Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success

Sharon Bradley, RN, CIC
Senior Infection Prevention Analyst
Pennsylvania Patient Safety Authority

Nothing to disclose

Objectives

• Recall multifocal methods of assessment to measure integration of best practices into infection control program and structure

• Detect opportunities for improvement to implement infection control best practices at leadership, physician, clinical, and support staff levels

• Select approaches to translate assessment results into a structured framework that incorporates infection control strategies into clinical practice

A Webber Training Teleclass
www.webbertraining.com
Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success
Sharon Bradley, Pennsylvania Patient Safety Authority
Broadcast live from APIC 2016 conference (www.apic.org)

Burden of Healthcare-Associated Infections (HAI) in Long-Term Care Facilities (LTCF)

• 1.2 - 3.8 million annual HAI
• 150,000 additional hospitalizations
• 380,000 additional deaths

(US HHS: “Long-Term”)

What Does the Research Tell Us?

• 2000-2007: study of infection control deficiency citations
  • 60,000 LTCFs nationwide
  • On average, 15% cited for infection control deficiency

• 2005: survey of 37 LTCFs
  • Significant variability in implementation of infection control methods

(Castle et al.; Mody et al.)

A Webber Training Teleclass
www.webbertraining.com
What Does the Research Tell Us?

- Few peer-reviewed publications examine infection control in LTCF
- No studies have critically evaluated efficacy of infection control programs in LTCF
- Need for increased emphasis and research
- Focus on identifying barriers to implementing infection control best practices in LTCF

(Castle et al.; Mody et al.)

Research Questions

- In which infection prevention domains do nursing homes perform well or need improvement?
- In which implementation categories are there differences between facilities or units with high or low HAI rates?
- What elements of best practice are most lacking in areas of low performance?

(Bradley et al.)
Where to Start?

• Measure integration of best practices into infection control program and structure

• Utilize multifocal methods of assessment

Assessment Tools

Identify barriers and determine compliance with infection control practices

• Interview
• Medical record review

• Simulation
• Clinical observation

• Checklists
• Process measuring worksheets
Assessment Module Design

• Standardized measurement tool
  • Implementation of evidence-based infection control practices

• Secondary implementation categories

• Scoring system to identify the level of implementation

• Specific targets for improvement

(Bradley et al.)
Where Is the Evidence?

Seven Assessment Domains

- Hand hygiene compliance
- Environmental control
- Outbreak control
- Prevention of:
  - Urinary tract infections (UTIs)
  - Respiratory tract infections (RTIs)
  - Gastrointestinal (GI) and multidrug-resistant organism infections (MDROs)
  - Skin and soft-tissue infections (SSTIs)

(Bradley et al.)
### Implementation Category

#### Infection Control Program Structure

<table>
<thead>
<tr>
<th>Infection Prevention Plan and Goals</th>
<th>Policies and Procedures</th>
<th>Education</th>
</tr>
</thead>
</table>

(Bradley et al.)

#### Infection Control Program Function

<table>
<thead>
<tr>
<th>Standard Documentation</th>
<th>Process and Outcome Monitoring</th>
<th>Assigned Accountability</th>
</tr>
</thead>
</table>

(Bradley et al.)
**Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success**

**Sharon Bradley, Pennsylvania Patient Safety Authority**

Broadcast live from APIC 2016 conference (www.apic.org)

---

### Long Term Care Best Practice Assessment

#### Practice Assessment

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>IC Plan/Goals</th>
<th>Policy and Procedures</th>
<th>Education</th>
<th>Standardization</th>
<th>Monitoring of process and outcomes</th>
<th>Accountability assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 <strong>HAND HYGIENE</strong> 1,3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Clinical staff demonstrates understanding of hand hygiene rationale, indications &amp; methods.</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2 Alcohol-based hand rub and gloves are available at the point of care</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3 Gloves are changed between residents &amp; between clean and dirty activities on the same resident.</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>4 Hand washing with soap and water is performed when hands are visibly soiled</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5 Hand hygiene is performed before and after resident care</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6 The facility has an individualized program to monitor hand hygiene compliance</td>
<td>20</td>
<td>25</td>
<td>25</td>
<td>5</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>7 Residents and families are knowledgeable about hand hygiene</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

**Category sub-total**

(Bradley et al.)

---

### Long Term Care Best Practice Assessment (Demonstration)

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>IC Plan/Goals</th>
<th>Policy and Procedures</th>
<th>Education</th>
<th>Standardization</th>
<th>Monitoring of process and outcomes</th>
<th>Accountability assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 <strong>HAND HYGIENE</strong> 1,3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Clinical staff demonstrates understanding of hand hygiene rationale, indications &amp; methods.</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2 Alcohol-based hand rub and gloves are available at the point of care</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3 Gloves are changed between residents &amp; between clean and dirty activities on the same resident.</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>4 Hand washing with soap and water is performed when hands are visibly soiled</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5 Hand hygiene is performed before and after resident care</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6 The facility has an individualized program to monitor hand hygiene compliance</td>
<td>20</td>
<td>25</td>
<td>25</td>
<td>5</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>7 Residents and families are knowledgeable about hand hygiene</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

**Category sub-total**

(Bradley et al.)

---

A Webber Training Teleclass

www.webbertraining.com
Detect Opportunity for Improvement

- Clinical observation tool
- Pre and post-intervention self-assessment
- Overall performance of unit/facility/group
- Multidisciplinary-level barriers

(Bradley et al.)

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>Education</th>
<th>Documentation</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A WING</td>
<td>B WING</td>
<td>PRE-PI</td>
</tr>
<tr>
<td>Hand hygiene</td>
<td>73%</td>
<td>76%</td>
<td>77%</td>
</tr>
<tr>
<td>Environmental control</td>
<td>88%</td>
<td>74%</td>
<td>96%</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>75%</td>
<td>32%</td>
<td>79%</td>
</tr>
<tr>
<td>Respiratory tract infection</td>
<td>79%</td>
<td>52%</td>
<td>85%</td>
</tr>
<tr>
<td>Gastrointestinal/multidrug-resistant organism infections</td>
<td>78%</td>
<td>78%</td>
<td>90%</td>
</tr>
<tr>
<td>Skin and soft-tissue infection</td>
<td>84%</td>
<td>30%</td>
<td>95%</td>
</tr>
<tr>
<td>Outbreak control</td>
<td>71%</td>
<td>84%</td>
<td>84%</td>
</tr>
</tbody>
</table>

(Bradley et al.)
Detect Opportunity for Improvement

• Leadership
• Physicians
• Clinicians
• Support staff

(Bradley et al.)

PA Patient Safety Authority Outreach Project 2010-2012

• Comparison of implemented infection prevention best practices
• Model and assessment tool utilized
• 20 nursing homes visited
  • 10 LTCFs with high HAI rates
  • 10 LTCFs with low HAI rates

(Bradley et al.)
Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success
Sharon Bradley, Pennsylvania Patient Safety Authority
Broadcast live from APIC 2016 conference (www.apic.org)

**Difference in Percentages of Full Implementation of Nursing Home Best Practices**

<table>
<thead>
<tr>
<th>#</th>
<th>Best Practices</th>
<th>L-HAI</th>
<th>H-HAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hand hygiene</td>
<td>73%</td>
<td>76%</td>
</tr>
<tr>
<td>2</td>
<td>Environmental control</td>
<td>88%</td>
<td>74%</td>
</tr>
<tr>
<td>3</td>
<td>Urinary tract infection</td>
<td>75%</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>Respiratory tract infection</td>
<td>79%</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>Gastrointestinal/multidrug-resistant organism Infections</td>
<td>78%</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td>Skin and soft-tissue infection</td>
<td>84%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Outbreak control</td>
<td>71%</td>
<td>84%</td>
</tr>
</tbody>
</table>

L-HAI = Nursing homes with low HAI rates  H-HAI = Nursing homes with high HAI rates

Yellow cells - higher % of implementation; Bolded cells - 10% higher implementation

(Bradley et al.)

**Implementation of Structure Categories**

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>Plan</th>
<th>Policy/ goals</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand hygiene</td>
<td>73%</td>
<td>76%</td>
<td>84%</td>
</tr>
<tr>
<td>Environmental control</td>
<td>88%</td>
<td>74%</td>
<td>98%</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>75%</td>
<td>32%</td>
<td>86%</td>
</tr>
<tr>
<td>Respiratory tract infection</td>
<td>79%</td>
<td>52%</td>
<td>91%</td>
</tr>
<tr>
<td>Gastrointestinal/multidrug-resistant organism Infections</td>
<td>78%</td>
<td>78%</td>
<td>91%</td>
</tr>
<tr>
<td>Skin and soft-tissue infection</td>
<td>84%</td>
<td>30%</td>
<td>95%</td>
</tr>
<tr>
<td>Outbreak control</td>
<td>71%</td>
<td>84%</td>
<td>84%</td>
</tr>
</tbody>
</table>

L-HAI = Nursing homes with low HAI rates  H-HAI = Nursing homes with high HAI rates

Yellow cells - higher % of implementation; Bolded cells - 10% higher implementation

(Bradley et al.)
**Implementation of Function Categories**

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>Documentation</th>
<th>Monitoring</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L-HAI</td>
<td>H-HAI</td>
<td>L-HAI</td>
</tr>
<tr>
<td>Hand hygiene</td>
<td>61%</td>
<td>37%</td>
<td>66%</td>
</tr>
<tr>
<td>Environmental control</td>
<td>65%</td>
<td>28%</td>
<td>70%</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>82%</td>
<td>72%</td>
<td>76%</td>
</tr>
<tr>
<td>Respiratory tract infection</td>
<td>84%</td>
<td>74%</td>
<td>71%</td>
</tr>
<tr>
<td>Gastrointestinal/ multido drug-resistant organism Infections</td>
<td>91%</td>
<td>88%</td>
<td>78%</td>
</tr>
<tr>
<td>Skin and soft-tissue Infection</td>
<td>97%</td>
<td>95%</td>
<td>97%</td>
</tr>
<tr>
<td>Outbreak control</td>
<td>80%</td>
<td>86%</td>
<td>64%</td>
</tr>
</tbody>
</table>

L-HAI = Nursing homes with low HAI rates  
H-HAI = Nursing homes with high HAI rates  
Yellow cells= higher % of implementation; Bolded cells- 10% higher implementation

**Hand Hygiene Best-Practice Implementation**

- Clinical staff demonstrate understanding of hand hygiene rationale, indications, and methods.
- Alcohol-based hand rub and gloves are available at the point of care.
- Gloves are changed between residents and between clean and dirty activities on the same resident.
- Handwashing with soap and water is performed when hands are visibly soiled.
- Hand hygiene is performed before and after resident care.
- The facility has an individualized program to monitor hand hygiene compliance.
- Residents and families are knowledgeable about hand hygiene.

% lower implementation than homes with low HAI rates  
% higher implementation than homes with low HAI rates

A Webber Training Teleclass  
www.webbertraining.com
Environmental Control Best-Practice Implementation

<table>
<thead>
<tr>
<th>Nursing Homes with High HAI Rates</th>
<th>% Lower Implementation than Homes with Low HAI Rates</th>
<th>% Higher Implementation than Homes with Low HAI Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloves are used to handle soiled equipment &amp; linens</td>
<td>-70%</td>
<td>8%</td>
</tr>
<tr>
<td>Reusable equipment is cleaned/decontaminated before use on another resident</td>
<td>-50%</td>
<td>10%</td>
</tr>
<tr>
<td>Used items are contained &amp; disposed of immediately after use</td>
<td>-30%</td>
<td>15%</td>
</tr>
<tr>
<td>Environmental surfaces are cleaned &amp; disinfected with an EPA-approved product as per facility policy; special attention is paid to high-touch surfaces</td>
<td>-20%</td>
<td>20%</td>
</tr>
<tr>
<td>Clean linens are stored in a manner that ensures cleanliness</td>
<td>0%</td>
<td>30%</td>
</tr>
</tbody>
</table>

(Bradley et al.)

Urinary Tract Infection Prevention
Best-Practice Implementation

<table>
<thead>
<tr>
<th>Nursing Homes with High HAI Rates</th>
<th>% Lower Implementation than Homes with Low HAI Rates</th>
<th>% Higher Implementation than Homes with Low HAI Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility has instituted a toileting and hydration program</td>
<td>-70%</td>
<td>8%</td>
</tr>
<tr>
<td>The facility has adopted written criteria for use of Foley catheter (FC) necessity of continued use is assessed and documented as per facility policy and unnecessary catheters removed</td>
<td>-50%</td>
<td>10%</td>
</tr>
<tr>
<td>Standing orders are in place to remove FC if criteria not met</td>
<td>-30%</td>
<td>15%</td>
</tr>
<tr>
<td>Aseptic technique is followed for FC insertion &amp; maintenance</td>
<td>-20%</td>
<td>20%</td>
</tr>
<tr>
<td>A FC removal device is required</td>
<td>0%</td>
<td>30%</td>
</tr>
<tr>
<td>A process is in place to assure maintenance of FC/closed systems (i.e., specimen ports)</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>FC drainage bags are appropriately positioned to prevent backflow of urine into the bladder</td>
<td>10%</td>
<td>40%</td>
</tr>
<tr>
<td>Post care is performed daily and after each Foley episode</td>
<td>20%</td>
<td>60%</td>
</tr>
</tbody>
</table>

(Bradley et al.)
**Respiratory Tract Infection Prevention Best-Practice Implementation**

<table>
<thead>
<tr>
<th>Nursing Homes with High HAI Rates</th>
<th>% Lower Implementation than Homes with Low HAI Rates</th>
<th>% Higher Implementation than Homes with Low HAI Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-70% -60% -50% -40% -30% -20% -10% 0% 10% 20% 30% 40%</td>
<td></td>
</tr>
</tbody>
</table>

- The facility has instituted a standing order for pneumococcal polysaccharide vaccine and influenza vaccine.
- An employee vaccination program is in place, including provision of free vaccine.
- Respiratory equipment is cleaned and disinfected between treatments.
- Single-dose aerosolized medications are used whenever possible.
- Sterile single-use catheters and sterile fluid for suctioning open systems are used.
- A respiratory etiquette program is in place.
- Precautions for the prevention of aspiration are in place for residents at risk (e.g., head-of-bed elevation, gastrostomy tube verification, gastric content).
- A standardized oral hygiene program is in place.
- Employees with active respiratory infections are not in contact with residents.
- Residents with communicable diseases are separated from other residents.
- Plan Goals
- Policy or Procedure
- Education
- Standard Documentation
- Monitoring Process
- Assigned Accountability

(Bradley et al.)

---

**Gastrointestinal and Resistant Organism Infection Prevention Best-Practice Implementation**

<table>
<thead>
<tr>
<th>Nursing Homes with High HAI Rates</th>
<th>% Lower Implementation than Homes with Low HAI Rates</th>
<th>% Higher Implementation than Homes with High HAI Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-70% -60% -50% -40% -30% -20% -10% 0% 10% 20% 30% 40%</td>
<td></td>
</tr>
</tbody>
</table>

- Facility ensures that standard and transmission-based precautions are followed by providing gowns and gloves for use as per isolation guidelines.
- Staff communicates infectious condition of resident to appropriate persons (other staff members and immediate family/friends).
- Facility posts appropriate signage if resident is placed on transmission-based precautions.
- Antimicrobial monitoring is in place for all residents receiving antibiotics.
- Plan Goals
- Policy or Procedure
- Education
- Standard Documentation
- Monitoring Process
- Assigned Accountability

(Bradley et al.)

---

A Webber Training Teleclass
www.webbertraining.com
Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success
Sharon Bradley, Pennsylvania Patient Safety Authority
Broadcast live from APIC 2016 conference (www.apic.org)

Skin and Soft-Tissue Infection Prevention
Best Practice Implementation

Outbreak Control Best Practice Implementation
Practice Barriers Identified

- Unavailability of hand sanitizers
- Antimicrobial monitoring by pharmacy only
- Lack of aspiration prevention strategies
- Routine Foley changing/irrigation
- Physician refusal to remove Foley
- Limited separation of clean/dirty workspace
- Lack of family/resident education

Organizational Barriers Identified

- Lack of trained infection preventionist (IP)
- IP has multiple roles/campuses
- High acuity, low staffing, limited consultation
- Reactive versus proactive response
- Lack of administrative support
- Lack of root-cause analysis (RCA)
- Absence of structured documentation process
- Inadequate communication protocols

(Bradley et al.)
High-HAI NH Follow-Up

- Pre to post intervention quarters:
  - Improved in all domains and implementation categories
  - 16% significant decrease in mean overall HAI rate (P value <0.05)
  - 8:10 improved infection rates
  - 18.8% combined decrease in number of HAI s
  - 9% decrease in overall costs for GI infections, RTIs, SSTIs, and symptomatic UTIs

(Feil et al.)

Implementation Improvement

(Feil et al.)
Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success
Sharon Bradley, Pennsylvania Patient Safety Authority
Broadcast live from APIC 2016 conference (www.apic.org)

Barriers to Practice Adoption

- Awareness of performance gaps before practice adoption
- Resource investment and capacity to make changes
- Leadership directly responsible for closing gaps
- Define targets to close performance gaps

(Denham: Patient Safety)

Bridging the Gap

- Translate assessment results into a structured framework
- Incorporate infection control strategies into clinical practice

A Webber Training Teleclass
www.webbertraining.com
Structured Framework

Provides a snapshot of level of current barriers and defects:

- Domain
- Implementation category
- Implementation level
- Specific best practice

(Bradley et al.)

Structured Framework

- Stimulate conversations with leadership
- Cost-effective and targeted use of resources
- Supports administrative safety rounds
- Business plan buy-in
- Display ready for committee and administrative review

(Bradley et al.)
Approaches to Integrate Strategies into Clinical Practice

• Increase awareness
  • Engage
  • Educate

• Oversee compliance
  • Execute
  • Evaluate

(US Department of Health and Human Services: CUSP Toolkit)

"Bundled" Infection Practices

1. The facility has instituted a standing order process for pneumococcal polysaccharide vaccine and influenza vaccine.
2. An employee vaccination program is in place, including provision of free vaccine.
3. Respiratory equipment is cleaned and disinfected between treatments.
4. Single-dose aerosolized medications are used whenever possible.
5. Sterile single-use catheters and sterile fluid for suctioning open systems are used.
6. A respiratory etiquette program is in place.
7. Precautions for the prevention of aspiration are in place for residents at risk (e.g., head-of-bed elevation, gastrostomy tube verification, gastric content aspiration, feeding protocols).
8. A standardized oral hygiene program is in place.
9. Employees with active respiratory infections are not in contact with residents.
10. Residents with communicable diseases are separated from other residents.

(Bradley et al.; CDC; CMS)
Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success
Sharon Bradley, Pennsylvania Patient Safety Authority
Broadcast live from APIC 2016 conference (www.apic.org)

Complements Quality Assurance Performance Improvement Work

• Fresh perspective on effectiveness of (QAPI) strategies
• Identify and learn from defects
• Data for monitoring or evaluation tools
• Enhance annual infection control risk assessment
• Demonstrate compliance with regulations
• Less time commitment than a failure mode and effects analysis (FMEA)

Facilitators for Success

• Supportive/engaged leaders
• Education, checklists, monitoring
• Multidisciplinary teamwork
• Root Cause Analysis for adverse events
• Administrative partnership units
• Accessibility of supplies at point of care
• Sharing process outcome data with staff

(A)PIC2016 June 11-13 Charlotte, NC

A Webber Training Teleclass
www.webbertraining.com
References


• US Department of Health and Human Services (HHS):


Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success
Sharon Bradley, Pennsylvania Patient Safety Authority
Broadcast live from APIC 2016 conference (www.apic.org)

June 16  STRATEGIES TO REDUCE SKIN INJURY IN CRITICALLY ILL PATIENTS
Kathleen M. Vollman, Advanced Nursing LLC

June 23  EXPLORING THE ROLE OF ENVIRONMENTAL SURFACES IN OCCUPATIONAL INFECTION PREVENTION
Dr. Amber Mitchell, International Safety Center, and Barbara DeBaun, Cynosure Health

June 29  SHARPS INJURY PREVENTION (South Pacific Teleclass)
Dr. Terry Grimmond, Grimmond & Associates Ltd., New Zealand

July 14  RESULTS OF QUALITATIVE RESEARCH ON IMPLEMENTATION OF INFECTION CONTROL BEST PRACTICES IN EUROPEAN HOSPITALS
Dr. Hugo Sax, University Hospital Zurich, Switzerland

July 21  BEHAVIOURAL AND ORGANIZATIONAL DETERMINANTS OF SUCCESSFUL INFECTION PREVENTION AND CONTROL INTERVENTIONS
Dr. Enrique Castro-Sánchez, Imperial College London, England

www.webbertraining.com/schedulepl.php
A Webber Training Teleclass
www.webbertraining.com
Bridging the Gap Between Research and Practice in Long-Term Care: An Innovative Model for Success
Sharon Bradley, Pennsylvania Patient Safety Authority
Broadcast live from APIC 2016 conference (www.apic.org)

THANKS FOR YOUR SUPPORT

A Webber Training Teleclass
www.webbertraining.com