Appendix A.
Template depicting stakeholder deliberations for the people group of the HAI forum. This template does not constitute specific recommendations.

NOTE: Yellow highlighted factors or elements indicate ones that were vetted with in the plenary.

<p>| HAI-Transmission Risks Associated with Human Behavior and the Social Environment of Care |</p>
<table>
<thead>
<tr>
<th>Possible Factors or Elements Contributing to HAI Risk</th>
<th>1. Where Is the Problem? (Aspects of healthcare that create technology-associated HAI transmission hazards)</th>
<th>2. How Can a Transmission Occur? (Specific risks of transmission related to the hazards identified)</th>
<th>3. What Can Be Done? (Actions, solutions, and strategies to mitigate the risk)</th>
<th>4. How Do We Make It Happen? (Barriers to implementation and means to overcome them)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Actions of Healthcare Providers</td>
<td>• Lack of awareness</td>
<td>• Indirect or direct patient contact</td>
<td>• Bundle approach similar to VAP for device associated complications</td>
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<tr>
<td>Risk rating = 3.75</td>
<td>• Complacency; get in routine of your job</td>
<td>• Negligence</td>
<td>– Evidence-based practice</td>
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<tr>
<td></td>
<td>• No data</td>
<td>• Production pressure</td>
<td>• 4-5 items for non-critical, semi-critical and critical (check list)</td>
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<tr>
<td></td>
<td>• “Not my job”</td>
<td>• Chemical reactions; if someone doesn’t rinse off high-level disinfectant</td>
<td>• Change in culture</td>
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<tr>
<td></td>
<td>• Desensitization of HCW (healthcare workers); HCWs become immune to fact that they have impact and potential to transmit HAIs; “It’s not my problem”; linked to complacency; lack of ethics of doing a good job—right first time</td>
<td></td>
<td>• Communication</td>
<td></td>
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<tr>
<td></td>
<td>– Feeling that you’re making a difference in what you do</td>
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<tr>
<td></td>
<td>• Too many demands/shortcuts</td>
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<tr>
<td></td>
<td>• Direct versus indirect HCW</td>
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</tbody>
</table>

September 30, 2016
People Plan
Page 1
| 2. Actions of Patients | • Lack of understanding of how patients contribute to HAIs  
| Risk rating = 3.40 | • U.S. culture don’t question doctors  
| | • Fear of healthcare provider  
| | • Don’t know what to ask  
| | • Patient needs to participate in own care and be accountable for understanding their role in their own care  
| | • Patients infect own personal devices  
| | • Patients share items with other patients  
| | • Contribute to cross contamination  
| | • Don’t understand instructions  
| | • Make sure patients are aware at time of discharge they may be carrier of pathogen; empower patients with information regarding potentially transmissible conditions  
| | • Unknown community acquired infection  
| | • Adherence to pre-op/post-op instructions  
| | • Laymen’s terms  
| | • Screening  
| | • Patient education  
| | • Patient empowerment to keep their area clean  
| | • Case management  
| | • Personnel resources  
| | • Better discharge planning  
| | • Employer support to stay home when sick  
| | • Paid sick leave  
| | • Create education tools  
| | • Patient’s need to be forthcoming with medical history  
| 3. Actions of visitors and the public | • Bundle patient and visitors and the public together (similar issues in all these groups)  
| Risk rating = 3.29 | • Lack of knowledge of transmission  
| | • U.S. culture can’t question doctors  
| | • Ease of access too high, HCAHPS scores  
| | • Outside food  
| | • Break in isolation precautions  
| | • Don’t use PPE when needed  
| | • Brings in agents from the community to the healthcare facility  
| | • Improved education  
| | • Ability to screen visitors; All visitors must wash hands before entering  
| | • More restrictive access  
| | • Mandatory vaccinations  
| | • Resources available  
| | • Volume of visitors  
| | • HCAHPS scores  
|
### 4. Actions of housekeeping and Environmental Services

**Risk rating = 3.75**

- Disinfectant resistance
- MDRO adapt
  - Poor feedback loop to EVS
  - Production pressure
    - Turn over time pressure
  - Lack of EVS authority
  - Competency
  - Language
  - Education and understanding around PPE and procedures
  - Movable medical devices not centrally controlled and cleaned, who is responsible.

### Risk Mitigation Strategies

- **Change of culture**
- **Sharing of problems and how to fix**
- **Higher value to the EVS tech position**
- **Use of appropriate PPE/training**
- **Position of environmental services (EVS) technician denotes importance of position**
- **Foster team environment**
- **Break apart silos**
- **Mandatory certification**
- **Certified Healthcare Environmental Services Tech (CHEST)) and Certified Healthcare Environmental Services Professional (CHESP). Include training course and certification, higher pay**
- **CHEST front-line EVS tech**
- **CHESP manager/supervisor**
- **Consistency in standards**
- **Designation of who is responsible for various functions/tasks**
- **Prioritize tasks and resources**
- **Dedicated EVS personnel to specific units and types of areas**
- **Include environmental services in routine meetings; input in management**
- **Reward for EVS staff performance**

- **Resource management**
- **Understanding of requirements in many areas, work in each department for short term**
- **Spend time in each department**
- **Leadership doesn’t appreciate role of EVS in infection prevention**
- **Need to do better job of communicating problems of resource allocation to leadership**
- **Difficult to quantify data related to infection control for EVS**
5. **Actions of Governance and Leadership**

**Risk rating = 3.15**

| • Difference in governance and leadership | • Lack of shared and aligned expectations among governance and support departments | • Bundling of tools |
| • Governance: standards, regulations      | • Lack of education/awareness of leadership/governance on needs of operations and support personnel | • Standardization of standards/guidelines across organizations |
|   – Structure of governance; may be in different departments and get lost | • Enforcement: If leadership doesn’t follow through on enforcement, the right things won’t happen | • Harmonization of above |
| • Leadership: department and senior      | • Failure in any support functions—environmental or CSSD—can have detrimental effects on patient safety and quality of care | • AAMI to take central role in this |
|   leadership / governing board           | • Further investment in EHRs/EMRs | • Realistic expectations, (e.g., move away from “we want it in 5 minutes” when it needs more consideration/time); results in shortcuts that cause problems; educate leadership; manage from below; communicate realistic expectations upward |
|   – Senior management, governance need   |                                         | • Have adequate staff to keep up with work with equipment when individuals have medical/personal emergencies |
|   to use support functions such as      |                                         |   – Not penalizing healthcare workers and others for medical/personal emergencies; Allow people to be sick and not be forced to come into work knowing that it could be potential cause of HAI |
|   environmental services and CSSD as    |                                         | • Understanding and providing adequate resources for non-revenue generating departments (this can prevent against possible |
|   intimate parts of providing adequate  |                                         |   PENNSYLVANIA MODEL OF MANDATORY REPORTING REQUIREMENTS FOR HAIS AND FOLLOW UP ACTION; DELIVERY OF SYSTEMS AND INFECTION AND CAUSE ANALYSIS (CQI) |
|   patient safety                        |                                         |   – Most comprehensive/gold standard regulations around reporting of HAIs |
| • Understanding of good practice        |                                         |   – HAI reporting was intended to drive investment in prevention |
|   requirements                           |                                         |   – PA Safety Authority does this analysis |
| • Lots of inconsistency across         |                                         | • Non-punitive feedback |
|   guideline and standards from          |                                         | |
|   different organizations               |                                         | |
| • Unrealistic expectations              |                                         | |
| • Not penalizing healthcare workers     |                                         | |
|   and staff for medical/personal        |                                         | |
|   emergencies; Allow people to be       |                                         | |
|   sick and not be forced to come into   |                                         | |
|   work knowing that it could be         |                                         | |
|   potential cause of HAI                |                                         | |
| • Understanding and providing           |                                         | |
|   adequate resources for non-revenue    |                                         | |
|   generating departments                |                                         | |

Unless this one is addressed, the probability of success of addressing the other factors won’t impact the outcome.
<table>
<thead>
<tr>
<th>(this can prevent against possible outbreaks in the future)</th>
<th>outbreaks in future)</th>
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<tbody>
<tr>
<td>• Staffing (understanding the importance of “low level” jobs who may contribute to higher degree of possible HAIs)</td>
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<tr>
<td>• Lack of transparency in weighted decision making</td>
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<tr>
<td>• Money is driving and undermining the system; can’t let this be a barrier to taking action; position as business case to justify what needs to be done</td>
<td>• Benchmarking and implementing best practices</td>
</tr>
<tr>
<td>• Lack of training/knowledge on how to build and present a business case for resources needed (e.g., quality control); especially for CSSD and environmental services*</td>
<td>– Instead of minimum requirements, implement best case requirements</td>
</tr>
<tr>
<td>– Regulatory compliance can add ESD quality metrics (e.g., cleaning)</td>
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<tr>
<td>• Outreach to healthcare executives (e.g., AHA, ACHE) (training opportunity at annual meeting)</td>
<td></td>
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<tr>
<td>• Lack of transparency in reporting*</td>
<td></td>
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<tr>
<td>*add to hospital scorecard</td>
<td></td>
</tr>
</tbody>
</table>

*add to hospital scorecard
6. Inadequate Screening, Isolation and Reporting  
   Risk rating = 3.72
   - Depends on patient population?
   - Not screening patients adequately?
   - Science is complex...
   - Reactive versus proactive risk-based approach

7. Failure to Consider Reprocessing Requirements During Purchasing  
   Risk rating = 4.31
   - Communication
     - Systems/practice is different for each device/product.
     - Communication should be consistent anywhere reprocessing equipment/product is used/housed
       - Clinician wants something right away, reprocessors are not involved; not sure if we have the right people involved
       - Not talking with mfc about what they’re purchasing about the needs in order to get the right equipment
       - Mfc goes to direct caregiver and shows them how to use the product, but don’t always go to CS and educate them on how to use it
       - Mfcs don’t always educate care givers on point-of-use treatment
   - Improper cleaning and extended processing.

   - Innovative healthcare delivery options to avoid conventional office visits
   - Pediatric offices as a model—sick room/well room and ability to call to see if one needs to come into hospital/healthcare provider

   - Incorporate requirement to existing standards.
     - AAMI collaborate with AHA, AHRMM and the value analysis organizations.
     - Get leadership (i.e., purchasing management) to understand the importance of purchasing decisions with the end-user collaboration similar to the lab director.
     - Get other organizations to drive this part of administrative support/policies/review process
     - Need to have a very strong policy that nothing comes into facility, even for a trial without IFU.
       - Have administrative support for the policy; enforcement
     - Take into account supplies that go along with purchases

   - Work the requirement for reprocessing of IFUs into QMS (quality management systems)
     - Subtitled objectives for the organization
     - Needs to be specific to reprocessing
     - Strict enforcement of policy with back-up from the top
     - Institute reasonable medical device review team to evaluate devices before purchased; ensure we can use them, fix them, clean them, etc.
## 8. Inadequate Resources and Training

**Risk rating = 4.41**

- Lack of consistency in training and competency
- Inadequate resource/staffing for work being done and complexity of devices being processed
- Any healthcare setting
- Not having time to train
- Lack of money/resources/staffing
- Quality of training

| • Inadequate training missing steps failure. | • Standardized training/competency
| • Established curriculum
| • Core competencies, initial and annual
| • Requirement for training
| • Requirement of training hours needed |

- Leadership and investing percentage.
- Risk analysis of the vectors
- Strict enforcement of policy with back-up from the top

## 9. Actions of Vendors

- Anywhere someone is selling a product or providing a service to healthcare facility.
- Easier access to manufacturers
- Being proactive

| • Full disclosure of the risks associated with using the product. | • Improved IFU
| • FDA change their testing criteria to more modalities?
| • Vendor does not understand the work flow
| • Third-party repair, lack of visibility.
| • Pre–start-up checklist
| • Sales rep needs to understand hospital/healthcare provider process |

- Vendor does not understand the work flow
- Third-party repair, lack of visibility.
- Full disclosure of the risks associated with using the product.
- Pre–start-up checklist
- Sales rep needs to understand hospital/healthcare provider process

## 10. Failure to Follow Procedures/Standard Precautions

- Assumption of scope-to-scope procedure when re-processors can have different understanding and practices
- Deviation from policies without evaluation in order to meet demand

| • Stronger enforcement of policies and procedures | • Provide at free or low-cost for hospitals/healthcare providers
| • Strict enforcement of IFU
| • Formal deviation process
| • Evaluation of processes and make it streamlined |

- Stronger enforcement of policies and procedures
- Provide at free or low-cost for hospitals/healthcare providers
- Strict enforcement of IFU
- Formal deviation process
- Evaluation of processes and make it streamlined
| 11. Use of Workarounds or Shortcuts | • Lack of time/accountability  
• Adequate staffing/equipment  
• Doing steps because they are expected and not understanding why  
• Training: very one-sided action | • Vet IFUs with users before publishing | • Culture of safety above case scheduling  
• Easy to use OEM IFUs  
• Continuity |
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</thead>
<tbody>
<tr>
<td>12. Use of Disinfection in Place of Sterilization</td>
<td>• Anywhere HLD is occurring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 13. Inadequate Communication of Information | • There is no clear communication/training on why certain things are in policies and processes  
• Understanding of roles in causing HAI (what can I do? I am just one person) | • Media—creating public empowerment | |
| 14. U.S. Government | • Penalized for reporting | • Public service announcements/education to general public and not just information on government websites | • Penalties for not reporting  
• Alignment of states’ healthcare policies  
• Alignment of organizations (professional societies) |
| 15. Sterile Processing Personnel (reference other AAMI reports that address this topic) | | | |