

Safe Surgery SA

Block A, Willow Wood Office Park
Cnr 3rd Street & Cedar road
Broadacres, 2021
Cell: +27 67 429 2053
Telephone: +27 11 065 9501
Email: admin@safesurgery.co.za
www.safesurgery.co.za
CIPC Reg no 2014/057792/08
DSD Reg no 225-187 NPO

Safe Surgery SA (SSSA) is a research-driven non-profit organisation enabling the use of data related to perioperative care. Its mission is to empower clinicians in providing affordable quality services in optimal settings, and advocate for surgical systems strengthening. We do this by providing research support, promoting access to relevant data, and seeking collaborative partnerships.

Key to SSSA efforts is identifying appropriate **perioperative datasets**, and facilitating sharing of data in a safe, effective way. The **SSSA Data Tree** provides a conceptual framework for datasets that can be used to promote research and learning/improvement in perioperative care. Without common datasets, information cannot be shared. Without sharing information in an effective and standardised manner, we cannot interpret the information. Without this information, we cannot drive outcomes-based care. Safe Surgery SA's efforts to co-create the **digital health architecture** to host perioperative healthcare data for use by stakeholders in South Africa and on the African continent, are on-going. We help define the data needed, determine the common language, and build the researcher and information networks, using our uniquely clinician-driven structures and reputation.

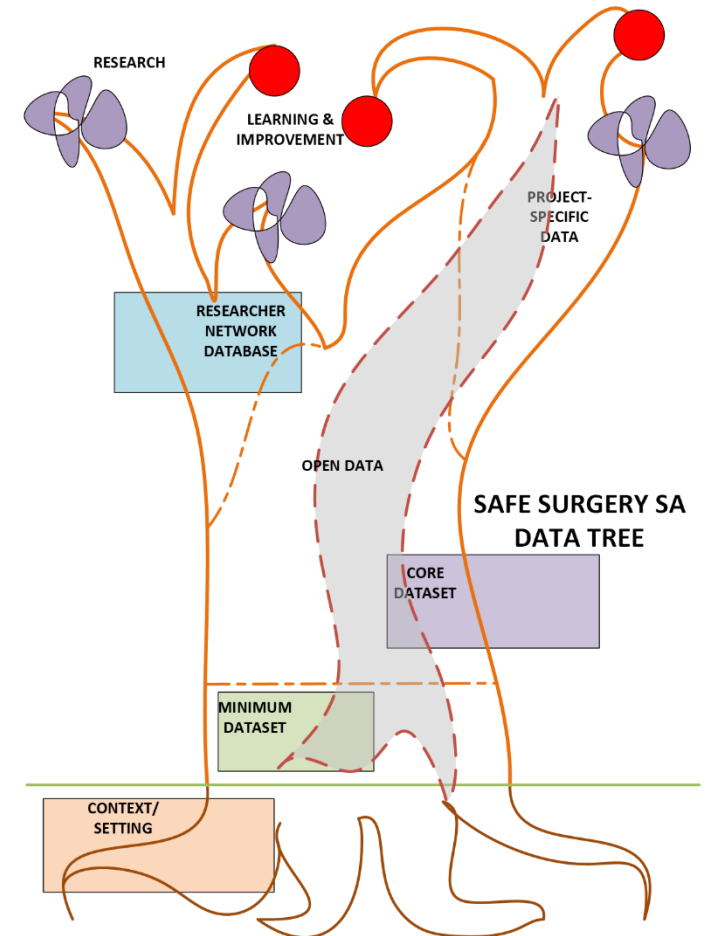
We are growing the data tree with projects to:

Understand the context of perioperative care - data on clinical settings/surgical facilities.

Perform a proof-of-concept study for the inclusion of surgical indicators (Risk-adjusted Perioperative Mortality Rate and Surgical Volume) in the South African National Indicator Dataset, funded by the World Federation of Societies of Anaesthesiologists.

Use data collection tools that capture data to enhance the minimum dataset and create a core patient - level dataset, e.g., process quality indicators and/or patient-reported data using the Perioperative Shared Health Record (<https://pshr.safesurgery.co.za>)

Manage and maintain a researcher network database of the African Perioperative Research Group (APORG) members (<https://periopnetwork.org/>)



Safe Surgery SA has collaborative research agreements with Sefako Makgatho Health Sciences University (SMU), a historically disadvantaged institution in South Africa, and with the UK NIHR APPRISE group <https://globalperioperativecriticalcare.org/>. Safe Surgery SA has memoranda of understanding with CareConnectHIE <https://www.careconnecthie.org/>, the SA Medical Association <https://www.samedical.org/> and Health Systems Trust <https://www.hst.org.za/>.

Publications related to or supported by the Safe Surgery SA work:

- Kluyts H, Bedwell GJ, Bedada AG, et al. Determining the Minimum Dataset for Surgical Patients in Africa: A Delphi Study. *World J Surg*. Published online 16 November 2022. <https://doi.org/10.1007/s00268-022-06815-3>
- Van der Merwe F, Vickery NJ, Kluyts H, et al. Postoperative Outcomes Associated with Procedural Sedation Conducted by Physician and Nonphysician Anesthesia Providers: Findings from the Prospective, Observational African Surgical Outcomes Study. *Anesth Analg*. 2021 Dec 28 Online ahead of print. <https://doi.org/10.1213/ANE.0000000000005819>
- Biccard BM, Du Toit L, Lesosky M, Stephens T, Myer L, Prempeh A, Vickery N, Kluyts H, et al. Effect of enhanced postoperative surveillance on mortality amongst adult surgical patients in Africa (ASOS-2): A cluster randomised trial. *The Lancet Global Health*. Published Online August 18, 2021. [https://doi.org/10.1016/S2214-109X\(21\)00291-6](https://doi.org/10.1016/S2214-109X(21)00291-6)
- Biccard BM, Miller M, Michell WL, Thomson D, Ademuyiwa A, Aniteye E, Calligaro G, Dhufera T, Elfagieh M, Elfiky M, Elhadi M, Fawzy M, Fredericks D, Gebre M, Genetu Bayih A, Hardy A, Joubert I, Kifle F, Kluyts H, et al, on behalf of the ACCCOS Investigators. An African, multi-centre evaluation of patient care and clinical outcomes for patients with COVID-19 infection admitted to high-care or intensive care units. *Lancet* 2021;397:1885–94. [https://doi.org/10.1016/S0140-6736\(21\)00441-4](https://doi.org/10.1016/S0140-6736(21)00441-4)
- Kluyts H, Conradie W, Cloete E, Spijkerman S, Smith O, Alli A, Koto MZ, Montwedi OD, Govender K, Cronje L, Grobbelaar M, Omoshoro-Jones JA, Rorke NF, Anderson P, Torborg A, Alphonsus C, Alexandris P, Mallier Peter A, Singh U, Diedericks J, Mrara B, Reed A, Davies GL, Davids JG, Van Zyl HA, Govindasamy V, Rodseth R, Matos-Puig R, Bhat KAP, Naidoo N, Roos J, Jaworska M, Steyn A, Dippenaar JM, Pearse RM, Madiba T, Biccard BM. Development of a Clinical Prediction Model for In-hospital Mortality from the South African cohort of the African Surgical Outcomes Study. *World J Surg* 2020;45:404-416. <https://doi.org/10.1007/s00268-020-05843-1>
- The African Perioperative Research Group (APORG) working group. Priorities for perioperative research in Africa. *Anaesthesia* 2020, 75 (Suppl. 1), e28–e33 <https://doi.org/10.1111/anae.14934>
- Bishop D, Dyer RA, Maswime S, Rodseth R, Van Dyk D, Kluyts H, Tumukunde J et al. Maternal and neonatal outcomes following caesarean delivery in the African Surgical Outcomes Study: 7-day prospective observational cohort study. *Lancet Glob Health* 2019; 7: e513–22. [https://doi.org/10.1016/S2214-109X\(19\)30036-1](https://doi.org/10.1016/S2214-109X(19)30036-1)
- Kluyts H, Le Manach Y, Munlemvo DM, et al. The ASOS Surgical Risk Calculator: development and validation of a preoperative risk stratification tool for identifying African surgical patients at risk of severe postoperative complications. *Br J Anaesth* 2018;121(6):1357-63. <https://doi.org/10.1016/j.bja.2018.08.005>
- Biccard BM, Madiba TE, Kluyts H, Munlemvo D et al. Perioperative patient outcomes in the African Surgical Outcomes Study: a 7-day prospective observational cohort study. *The Lancet* 2018; 391(10130):1589-98. [http://dx.doi.org/10.1016/S0140-6736\(18\)30001-1](http://dx.doi.org/10.1016/S0140-6736(18)30001-1)