

# **Does one size fit all? The implications of gender for operating room team performance, teamwork interventions, and equitable patient outcomes**

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**Summary** This work aims to advance research and practice in the operating room (OR) combining technological innovation (the OR Black Box) with gender-based analysis. Findings will be used to inform future intervention implementation through understanding how gender affects teamwork behaviours, barriers and facilitators to effective teamwork, and patient outcomes.

## **1. Relevance**

Surgical patient safety relies on effective teamwork; yet, research and intervention implementation have overlooked the gendered social context in which teams operate. In fact, the OR has largely been treated as “gender neutral” despite evidence from other areas of healthcare demonstrating the relevance of gender to team interactions, practice patterns, care delivery, and patient outcomes.

## **2. Aims & Objectives**

- 1) Examine the interrelationship between the gender composition of OR teams, individual clinician gender for each professional role, intraoperative teamwork performance, and patient outcomes.
- 2) Explore barriers and facilitators to effective OR teamwork according to clinician gender and professional role.

## **3. Methods**

1) Intraoperative data will be collected using the OR Black Box at two Canadian hospitals. Like black boxes used in aviation, the OR Black Box is an innovative tool that records detailed information from the surgical environment (e.g. audio, video, patient vials). 2) Qualitative interviews will be conducted with female and male clinicians from each main OR profession (nursing, anaesthesia, surgery). The interview guide and analysis will be based on the Theoretical Domains Framework.

## **4. Results**

We anticipate results will demonstrate variation in teamwork performance, teamwork barriers and facilitators, and patient outcomes by gender, implying teamwork intervention implementation should account for gender differences.

## **5. Conclusions**

Gender is a key social determinant of healthcare practices, health outcomes, and their interrelationship. Understanding the role of gender in the OR is critical to overcoming gender bias in clinical research and generating better evidence, more effective interventions, and equitable patient outcomes.

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