

Appendix 2. Quality Information

Title	Author	Was the intervention independent of other changes?	Was the shape of the intervention effect prespecified?	Was the intervention unlikely to affect data collection?	Blinding of participants and personnel	Blinding of outcome assessments	Were incomplete outcome data adequately addressed?	Are reports of the study free of suggestion of selective outcome reporting?	Was the study free from other risks of bias?
A handoff protocol from the cardiovascular operating room to cardiac ICU is associated with improvements in care beyond the immediate postoperative period.	Kaufman	High Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Low Risk: convenience sampling
The effect of a checklist on the quality of post-anaesthesia patient handover: a randomized controlled trial	Salzwedel	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Low Risk: convenience sampling
Patient handover from surgery to intensive care: using Formula 1 pit-stop and aviation models to improve safety and quality.	Catchpole	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Low Risk: patients selected to be balanced pre- and post-intervention
Standardizing postoperative PICU handovers improves handover metrics and patient outcomes.	Breuer	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sampling, low survey response rate, recall and response bias

A standard handoff improves cardiac surgical patient transfer: operating room to intensive care unit.	Dixon	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Low Risk: sampling method unclear, recall and response bias
Face-to-face handoff: improving transfer to the pediatric intensive care unit after cardiac surgery.	Vergales	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Low Risk: recall and response bias
Pilot implementation of a perioperative protocol to guide operating room-to-intensive care unit patient handoffs.	Petrovic	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sampling, recall and response bias
Standardized postoperative handover process improves outcomes in the intensive care unit: a model for operational sustainability and improved team performance*.	Agarwal	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall and response bias
Handover after pediatric heart surgery: a simple tool improves information exchange.	Zavalkoff	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Medium Risk: all patients selected, but had a small sample size to draw conclusions about patient outcomes
Operating Room-to-ICU Patient Handovers: A Multidisciplinary Human-Centered Design Approach.	Segall	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall bias, sampling method unclear
Standardized multidisciplinary protocol improves handover of cardiac surgery patients to the intensive care unit.	Joy	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall and response bias, sampling method unclear

Surgical suite to pediatric intensive care unit handover protocol: implementation process and long-term sustainability.	Northway	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall and response bias, sampling method unclear
Assuring Sustainable Gains in Interdisciplinary Performance Improvement: Creating a Shared Mental Model During Operating Room to Cardiac ICU Handoff.	Riley	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall and response bias, but sampling done randomly and consecutively
Improving postoperative handover from anaesthetists to non-anaesthetists in a children's intensive care unit: the receiver's perception.	Fabila	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall bias, response bias
Improving the quality of the operating room to intensive care unit handover at an urban teaching hospital through a bundled intervention.	Moon	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall bias, response bias
A Structured Transfer of Care Process Reduces Perioperative Complications in Cardiac Surgery Patients.	Hall	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: complications data is from a database that has voluntary reporting, attempted to limit this bias by testing and verifying whether things were captured, lack of analysis of patient comorbidities
Improving cardiac operating room to intensive care unit handover using a standardised handover process.	Gleicher	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High risk: recall and response bias, low sample size for pre-intervention data collection, purposive sampling

Improving the postoperative handover process in the intensive care unit of a tertiary teaching hospital.	Yang	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sampling, did not account for other factors that could have impacted ventilator time
Implementation of a standardized handoff protocol for post-operative admissions to the surgical intensive care unit.	Mukhopadhyay	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Low Risk: purposive sampling to cover all shifts
Sustainability of protocolized handover of pediatric cardiac surgery patients to the intensive care unit.	Chenault	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: response and recall bias, sampling method unclear
Optimizing postoperative handover to the intensive care unit at a tertiary centre.	Kumar	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Medium Risk: consecutive patient sampling
Improvement in Patient Transfer Process From the Operating Room to the PICU Using a Lean and Six Sigma-Based Quality Improvement Project.	Gleich	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall and response bias, differing sample sizes in each phase, unclear sampling method
Implementation of a postoperative handoff protocol	Van Der Walt	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall and response bias, sampling method unclear
Adaptation of a postoperative handoff communication process for children with heart disease: a quantitative study.	Chen	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sampling
Using Six Sigma® Methodology to Improve Handoff	Mistry	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: small amount of pre-intervention data relative

Communication in High-Risk Patients				ne effect					to post-intervention, sampling method unclear
Implementation of a structured information transfer checklist improves postoperative data transfer after congenital cardiac surgery.	Karakaya	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Medium Risk: sampling method unclear
Strengthening handover communication in pediatric cardiac intensive care.	Craig	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Medium Risk: sampling method unclear, patients in pre- and post-intervention groups similar
Improving Handoffs Between Operating Room and Pediatric Intensive Care Teams: Before and After Study.	Malenka	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sampling, more emergent procedures in group post-intervention
Handover from operating theatre to the intensive care unit: A quality improvement study.	Marshall	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: recall and response bias, observations consecutive but within a specified time frame
A Partially Structured Postoperative Handoff Protocol Improves Communication in 2 Mixed Surgical Intensive Care Units: Findings From the Handoffs and Transitions in Critical Care (HATRICC) Prospective Cohort Study.	Lane-Fall	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: response and recall bias, convenience sample, but captured all time periods
A Multidisciplinary QI Initiative to Improve OR-ICU Handovers.	Krimminge r	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sample, response and recall bias

A Model for a Standardized and Sustainable Pediatric Anesthesia-Intensive Care Unit Hand-Off Process	Dalal	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sample, response and recall bias, observer bias
An electronic handoff tool to facilitate transfer of care from anesthesia to nursing in intensive care units	Shah	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sample, response and recall bias, observer bias
An Implementation Science Approach to Handoff Redesign in a Cardiac Surgery Intensive Care Unit	Geoffrion	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sample, response and recall bias, possible concurrent quality improvement activities
Implementation and 1-year follow-up of the cardiovascular ICU standardised handover	Lupei	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Medium Risk: response and recall bias, selection bias in survey response
Improving Postoperative Handoff in a Surgical Intensive Care Unit	Talley	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Medium Risk: response and recall bias, small sample size for survey
Improving quality of care in less than 1 min: a prospective intervention study on postoperative handovers to the ICU/PACU	Keller	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	Medium Risk: convenience sample, response and recall bias
OR and ICU teams 'running in parallel' at the end of cardiothoracic surgery improves perceptions of handoff safety	Hamid	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sample, response and recall bias
Postoperative handover among nurses in an orthopedic surgical	Tun	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sample, response and recall bias

setting in Myanmar: a best practice implementation project				ne effect					
Standardization improves postoperative patient handoff experience for junior clinicians	Prasad	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: convenience sample, response and recall bias, low response rates
Standardizing postoperative handoffs using the evidence-based IPASS framework through a multidisciplinary initiative improves handoff communication for neurosurgical patients in the neuro-intensive care unit	Schmidt	Low Risk	Low Risk	High Risk: Hawthorne effect	High Risk	High Risk	Low Risk	Low Risk	High Risk: sampling bias, response and recall bias