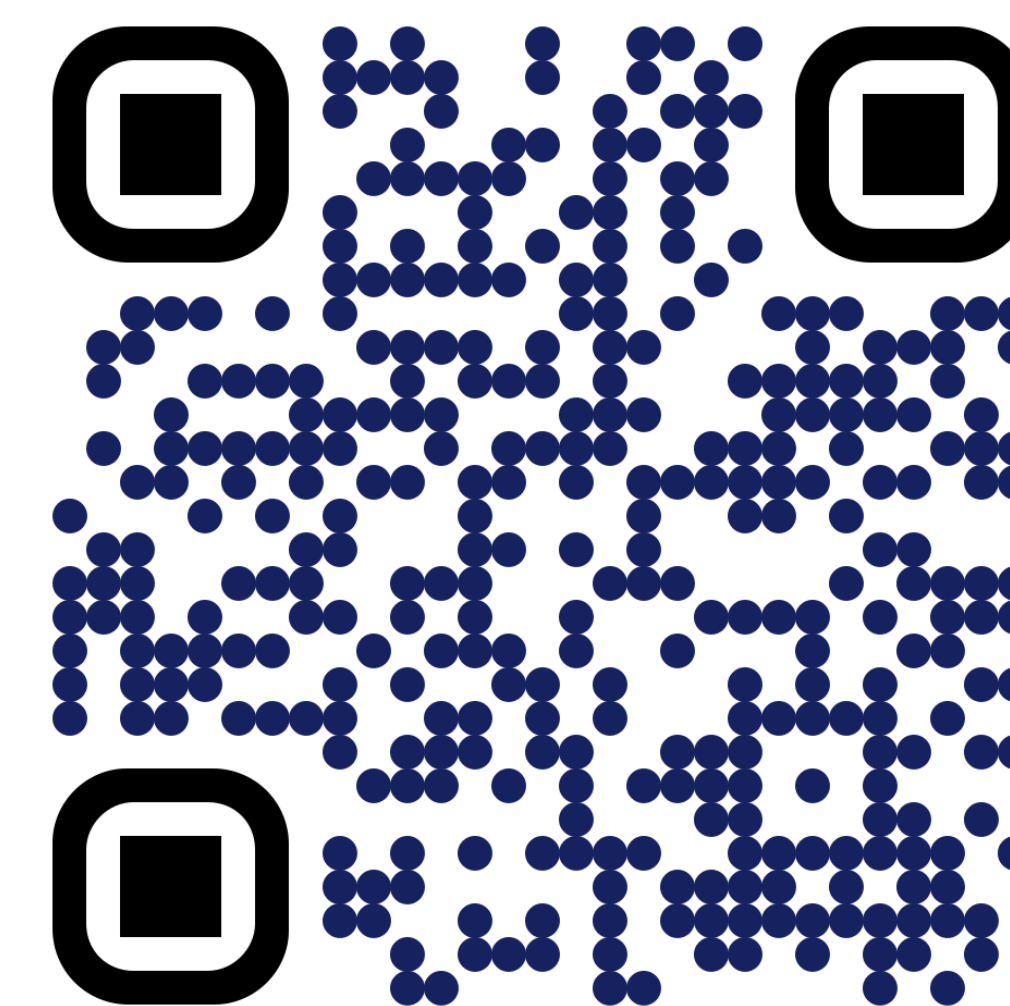


Dedicated teams to optimize quality and safety of surgery: a systematic review

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BACKGROUND

- An essential part of incidents in healthcare take place in the perioperative period. Technical, logistical, and communicative complexity create a high-risk environment for patients.
- Increasing specialization of medical specialists has led to potential disparities within operating room teams, potentially affecting communication and perioperative alignment.
- It seems straightforward that a dedicated surgical team, trained in technical and/or non-technical skills concerning an intervention, could improve efficiency, quality, and safety of healthcare.



AIM

- To determine whether a dedicated surgical team trained in communicative and/or technical skills contributes to healthcare quality and patient safety.



METHODS

- A systematic review was conducted to evaluate the effects of a dedicated surgical team on clinical and performance outcomes.
- A dedicated surgical team includes surgeon, scrub and circulating nurses, anesthesiologist, nurse anesthetist, and may include additional members.
- Medline and Embase were searched on 23 June 2022.
- Both randomized controlled trials (RCTs) and non-randomized studies (NRS) were included.
- Primary outcomes were mortality, complications, and readmissions. Secondary outcomes were costs and performance measures.
- Risk of bias was determined using the Cochrane risk of bias tool for RCTs and the Newcastle-Ottawa tool for NRS.



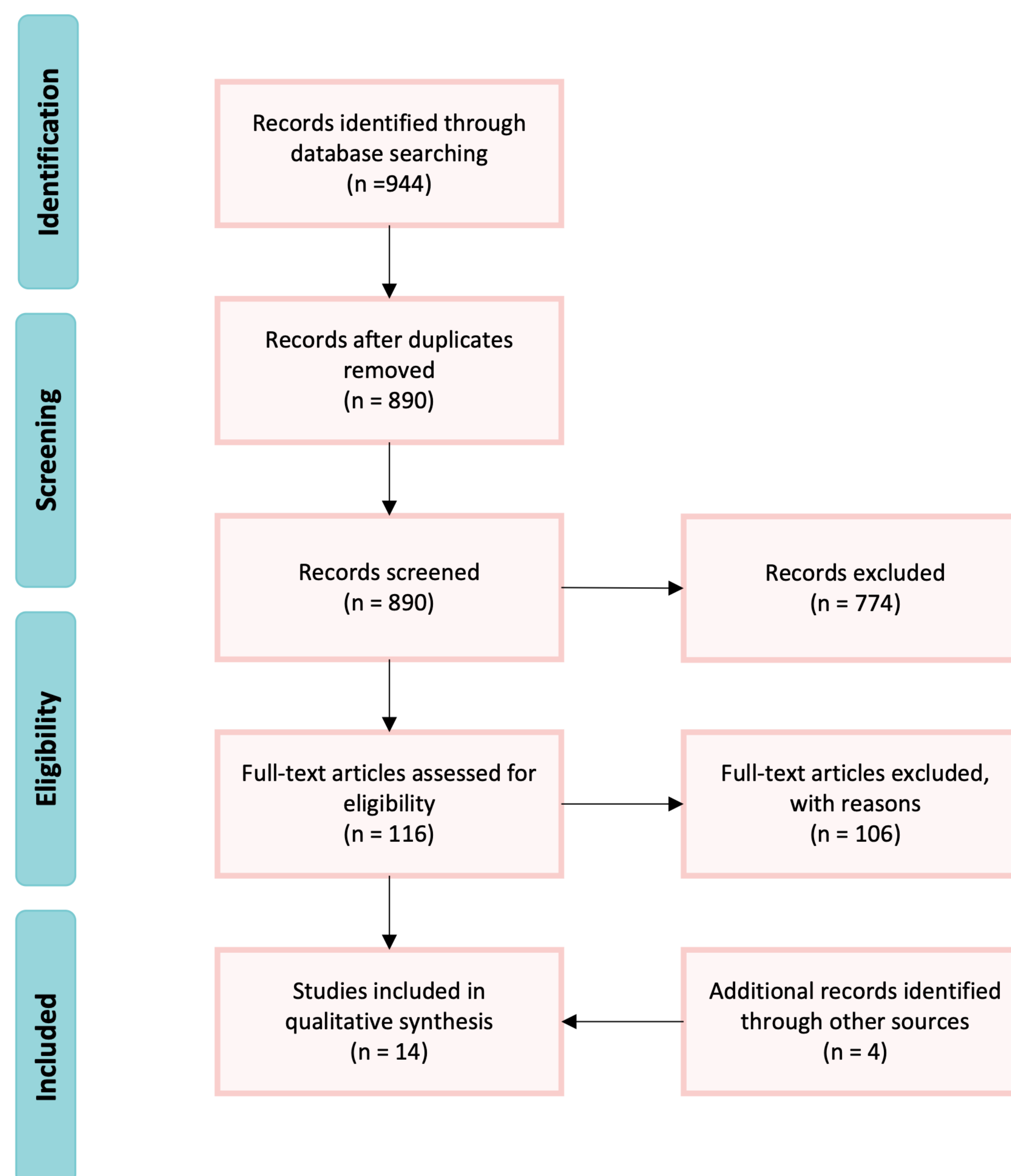
HYPOTHESIS

- Establishing dedicated surgical teams trained in technical and/ or non-technical aspects holds promise for improving healthcare efficiency and safety.



RESULTS

- Fourteen studies were included (RCTs n=1; NRS n=13).
- Implementation of dedicated operating teams was associated with improvements in mortality, turnover time, teamwork, communication, and costs.
- No significant differences were observed in readmission rates and length of hospital stay.
- Results regarding duration, glitch counts, and complications of surgery were inconclusive.
- Limitations include study conduct and heterogeneity between studies.



CONCLUSION

- Surgical teams that received training communication and/ or technical skills showed positive effects on multiple clinical outcome measures.
- Dedicated teams provide a feasible way of improving healthcare quality and patient safety.
- A dose-response effect of team training was reported, but also a relapse rate, suggesting that repetitive training is of major concern to high-quality patient care.