Single-Use Washable Precaution Gowns

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Materials Management
Background

• UCLA Health purchased 2.6 M disposable gowns annually prior to implementation
  • 234 tons sent to landfill
  • No recycling program exists
Pilot

• Began in units with high utilization
  • Liver Transplant
  • Peds
  • Med Surg
  • ICU’s

• Once units were provided washable gowns, they did not go back to disposables
Choice of Gown

- **Textile Manufacturer**
  - Custom gowns
    - 99% Polyester, 1% Carbon
    - Snaps on back
    - Short cuffs
    - Reversible
    - 100 washes

- **Washable Cost Less per Use**
  - Disposable cost per unit - $0.67
  - Washable cost per unit - $0.34
    - Washable gowns could last approximately 1 year or up to 100 washes
### Estimated vs. Actual – Usage/Savings

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<thead>
<tr>
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<th>Estimated</th>
<th>Actual</th>
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</thead>
<tbody>
<tr>
<td>Average Daily Use</td>
<td>5,786</td>
<td>3,300</td>
</tr>
<tr>
<td>Inventory Level</td>
<td>40,502 (7 Par Level)</td>
<td>23,100 (7 Par Level)</td>
</tr>
<tr>
<td>Savings – 5 yr Projection</td>
<td>35%</td>
<td>-</td>
</tr>
<tr>
<td>Savings – 3 yr Actual</td>
<td>35%</td>
<td>49%</td>
</tr>
</tbody>
</table>

New isolation protocols introduced in July ‘14 reduced usage by **49%**
Disposable to Washable Savings

<table>
<thead>
<tr>
<th>Acq/Replacement Cost</th>
<th>Processing Cost</th>
<th>Disposable Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$500,000</td>
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<td>$2,000,000</td>
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Laundry

• Use Local Laundry Vendor
  • LEED Certified facility

• What do we do with the washable gowns once they can no longer be used?
  • Current linen is never thrown out, use a recycler
  • Linen is often donated to different organizations and countries
    • L.A. Marathon
    • Fire departments
    • Haiti and Armenia
Life Cycle Analysis

• Studies on Reusable Textiles (Surgical Gowns)*
  • Six studies concluded reusable gowns are less of an environmental burden than disposable gowns
  • According to these studies, disposable gowns consume more than reusable gowns in all areas of sustainability
    • 200-300% more energy
    • 250-330% more water
    • 200-300% higher carbon footprint

* A Comparison of Reusable and Disposable Perioperative Textiles: Sustainability State-of-the-Art 2012; Michael Overcash, PhD
Buy-In

• Initial Resistance
  • Staff did not like initial gowns proposed
    • Disposables are easier to remove
    • Washables are slippery
    • Too hot

• Acceptance
  • Sustainability help push initiative further
  • Leadership support
  • Cost savings for leadership
  • Infection Prevention support
Isolation Precaution Policy Change

- Contact Precautions are no longer required for MRSA.

- Contact Precautions are no longer required for VRE.

- Visitors are no longer required to adhere to Contact Precautions. Visitors are expected, however, to practice diligent hand hygiene and utilize standard precautions.
Disposable vs. Washable Gowns

Infection control policy went into SMUCLA accelerated conversion to reusable Gowns January 2015

100% conversion achieved for SMUCLA

100% conversion achieved for