urinary catheters in the ED will reduce inappropriate use hospital-wide.</td>
<td></td>
</tr>
</tbody>
</table>
What Facilitates Spread Success?

- Evidence based efforts, tools and examples
- Leadership support
- Easy to adopt
- Pertinent and relevant issue
- Able to be piloted or tested on a small scale
- Observable
Spread Sequencing

- Theory and prediction
- Developing a change
- Testing under a variety of conditions
- Testing a change
- Implementing a change
- Make part of routine operations
- Sustaining and spreading a change to other locations

The Plan-Do-Study-Act cycle. Adapted from the Institute for Health Care Improvement (Available at www.ihi.org)
Comprehensive Unit-based Safety Program (CUSP)

1. Educate on the science of safety

2. Identify defects

3. Assign executive to adopt unit

4. Learn from Defects

5. Implement teamwork & communication tools
Developing a Plan for Spread

- Inform the team
- Work with the next unit to spread
- Account for variability
- Start with the units that can adopt easily
Resources Available to Support Project Sustainability and Spread

• The CUSP Toolkit
• CUSP framework Tools
• IHI 5 Million Lives Campaign
• Other Teams
• Local technical and socio-adaptive component champions
Summary

• Prior CUSP work should be leveraged to support sustainability and spread efforts
• Project spread is influenced by internal and external factors; spread and spread plans are unique to each team
• Collaboration is essential to ensure a successful project spread
Questions?
Thank you!
References


8 Edson B. Navigating the Fleet: Accelerating National Adoption. The Patient Safety Education Program (PSEP), Canada; February 2012.