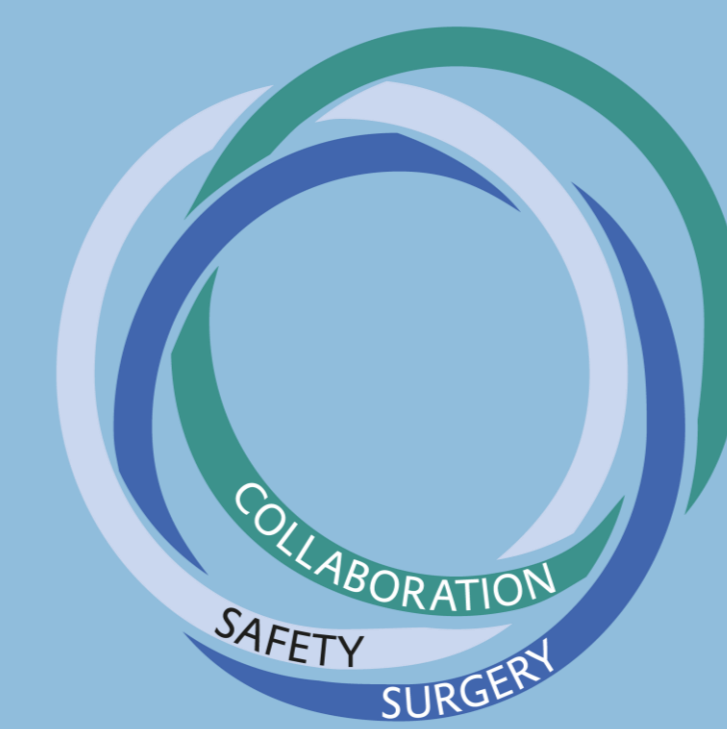


Implementation of routine recording of intraoperative adverse events according to ClassIntra® during the sign-out phase of the WHO Surgical Safety Checklist using a multifaceted, tailored implementation strategy: protocol of a collaborative before- and after-cohort project



CIBO SURG

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Background & Aim

Intraoperative adverse events (iAEs) increase postoperative complications which are devastating to patients and costly to health care systems.¹ To optimise patient outcomes, the World Health Organization Surgical Safety Checklist (WHO SSC) was introduced in 2008,² but adherence especially to its third part, the sign-out, is low and iAEs are currently not routinely assessed. This gap between evidence supporting the use of the WHO SSC,^{3,4} an inconsistent sign-out practice and the lack of standardised iAEs reporting warrants applying an implementation science approach. Hence, the CIBOSurg-project (ClassIntra[®] for Better Outcomes in Surgery; ClassIntra[®]: Classification of Intraoperative adverse events) aims to simultaneously evaluate the effectiveness and implementation of the sign-out including systematic recording and discussion of iAEs.

Methods

Using a hybrid effectiveness-implementation approach, this prospective before and after collaborative cohort project includes five surgical disciplines within nine Swiss hospitals. Following a context analysis using the Consolidated Framework for Implementation Research, this project is set up in three periods: 1) Recruitment of 40 patients per surgical discipline and site (approx. 900 in total) for baseline assessment; 2) Implementation of the sign-out with routine recording of iAEs according to ClassIntra[®] based on multifaceted, tailored implementation strategies including educating and creating awareness among healthcare professionals, visible support by leaders and regular feedback rounds; 3) Recruitment of 40 patients per discipline to assess the changes after implementation (approx. 900). Implementation and effectiveness outcomes will be analysed using a mixed regression model adjusting for relevant confounders.

Discussion & Conclusion

By enhancing adherence to the WHO SSC sign-out including standardised reporting of iAEs we expect to further improve perioperative patient outcomes. Based on the insights of the extensive context analysis, we will provide a broadly applicable implementation plan to achieve the required sustainable behavioural change, which will support the roll-out in further hospitals. Meanwhile clinical and implementation science expertise meets the challenges of the complex environment of an operating room.

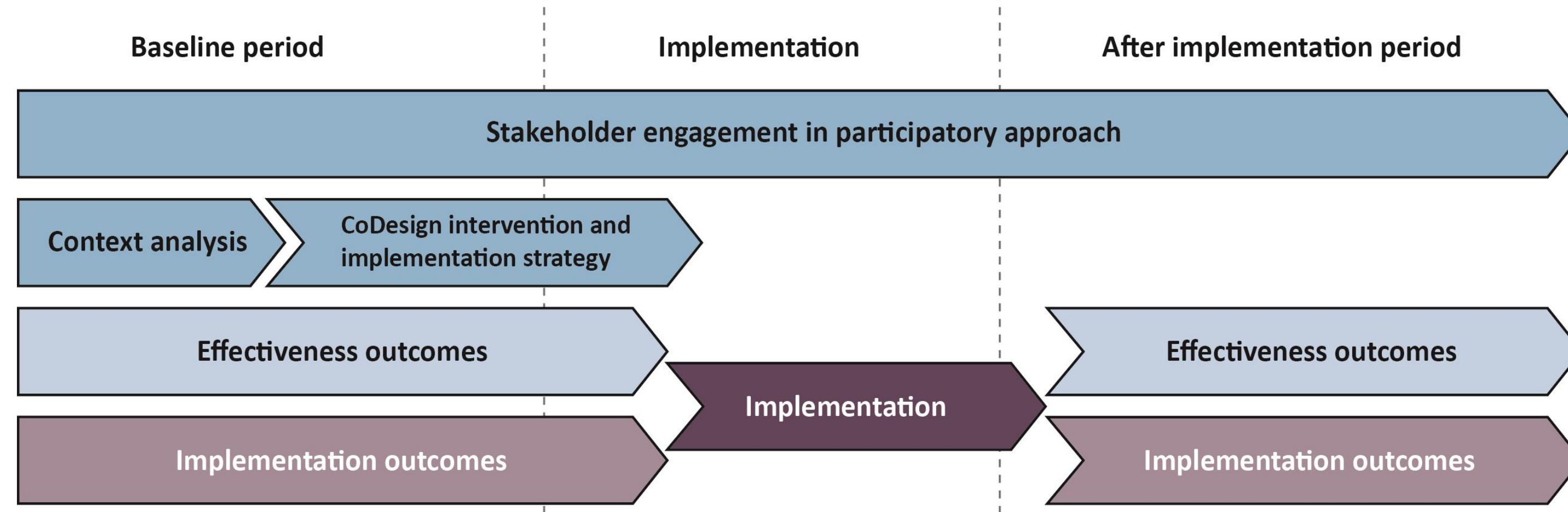
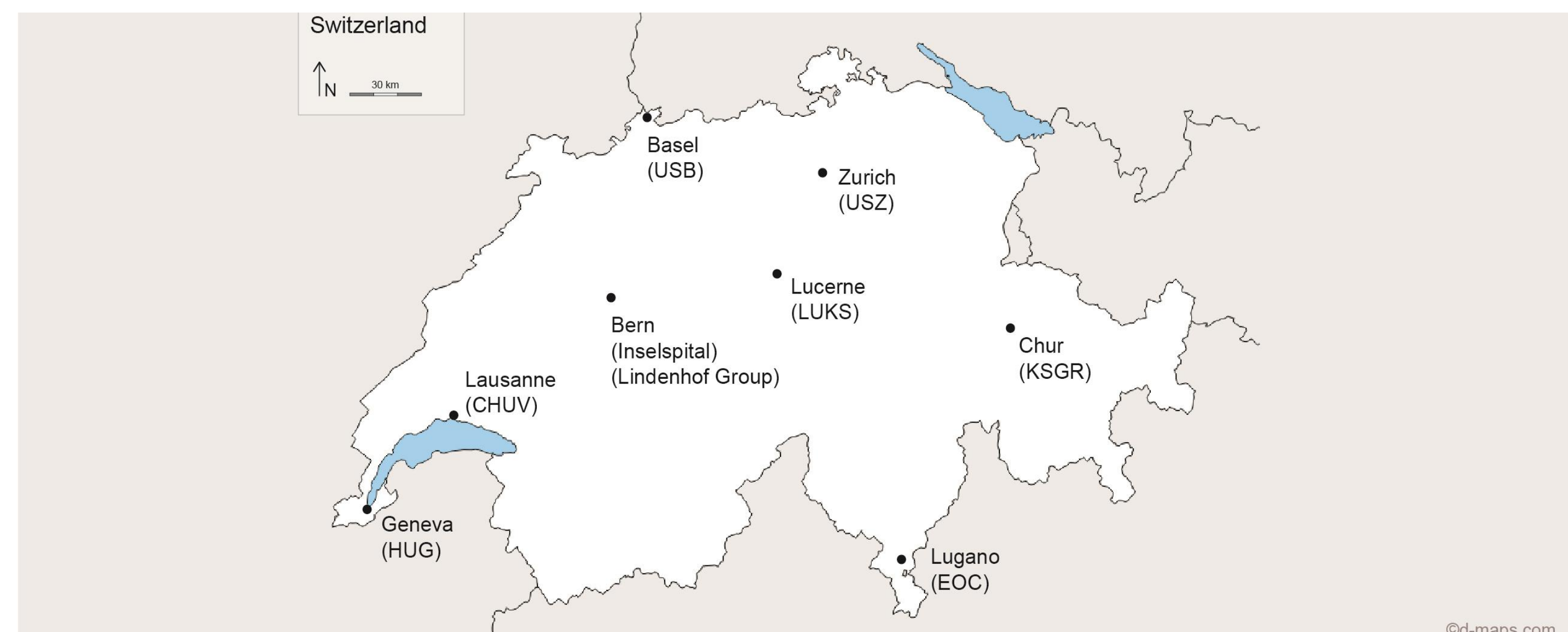


Figure 1: Project plan CIBOSurg

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Implementation Research Logic Model

