**Appendix 5 –Summary of Delphi Round 3 Breakout Group Discussions**

For each Round 3 breakout group, we briefly describe key aspects of the discussion the affected the final set of statements/questions for Round 4 voting:

**Group 1 – Common Process Elements and Essential Behaviors**

Two of the seven initial questions posed in Round 1 of the Delphi (“What process elements are essential for successful handoffs? What are the essential behaviors and attitudes that should be present for effective handoffs?”) were combined into one question for Round 2. Strong consensus for almost all statements was seen in the Round 3 breakout group discussion and voting, though several statements required revision to reach the threshold for presentation to the conference-at-large. All but two statements presented for Round 4 voting reached consensus on the first vote; one of these, encouraging the use of a setting-specific checklist or cognitive aid to assist with information transfer (1.6), was further modified during Round 4 voting and ultimately reached consensus.

**Group 2 - Measurements and Metrics**

Group 2 approached the list of statements generated from Round 2 of the Delphi process differently than Group 1. Rather than debating the merits of different approaches to measuring constructs, the group assumed that valid measurement approaches existed or could be developed. The group also decided against creation of an all-inclusive list of metrics to avoid being overly prescriptive about what must be measured. Rather, the group created a list of candidate measures that might be considered to assess handoff effectiveness. Prior to voting on statements, a preface statement to precede the list of outcome measures was created to avoid undue repetition: “The following measures are recommended to assess the effectiveness of perioperative patient handoffs.”

During the Round 3 breakout group discussion, there was uncertainty and debate about selecting metrics that could be measured easily (e.g. length of stay, in-hospital mortality) versus metrics that were more closely related to the conduct of handoffs (e.g. information transfer). The group also struggled with the importance of advocating measures that are unequivocally important but multifactorial (e.g. in-hospital mortality) versus measures on which handoffs have a more direct impact (e.g. medication errors). In Round 4 voting and discussion, participants were concerned with the specificity of efficiency metrics agreed to by the Round 3 breakout group; consensus was reached after the metric was broadened to “Efficiency and/or time-related processes.”

**Group 3 – Research Questions**

The question “What are the best practices for conducting safe and effective handoffs?” provoked an intense Round 3 debate about broad vs. specific research questions. Time constraints necessitated a focus on the questions that attained or nearly attained consensus on the first pass. The group agreed to slightly modify and alter some of the statements to reach consensus. A new question was added (“What are the current attitudes and beliefs of healthcare professionals towards the importance of a structured handoff process?”), which was considered very important by the group.

**Group 4 -Education and Training**

In general, there was agreement amongst Round 3 breakout group members surrounding the need for education and training that was relevant to all stakeholders, experiential, and sustainable through frequent feedback and assessment of competency. It was generally agreed that leadership should support these training initiatives. Consensus was achieved with relatively minor changes to statements; modifications were suggested so statements reflected sound education terminology and methodology without being too prescriptive. There were no controversial or contentious discussions during the focus group. Of the 10 statements that achieved consensus within the breakout group, all achieved consensus in Round 4 large group voting.

**Group 5: Implementation Strategies and Tactics**

As with Group 1 (process elements and essential behaviors), high levels of agreement existed in both Delphi Round 2 voting and following preliminary Round 3 voting during the breakout session for the implementation group. Consensus was achieved for most statements, though several statements were revised to reach the threshold for presentation to Round 4 large group voting: All fourteen statements from the breakout group reached consensus in Round 4 voting; one of these (“when resources are required for handoff redesign and implementation a proposal should be presented to organizational leadership”), required the most discussion in Round 3 and further modification during Round 4 for consensus to be reached.

**Group 6 – Patient and Family Engagement**

Group 6 was tasked with evaluating consensus statements surrounding the level and type of participation patients and their families should have in handoff communication. The Round 3 discussion was engaging with multiple points of view and a rich, robust discussion of pros and cons of having participants external to the healthcare provider team engage in patient care handoffs. Nearly all felt patients and families may potentially have valuable information that would be important to share with the healthcare team. Assuring consent of the patient prior to involving the family was a key discussion point. Most agreed that patients and families should be given the opportunity to participate in handoffs in the appropriate clinical setting as defined by circumstance and clinical judgment. However, the group was not able to achieve consensus on what those circumstances might be. Pediatric providers and intensivists present within the breakout group seemed more comfortable with the concept of familial participation. The Round 4 large group discussion unfolded in a similar fashion, resulting in only three statements reaching consensus.