

# AB070. SOH23ABS\_202.

## A systematic review of interventions to improve daily handover in surgery

Jessica Ryan<sup>1,2</sup>, Fiachra McHugh<sup>3</sup>, Walter Eppich<sup>1</sup>, Dara Kavanagh<sup>4,5</sup>, Deborah McNamara<sup>6,7,8</sup>

<sup>1</sup>SIM Centre for Simulation Education and Research, Royal College of Surgeons in Ireland, Dublin, Ireland; <sup>2</sup>StAR MD Programme, Royal College of Surgeons in Ireland, Dublin, Ireland; <sup>3</sup>Department of Surgery, Mayo University Hospital, Mayo, Ireland; <sup>4</sup>Department of Surgery, Tallaght University Hospital, Dublin, Ireland; <sup>5</sup>Department of Surgical Affairs, Royal College of Surgeons in Ireland, Dublin, Ireland; <sup>6</sup>Office of the President, Royal College of Surgeons in Ireland, Dublin, Ireland; <sup>7</sup>National Clinical Programme in Surgery, Royal College of Surgeons in Ireland, Dublin, Ireland; <sup>8</sup>Department of Surgery, Beaumont Hospital, Dublin, Ireland

**Background:** Poor quality handovers lead to patient harm and surgical teams receive little training in this area. This systematic review provides an up-to-date assessment of the types of interventions available to improve daily surgical handover.

**Methods:** This review was prospectively registered with PROSPERO (CRD42022363198). Ovid MEDLINE(R), PubMed, Embase, and Cochrane databases were searched for articles published up to July 2022. Comparative English-language studies describing interventions applicable to daily surgical handover were included.

**Results:** A total of 5,869 citations were reviewed by two independent reviewers. Thirty-four papers were included for systematic review, including 23 audits/quality improvement projects, 9 observational studies, and 2 randomised controlled trials. Interventions can be grouped into: formalisation of the handover process (n=9), improvements in tools used for handover (n=18), and team education only (n=7). Staff were educated on specific handover techniques in 4 papers [situation, background, assessment, recommendation (SBAR), n=3; illness severity, patient summary, action list, situation awareness, synthesis

by receiver (I-PASS), n=1]. Only 10 papers reported patient outcomes, 6 of which found significant improvements (length of stay, n=4; weekend discharges, n=1; erroneous order entries, n=1; emergency response team calls, n=1; and number of patients missed on ward rounds, n=1).

**Conclusions:** There is a lack of prospective comparative data in the area of surgical handover with wide heterogeneity of reported interventions and outcomes. Few papers have used robust measures of patient outcomes, which are arguably the most important factors in this process. More research is needed in this area to generate levels II and III evidence specific to surgical handover.

**Keywords:** Continuity of care; information transfer; sign-out; surgical education; surgical handover

### Acknowledgments

*Funding:* None.

### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

*Open Access Statement:* This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

doi: 10.21037/map-23-ab070

**Cite this abstract as:** Ryan J, McHugh F, Eppich W, Kavanagh D, McNamara D. AB070. SOH23ABS\_202. A systematic review of interventions to improve daily handover in surgery. *Mesentery Peritoneum* 2023;7:AB070.