

**Supplementary Table 2: Educational Strategies:**

| Study                | Participants in Educational Strategy                   |   |   | Individual and Team Learning Strategies   |   | Educational Objectives and Comments on Educational Strategies  |
|----------------------|--|---|---|---|---|--|
|                      | <i>Surgeons and Anesthesiologists</i>                  | <i>Nurses and Non-physician Operating Room Staff</i>  | <i>Other</i>  | <i>Individual Learning</i>  | <i>Team Learning</i>  |  |
| Avansino et al. 2011 | Web-based individual learning and educational sessions | Web-based individual learning and educational sessions  | Interventional radiologists and cardiologists: Web-based individual learning and educational sessions | <b>Web-based:</b><br>Single web-based video (details not provided)                                  | <b>Educational sessions</b><br>(details not provided)   | <b>Objectives:</b><br>Compliance with checklist<br><br><b>Strategies:</b><br>Not described in detail   |
| Jenkins et al. 2014  | Some involvement but extent unclear                    | Web-based individual learning, individual mentoring, multiple team-based and interactive strategies |   | <b>Web-based:</b><br>-Multiple webinars with interactive content<br><br><b>Individual mentoring</b> | <b>Didactic and Interactive Workshops</b><br><br><b>Interactive</b><br>Nurses: Assertiveness, closed-loop communication, briefing strategies, communication scripts | <b>Objectives:</b><br>Infection prevention, Surgical Safety, Communication<br><br><b>Strategies:</b><br>-Multiple learning strategies<br>-Progressive Learning modules |

|                    |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|
|                    |  |  |  |  | <p><b>Didactic</b></p> <p>Nurses:<br/>Demonstration of nursing competencies, case-based videos</p> <p>Others: international learning session</p> | <p>-Transfer of educational responsibility from global to local.</p> <p>-Standardized content with site development of materials</p> <p>-Mentoring</p> |
| Levy et al. 2012   | Physician education “left to discretion” of administration             | Limited didactic and computer-based teaching                       |  | <p><b>Web-based:</b></p> <p>One web-based teaching session</p>           | Limited didactic   | <p>Objectives:</p> <p><b>Strategies:</b></p> <p>-Limited education</p> <p>-No physician learning strategies</p>  |
| Norton et al. 2007 | Mandatory electronic learning and testing for physicians and new hires | Mandatory electronic learning and testing for nurses and new hires |  | <p><b>Web-based:</b></p> <p>Mandatory web-based learning and testing</p> |  | <p>Objectives:</p> <p>Improved checklist performance</p> <p>Strategies:</p>  |

|                    |   |   |                                 |   |  |  |
|--------------------|---|---|---------------------------------|---|--|--|
|                    | In-service programs                                       | In-service programs                                       |                                 |   |  | <ul style="list-style-type: none"> <li>-Multiple learning strategies: individual and team based</li> <li>-Standardized educational content</li> <li>-Training of checklist educators</li> <li>-Mandated educational participation and testing</li> </ul> |
| Norton et al. 2010 | Individual electronic training<br><br>In-service programs | Individual electronic training<br><br>In-service programs | Leadership: In-service programs | <b>Web-based:</b><br>Individual web-based training<br><br>(details not given) | Didactic: In-service programs for leadership, nurses and physicians                | <p>Objectives:</p> <p>Strategies:</p> <p>Multiple learning strategies</p> <p>Individual and team-based strategies</p>  |
| Putnam et al. 2014 | Educational workshops                                     | Individual computer training<br><br>Educational workshops |                                 | <b>Web-based:</b><br>Individual web-based training                            | <b>Didactic (surgical safety and performance):</b><br>Lectures, educational videos | <p>Multiple learning strategies</p> <p>Individual and team-based strategies</p>  |

|                   |   |   |  |      |  |      |
|-------------------|---|---|--|------|--|------|
|                   |   |   |  |      | <b>Interactive (surgical safety and performance):</b><br>discussion, interactive activities, break-out sessions (error identification and communication) |      |
| Wyrick et al 2015 | Surgeon-specific education on utilization of sign-out portion of WHO checklist<br><br>Didactic lectures | Nursing-led education of circulating nurses on SWC<br><br>Didactic lectures |  | None | Didactic lectures during weekly meetings   | None |