

Supplementary Materials

The surgeon behind the algorithm: Why Intraoperative AI Literacy is a patient safety imperative

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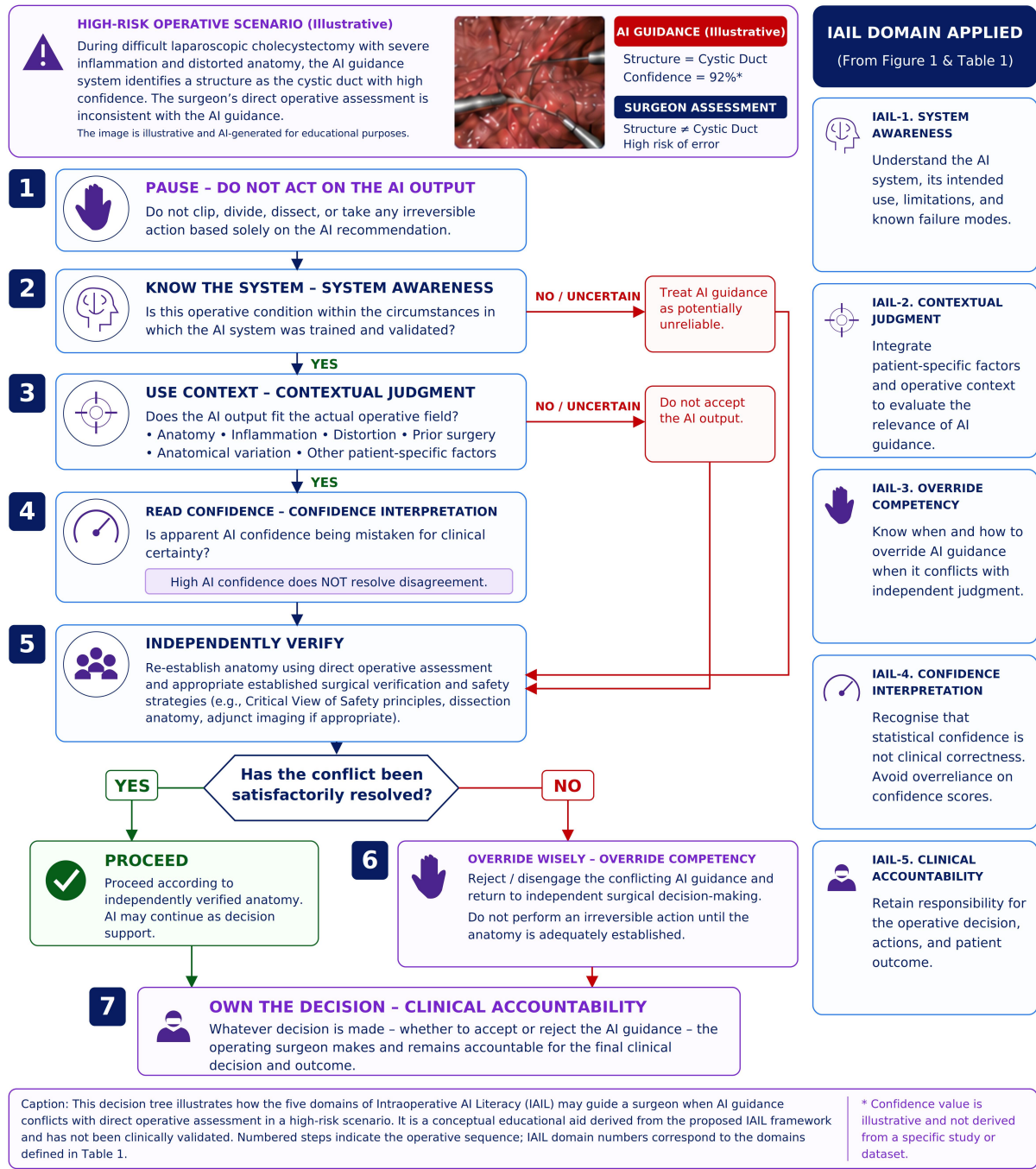
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Supplementary Figure 1. High-Risk Surgical Scenario Decision Tree

Applying Intraoperative AI Literacy (IAIL) When AI Guidance Conflicts with Direct Operative Assessment



Disclaimer: This figure is intended for educational and conceptual purposes only. It does not constitute clinical guidance or a standard of care. Clinical decisions must be based on individual patient factors, surgeon judgment, and established safety principles.

Supplementary Figure 1. Illustrative application of Intraoperative AI Literacy (IAIL) when AI guidance conflicts with direct operative assessment. The seven-step decision tree presents a hypothetical laparoscopic cholecystectomy scenario and maps the five IAIL domains defined in Table 1 and illustrated in Figure 1 to surgeon decision-making. It emphasises independent verification, rejection or disengagement of conflicting AI guidance, and continued surgeon accountability. Step numbers indicate the sequence of the illustrative workflow, not the numbering of the IAIL domains. The displayed AI confidence score of 92% is illustrative and is not derived from a study or dataset. This conceptual educational aid has not been validated and does not constitute clinical guidance or a standard of care. AI: Artificial intelligence; IAIL: Intraoperative AI Literacy.