1. INTRODUCTION

2022 review by A de Goede, T Hlongwane and N Zimmelman

The South African Society of Anaesthesiologists’ (SASA) mission is ‘leading the science and practice of safe anaesthesia at the highest standard and ensuring the sustainability of anaesthesiology services. SASA is dedicated to further the discipline of anaesthesia at both academic and clinical levels’. While SASA members adhere to a code of conduct for anaesthesia professionals (Appendix A(i)), these guidelines provide practical guidance for the safe practice of anaesthesia within our diverse clinical settings.

SASA as a professional organisation

SASA is an independent professional body that is the voice for the profession and practice of anaesthesia, both in the public and private sectors and the academic environment. It is a powerful lobbying platform for patient care and safety and better working conditions for all anaesthetists, incorporating the benefit of peer experience, support, and review.

It is the only collective body representing the interests of South African members of the anaesthesia profession. It has five business units, six branches, and seven special interest groups (SIGs), all serving the profession’s interests and our patients. More information on SASA is available at www.sasaweb.com.

SASA has full membership status of the World Federation of Societies of Anaesthesiologists (WFSA) and is a member of the African Regional Section within the WFSA. More information is available at www.wfsahq.org.

SASA is a member of the Common Issues Group (CIG), a collaboration of the Societies of Anaesthesia for Great Britain and Ireland, America, Canada, Australia, New Zealand, and South Africa.

1.1 Goals of the guidelines

These anaesthesia practice guidelines aim to set the same standard for the practice of safe anaesthesia at all levels in the context of the South African healthcare system, which is complex and heterogenous.

In the public sector, the custodians of anaesthesia services (including anaesthetists at all levels, facility managers, and supporting personnel) must be well versed with the standards outlined in practice guidelines and regulations supported by written policies and peer review policies. Stakeholders can incorporate these guidelines as a measure to rate the quality of anaesthesia care. In the private sector, the facility and each professional entity are required to uphold this responsibility.

1.2 Establishment of guidelines (methodology)

Authors and reviewers for the 2022 SASA Practice Guidelines were chosen according to their individual involvement and expertise in specific areas and by recommendation from colleagues. SASA members are represented by reviewers to cover a wide range of work and academic experience, demographics and geography.

With permission, the conveners have adopted and adapted the layout of the 2022 revision of the Canadian Anesthesiologists’ Society’s Practice Guidelines. This structure supports: (i) the ‘living document’ format that the panel of reviewers agreed upon to enable review of individual sections as necessary and (ii) easier navigation by members of sections relevant to clinical practice.

1.3 Format of practice guidelines

Most reviewers agree that we should aim for electronic publication rather than hardcopy. The aim will be to create a ‘living document’ as an online platform where sections of the document can be updated as the need arises and when new evidence demands it. The conveners aim to have the finalised guidelines ready for publication by the second half of 2022 in the South African Journal of Anaesthesia and Analgesia and on the SASA website.

1.4 Date of next review

The conveners and the panel of reviewers agreed that revision of the guidelines should ideally follow international timelines. However, a lack of human resources necessitates that a full review is done less frequently. Prioritising the flexibility that a web-based editable ‘living’ document enables allows for regular updates of specific individual sections as new evidence arises. A complete document review is provisionally set for 2026.

1.5 Outline of the 2022 revision

The 2022 revision aimed to clarify and elaborate on the strength of recommendations substantiated by updated references as far as possible. Sections reviewed include:

• Position statements circulated in the SASA newsletter
  ◦ Ketamine clinics
  ◦ Ampoule sharing
  ◦ Power outage
  ◦ Sugammadex
  ◦ Haemodynamic printouts

• Guidelines on professional health and wellbeing

• Delegation of care
  ◦ It is of utmost importance to note that SASA does not support the practice of “double doping” under any circumstances.

• Highlights of 2022 reviews
  ◦ Guidelines on professional health and wellbeing

The anaesthesia provider of the 21st century is expected to be up to date on the latest literature and technical developments, practice evidence-based medicine, always...
be alert and vigilant when the patient is under their care, and maintain a compassionate demeanour throughout. The working environments are often highly stressful, with multiple demands from patients, families, other physicians, co-workers and administrators. Other stressors include long and unpredictable working hours, minimal relief breaks, exposure to biological, chemical and radiation hazards, noise pollution, lack of natural light, isolation and lack of social interactions. Consequently, professional health and wellbeing are paramount and steps to follow to ensure this are covered in this section.

- **Day-case surgery**
  This guideline defines day-case surgery (DCS) in South Africa, describes the ideal patient population for DCS, and discusses various practical aspects of DCS like preoperative preparation, admission procedures, monitoring and equipment, and discharge procedures. The document discusses DCS in specific patient populations like elderly patients, obese patients and paediatric patients. Our guideline is aimed at stand-alone day-case facilities and does not cover non-operating room anaesthesia (NORA) or procedures performed in practitioners' rooms.

- **Anaesthesia support personnel**
  With the recent increase in research literature on teamwork in the operating theatre and during medical emergencies, it will be unthinkable not to include a section on anaesthesia support personnel. Safety in anaesthesia has improved tremendously with peri-anaesthesia assistance from the anaesthetist. Peri-anaesthesia assistance includes, among other things, the management of anaesthesia services; conducting a knowledgeable preoperative handover with informed consent; preparation and assistance in the theatre and provision of a safe recovery room. Without a current accredited anaesthetic assistant qualification available, the training and development of anaesthetic nurses and assistants remain the responsibility of the whole community of anaesthesia practice.

- **Low flow anaesthesia**
  The delivery of anaesthesia gases in the most efficient, economical, and environmentally friendly manner is a requirement of modern anaesthesia practice. This practice requires an understanding of the physics of the delivery system and the properties of the agents being used. Low flow anaesthesia is an appropriate technique for the current administration of most volatile-based anaesthetics.

SASA co-signed a **Sustainability Statement** with other common interest group (CIG) countries in support of sustainable practice.

- **Hours of work**
  Clinical services in anaesthesia are provided 24 hours a day, 7 days a week. Services should adopt a shift system that considers regular and after-hours work; shift duration and frequency; periods of rest between shifts; elective versus after-hours procedures; and the complexity of tasks, while allowing staff members to maintain a good work-life balance. Clinical platforms for training specialists need to allocate time for teaching during working hours. Service planning should include and encourage continuing professional development (CPD) as the regulatory authority requires.

- **Records**
  This section encompasses the standards to which anaesthetic records and prescriptions are kept and speaks to those who own an anaesthetic record. It gives direction in terms of the Protection of Personal Information Act (POPIA) and guides anaesthesia-patient relations regarding access to records and confidentiality. It includes practical advice around electronic records, adverse incidents, and maternal mortalities.

- **Anaesthesia outside the hospital setting**
  This section describes the requirements to perform anaesthesia safely in humanitarian, austere, remote and disaster (HARD) settings. Anaesthesia equipment should be modular, adequately packaged, and well-tailored to the environment. The availability of medical gases and the use of specialised techniques for safe draw-over and intravenous anaesthesia are of paramount importance. Patients should be adequately assessed, cared for, and provided with the safest anaesthesia and post-procedural care, preferably by two different anaesthesia practitioners. Clinical governance should be promoted by accurate record-keeping and case records.

- **Equipment and facilities**
  In the review of this section, more clarity on the availability of videolaryngoscopes (VL) in various clinical settings is provided. Also, preanaesthetic clinics are defined and addressed. Members are encouraged to note and familiarise themselves with the SASA facilities agreement with some of our private facilities and the use of electronic record-keeping in some instances.

### 1.6 Strength of recommendations

The reviewers used three categories to indicate the strength of recommendations. For ease of viewing, colour coding was used to emphasise the strength of recommendation as follows:

i. Essential/mandatory (RED)

ii. Highly recommended (ORANGE)

iii. Recommended/desirable (GREEN)

Where applicable, a summary of the key points was added at the end of each section.

### 1.7 Conclusion

Although a disclaimer is added to this document, the Society is not ignorant of the fact that the standards set here can be, and have been, interpreted in several ways by individuals outside of the profession. It is, however, crucial that the Society continues to guide the profession of anaesthesia and related services in South Africa, which is the aim of this document. The Practice Guidelines will always be a work in progress, a guide that must stay relevant to the context and situation where care is provided and in changing social and economic circumstances. Any dispute over interpretation or guideline recommendation, as well as comments on the Practice Guidelines can be sent to the SASA Office via email to sasa@sasaweb.com, and will be considered during the next revision, or included as erratum where applicable.