DAY SURGERY IN AUSTRALIA

INTRODUCTION

There have been increasing reports of serious patient harm associated with procedures performed in an ‘office setting’, where either intravenous sedation and/or large and potentially toxic doses of local anaesthesia have been administered.

This position paper defines day-stay procedures and outlines the minimum standards upon which national, state and territory regulations for day surgery facilities should be based. It has been prepared and endorsed as a collaboration by the Royal Australasian College of Surgeons (RACS), the Australian and New Zealand College of Anaesthetists (ANZCA) and the Australian Society of Plastic Surgeons (ASPS). The position paper has been prepared to assist in the preparation of the licensure (licencing and accreditation) regulations in each Australian jurisdiction to ensure that an organisation or individual working in those jurisdictions meets minimum standards in order to appropriately protect public health and safety.

KEY WORDS

Day Surgery, Day Procedures, Facility, Sedation, Patient Care.

DEFINITIONS:

1. Day Surgery Procedures: includes “Day Surgery”, “Day Stay Surgery”, “Day Care Surgery”, or “Ambulatory Surgery”, as well as procedures performed on an outpatient basis where the patient would normally be discharged on the same day.

2. Office-based Procedures do not necessarily fall under these criteria for Day Surgery Procedures. Office-based procedures are those performed:
   a. with low doses of local anaesthetic such that any dose given into a single location is insufficient to cause systemic toxicity if inadvertently given intravenously, or a dose which is not likely to reach toxic levels by absorption; and,
   b. without intravenous sedation.

3. Day Surgery Centre (Facility): May refer to hospitals, clinics and office-based facilities where procedures are performed with concurrent administration of intravenous sedative medications (including opioids), general, neuraxial anaesthesia or significant local anaesthesia (other than using low doses of local anaesthetics as noted above). Management of a day surgery/procedure patient including the delivery of anaesthesia services at such facilities must comply with the approved licensing of the facility to ensure safe delivery of patient care.

4. Procedural Sedation: Use of any intravenous sedation must comply with these standards, due to the potential for unintentional transition from conscious to deep sedation or even anaesthesia.
   a. Conscious sedation is defined as a drug-induced reduction of consciousness during which patients respond semi-purposefully to verbal commands or light tactile stimulation. Interventions to maintain a patient airway, spontaneous ventilation or cardiovascular function may occasionally be required if conscious sedation is inadvertently exceeded.
b. **Deep sedation** is defined by lack of purposeful response to verbal or physical stimuli. It may be associated with loss of the ability to maintain a patient airway, inadequate spontaneous ventilation and/or impaired cardiovascular function. It has similar risks to general anaesthesia, and requires an equivalent level of care.

In clinical practice, transition between conscious and deep sedation using intravenous sedation techniques may be unexpected and unpredictable. It follows that wherever intravenous sedation is performed, there needs to be access to a full range of airway and resuscitation equipment. Staff must be trained and experienced in its use.

For elective medical procedures, any form of intravenous sedation or the use of drugs via any route in doses that might impair ventilation should only be performed in a licensed or accredited facility. The practitioner prescribing or administering the sedation must be fully conversant with the pharmacology of the drugs and the variability in their effects and be skilled and experienced in managing the potential complications.

**POSITION**

The six standards endorsed by RACS, ANZCA and ASPS are set out as follows:

1. **Facilities and Equipment for Day Surgery**
   i. **Facility:** The facility should be designed specifically for the management of a day surgery/procedure patient. A day surgery facility may be freestanding or a unit within a hospital or clinic. The facility should be appropriate to the needs of the patient. For example, if children are being treated, it should be child-friendly and child-safe.
   ii. **Accreditation:** All day surgery facilities should undergo regular assessments to maintain their accreditation through the Australian Health Service Safety and Quality Accreditation Scheme (AHSSQA). All day surgery facilities should undergo regular assessment by recognised external auditing authority, including verification of compliance with national safety and quality healthcare standards.
   iii. **Equipment:** Day theatre facilities and equipment should be comparable to inpatient theatres. Provision of resuscitation equipment including oxygen, defibrillator and suction must be provided and available.
   iv. **Emergency Plan:** A clear emergency response plan to recognise and manage patient deterioration must be in place. There must be a clear plan and accessibility for patient transfer if required.

2. **Staff and Training for Day Surgery**
   i. **Staff**
      - All health professionals must hold appropriate registration with their relevant regulatory authority.
      - All clinicians must hold appropriate certification and be credentialed for the procedures they perform.
      - Adequate staffing levels must be maintained throughout all aspects of the patient’s care.
   ii. **Training:**
      - Training must be provided to all clinicians and staff relevant to their role.
      - Training should be interdisciplinary and competency-based, including specific training around airway skills, monitoring techniques and use of equipment.
Regular professional development and maintenance of competency is expected of all clinicians involved in the provision of day surgery.

Development of protocols, training programs and quality assurance should be undertaken and reviewed on a regular basis in consultation with surgeons, anaesthetists, nursing and theatre staff.

3. **Pre-operative Care**

For day surgery procedures there should be clear protocols regarding patient suitability (as per ANZCA PS15). These should balance the risks and benefits of day case surgery (also refer to ANZCA PS07).

The difficulty of undertaking an adequate pre-anaesthesia consultation for patients admitted on the day of their surgery or medical procedure must be recognised. Ideally such patients should be reviewed prior to admission (as per ANZCA PS07). Otherwise admission times, list planning and session times must accommodate the extra time required for pre-anaesthesia consultations.

i. **Patient Preparation:** Informed consent must be obtained prior to any procedure as outlined in the RACS Informed Consent and Informed Financial Consent position papers. This includes providing the patient with information about the risks of the procedure, preparation for the procedure and what to expect immediately after the procedure and after discharge.

ii. **Patient Assessment:** Prior to any procedure, a patient assessment should be undertaken including current or past medical or surgical history, current medications, allergies, fasting status, relevant recent investigations and any other evidence of potential problems relating to the airway or the procedure being undertaken.

iii. **Risk Stratification:** Risk stratification aims to identify those patients at the highest risk of having an adverse event. This includes assessment of the patient’s BMI and ASA score when classifying the physical status of the patient.

4. **Intra-operative Care**

For day surgery procedures, general anaesthesia, neuraxial anaesthesia, or local or regional anaesthesia involving significant doses of local anaesthetics (in contrast to low doses of local anaesthetic such that any dose given into a single location is insufficient to cause systemic toxicity if inadvertently given intravenously, or a dose which is not likely to reach toxic levels by absorption), must be managed by a suitably qualified medical practitioner (ANZCA PS02).

Whenever intravenous sedation is being undertaken for a procedure there must be a high degree of vigilance, particularly with regard to monitoring of the airway and respiratory function (as per ANZCA PS09). This requires the following:

i. A dedicated, trained staff member solely allocated to monitoring the airway and respiratory function. This role cannot be filled by the proceduralist.

ii. A clinician responsible for prescribing the sedation must be trained in and maintain experience of an appropriate range of airway support manoeuvres and other life saving techniques, and be immediately available to perform these functions at any time.
5. Post-operative Care

Following day surgery procedures, the patient must be monitored during recovery to ensure any instability and/or deterioration is closely scrutinised and responded to if required by appropriately trained staff.

i. Recovery
   - A designated recovery area must be available following the procedure. This should be located within or in close proximity to the procedural area.
   - The patient should be monitored in accordance to their clinical context.
   - Oxygen, pulse oximetry and suction must be available.
   - A protocol should be in place to enable safe transfer of the patient to an appropriate medical facility should the need arise or if the patient is deemed unfit to be discharged on the same day.

ii. Discharge
   - Discharge must be in accordance with relevant licencing or accreditation frameworks of the facility. Patients undergoing day-stay procedures with anaesthesia or sedation must be discharged into the care of a responsible person who either drives or accompanies the patient to where they are staying overnight in accordance with ANZCA guidelines (PS15). This person should stay with the patient for the first night (or longer for more invasive procedures). The patient should not drive, operate complex machinery or make critical decisions until the next day.
   - Patients who live an hour or more away from the facility where the procedure was undertaken must have access to a safe emergency back-up. Patient hotels (where available) are an alternative for patients travelling long distances. If the patient does not have access to an after-care facility, consideration should be given to admitting the patient for an overnight stay.
   - Where appropriate, follow-up of patients by telephone may be required and is usually provided by day surgery nurses.

6. Documentation

   i. Providers of day surgery should familiarise themselves with the minimum standards for facilities and equipment where there is the provision of sedation and/or analgesia as outlined in the ANZCA PS09: Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures.
   
   ii. All pre-operative, intra-operative and post-operative assessment, risk stratification and procedures should be fully documented to allow for patient handover, where required.
   
   iii. All surgical procedures should be included in a documented peer reviewed audit process including an established system to manage outliers, complications and ongoing quality assurance.

REFERENCES

PS02 Statement on Credentialling and Defining the Scope of Clinical Practice in Anaesthesia
PS07 Guidelines on Pre-Anaesthesia Consultation and Patient Preparation
PS09 Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures
PS15 Guidelines for the Perioperative Care of Patients Selected for Day Care Surgery

ANZCA Professional Documents available at:
http://www.anzca.edu.au/resources/professional-documents

RACS Position Papers available at:
https://www.surgeons.org/policies-publications/publications/position-papers/