**Appendix 6. Complete List of Research Questions from Delphi Round 1**

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| **Research Question** | **Frequency of Occurrence** |
| Does the quality of perioperative handoffs affect patient outcome? | 10 |
| Does the quality of perioperative handoffs affect outcome? | 8 |
| What are best practices for handoff training? | 8 |
| What are the critical elements of effective handoffs? | 7 |
| Does the frequency of handoffs affect patient outcomes? | 6 |
| Do checklists improve handoffs? | 5 |
| Does information technology support effective handoffs? | 5 |
| Should standardization of handoffs vary by case, setting, etc? | 5 |
| Does the delivery method affect the quality of a handoff, e.g., face-to-face, telephone, written, electronic? | 4 |
| What adverse events are associated with ineffective handoffs? | 4 |
| What elements are required for effective handoffs? | 4 |
| Does a structured handoff reduce loss of critical information? | 3 |
| Does the quality of a perioperative handoff vary with the type of providers conducting the handoff? | 3 |
| Does the quality of perioperative handoffs affect intermediate outcomes? | 3 |
| What are best practices for implementing effective handoffs? | 3 |
| What are current practices for perioperative handoffs in different settings and situations? | 3 |
| What communication skills are required for high quality handoffs? | 3 |
| What information is lost in a perioperative handoff? | 3 |
| Do standardized handoffs improve patient outcomes? | 2 |
| Do standardized handoffs require more time? | 2 |
| Does simulation training improve handoff effectiveness? | 2 |
| How do organizational factors affect handoff implementation success? | 2 |
| what are best practices for conducting handoffs? | 2 |
| what are best practices for sustaining effective handoffs? | 2 |
| What are best practices to engage providers in effective handoff behaviors? | 2 |
| what are cost/benefit tradeoffs in handoffs? | 2 |
| What are the barriers to conducting effective handoffs? | 2 |
| What errors occur due to ineffective handoffs? | 2 |
| What factors influence the effectiveness of handoffs? | 2 |
| what is the best process for conducting effective handoffs? | 2 |
| What training is effective for sustaining handoff behavior change? | 2 |
| Are handoffs currently being conducted consistently? | 1 |
| Are handover failures associated with safety culture? | 1 |
| Are providers satisfied with handoff quality? | 1 |
| Are structured handoffs associated with improved outcomes? | 1 |
| Can read-back during handoffs be implemented? | 1 |
| Do handoffs affect PACU stay? | 1 |
| Do handovers in the OR improve patient safety? | 1 |
| Do mutual respect and collegiality affect the quality of handoffs? | 1 |
| Does lost information during a handoff affect patient outcome? | 1 |
| Does organizational ergonomics affect handoff effectiveness? | 1 |
| Does patient stability vary with time since a handoff? | 1 |
| Does team familiarity affect handoff quality? | 1 |
| Does team training affect handoff effectiveness? | 1 |
| Does the EHR contribute to handoff failures? | 1 |
| Does the quality of handoffs affect care team level of stress? | 1 |
| Does the quality of handoffs affect staff satisfaction? | 1 |
| does the quality of handoffs reduce call backs for questions? | 1 |
| Does the quality of perioperative handoffs reduce near misses? | 1 |
| Does the use of cognitive aids improve perioperative handoff quality? | 1 |
| How are medication errors associated with handoffs? | 1 |
| How are common handoff related events resolved? | 1 |
| How can handoffs reduce errors? | 1 |
| How can the receiver be best encouraged to demonstrate sufficient knowledge about the patient? | 1 |
| How do handoff practices vary with time of day? | 1 |
| How do specific interventions to improve handoffs impact outcome? | 1 |
| How do team dynamics affect the quality of handoffs? | 1 |
| how does teamwork influence handoff compliance? | 1 |
| How does the communication of sedation medication information affect handover effectiveness? | 1 |
| How does the communication of ventilator settings affect handover effectiveness? | 1 |
| How does the environment affect the quality of handoffs? | 1 |
| How is trust developed for effective handoffs? | 1 |
| How many handoffs are required in an effective ERAS protocol? | 1 |
| How much information needs to be transferred during an effective handoff? | 1 |
| How much information should be written vs spoken during effective handoffs? | 1 |
| How often are perioperative handoffs conducted between different specialties? | 1 |
| How often is information lost in handoffs? | 1 |
| How should medication reconciliation be incorporated into handoffs? | 1 |
| Is information transmitted during a handoff consistent with that in the patient record? | 1 |
| Is SBAR useful for effective handoffs? | 1 |
| What are best practices for assessing competency of staff in conducting handoffs? | 1 |
| What are best practices for evaluating handoff performance? | 1 |
| What are best practices for providing feedback to providers about handoff quality? | 1 |
| What are best practices for retention of handoff information? | 1 |
| What are best practices to scale handoff implementation? | 1 |
| What are patient and family expectations of handoffs?  | 1 |
| What are the collateral benefits of effective handoffs? | 1 |
| What are the most common events associated with handoffs? | 1 |
| what are the outcomes resulting from effective vs ineffective handoffs? | 1 |
| What behaviors are critical for effective handoffs? | 1 |
| What evidence exists for creating guidelines for conducting handoffs? | 1 |
| What handoff lessons can be learned from other domains? | 1 |
| What information is missed if all players are not present? | 1 |
| What information is missed in the absence of a structured handoff? | 1 |
| What is effective communication during a handoff? | 1 |
| What is optimal flexibility for conducting effective handoffs? | 1 |
| What is the best method to communicate information during a handoff? | 1 |
| What is the effect of production pressure on the quality of handoffs? | 1 |
| What is the most effective way to implement a standardized handoff process? | 1 |
| What is the optimal length of a handoff? | 1 |
| what is the role of the EMR in conducting effective handoffs? | 1 |
| What makes an effective handoff? | 1 |
| What process indicators should be collected for an effective handoff? | 1 |
| What should be the content of an effective handoff? | 1 |
| Why do providers feel structured handoffs are valuable? | 1 |