



# Guideline on sedation and/or analgesia for diagnostic and interventional medical, dental or surgical procedures

## Background paper

### 1. Purpose of review

Sedation and/or analgesia are commonly employed for medical, dental and surgical procedures by a range of health practitioners with diverse qualifications and training, including anaesthetists, other medical practitioners and dentists.

The goal of ANZCA professional document *PS09 Guideline on sedation and/or analgesia for diagnostic and interventional medical, dental or surgical procedures* is to support uniform standards for high quality and safe administration of procedural sedation and/or analgesia by all appropriately qualified health practitioners in Australia and New Zealand. The document was last reviewed in 2010. This review was undertaken under the process outlined in *A01 Policy for the development and review of professional documents* at the end of an informal one-year pilot phase, in order to consider feedback that had been received. This background document was written to support the guidelines.

### 2. Scope of the document

This professional document is intended to apply to all health practitioners administering procedural sedation and/or analgesia, and to all routes of drug administration (including the oral, inhaled, intranasal, intravenous, intramuscular and rectal routes).

This document is not intended to apply to local anaesthesia or major regional anaesthesia and analgesia administered without sedation, nor to general anaesthesia techniques, all of which are the subjects of other professional documents (*PS37 Guideline for health practitioners administering local anaesthesia*, *PS03 Guideline for the management of major regional analgesia* and *PS55 Position statement on minimum facilities for safe administration of anaesthesia in operating suites and other anaesthetising locations*). It is also not intended to apply to situations where sedation is used for longer term management of patients, such as in intensive care units or for psychiatrically disturbed patients.

If local anaesthesia and/or major regional anaesthesia or analgesia are co-administered with sedation and/or analgesia, then the standards associated with the former techniques also apply (*PS37 Guideline for health practitioners administering local anaesthesia* and *PS03 Guideline for the management of major regional analgesia*).

### 3. Background

This section is intended to provide background information for the key quality and safety concepts in this professional document.

#### 3.1 Personnel for sedation and/or analgesia

Sedative drugs are administered to facilitate diagnostic and interventional procedures by medical practitioners from many specialties, including anaesthesia, pain medicine, surgery, emergency medicine, intensive care medicine, radiology, gastroenterology and other sub-specialties of internal medicine. Dentists also engage in the practice of procedural sedation and/or analgesia. While anaesthetists are the acknowledged experts in procedural sedation and/or analgesia, it is impossible and unnecessary for anaesthetists to administer all procedural sedation and/or analgesia in Australia and New Zealand. For this reason, PS09 is designed to promote high standards of training and practice for **all** medical and dental practitioners who administer procedural sedation and/or analgesia. To this end, since the original promulgation of P9 in 1984, ANZCA has engaged in a process of co-badging of PS09 with other medical and dental colleges and specialist societies.

#### 3.2 The use of propofol for sedation and/or analgesia

Propofol is the drug of choice of anaesthetists who administer sedation for endoscopy in Australia and New Zealand.<sup>1</sup> Propofol is also in widespread use by non-anaesthetist medical and dental practitioners. There is evidence that outcomes are no different (or even safer) when non-anaesthetists administer propofol rather than benzodiazepines for sedation.<sup>2</sup> Therefore, PS09 accommodates the use of propofol by non-anaesthetists under an agreed set of principles:

- 3.2.1 Propofol must only be administered by a medical or dental practitioner other than the proceduralist.
- 3.2.2 Medical and dental practitioners, who are not anaesthetists or other trained and credentialed medical practitioners practising within their scope of practice, must only target conscious sedation when using propofol (or any other sedative or analgesic drug).
- 3.2.3 All medical and dental practitioners who wish to administer sedation must be trained in sedation and have resuscitation and airway skills.

#### 3.3 Patient assessment

The section dealing with patient assessment is commensurate with *PS07 Guideline on pre-anaesthesia consultation and patient preparation*.

#### 3.4 Depth of sedation and/or analgesia

The continuum of sedative/hypnotic drug effect extends from conscious sedation through deeper sedation to general anaesthesia.<sup>3</sup> Regardless of the sedative and/or analgesic agent used, PS09 specifically limits the practice of medical and dental practitioners who are not anaesthetists, or other trained and credentialed medical practitioners practising within their scope of practice, to conscious sedation in healthy patients, because of the inherent risks in deeper sedation and general anaesthesia. These risks include airway obstruction, respiratory depression and cardiovascular instability. If deep sedation or general anaesthesia is desired or required, then an anaesthetist, or another appropriately trained and credentialed medical specialist within his/her scope of practice, must be present. ANZCA has full agreement on this principle from the co-badgers of the document.

### **3.5 Patient co-morbidity**

Patients with significant co-morbidities, such as those classified as American Society of Anesthesiologists' physical status 3, are at higher risk of complications during sedation and/or analgesia than healthier patients.<sup>3</sup> In addition, these patients may transition from conscious sedation to deeper levels of sedation or general anaesthesia after lower doses of sedative and/or analgesic drugs than healthier patients. For this reason, a suitably trained and credentialed medical or dental practitioner must be exclusively available to administer sedation to these patients and the exclusive availability of an assistant to this practitioner is recommended. For patient at high risk, such as those with severely limiting co-morbidities (who are commonly classified as ASA physical status 4-5) and those requiring endotracheal intubation to prevent aspiration of gastric contents, an anaesthetist or another appropriately trained and credentialed medical specialist within his/her scope of practice, must be present. ANZCA has full agreement on this principle from the co-badgers of the document.

## **4. Summary**

Sedation and/or analgesia are commonly employed for medical, dental and surgical procedures by medical and dental practitioners. The goal of this revised document is to support uniform standards for the administration of sedation and/or analgesia for medical, dental and surgical procedures by medical and dental practitioners in Australia and New Zealand.

### **Related ANZCA documents**

PS03 Guideline for the management of major regional analgesia

PS07 Guideline on pre-anaesthesia consultation and patient preparation

PS18 Guideline on monitoring during anaesthesia

PS26 Statement on informed consent for anaesthesia or sedation

PS37 Guideline for health practitioners administering local anaesthesia

PS55 Position statement on minimum facilities for safe administration of anaesthesia in operating suites and other anaesthetising locations

### **References**

1. Padmanabhan U, Leslie K. Anaesthetists' practice of sedation for colonoscopy. *Anaesth Intensive Care* 2008;36:436-41.
2. Qadeer MA, Vargo JJ, Khandwala F, Lopez R, Zuccaro G. Propofol versus traditional sedative agents for gastrointestinal endoscopy; a meta-analysis. *Clinical Gastroenterology and Hepatology* 2005;3(11):1049-1056.
3. American Society of Anesthesiologists Task Force on Sedation and Analgesia by Non-Anesthesiologists. Practice guidelines for sedation and analgesia by non-anesthesiologists. *Anesthesiology* 2002;96(4):1004-17.

### **Document development group**

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ANZCA regional and national committees

Faculty of Pain Medicine Board

Faculty of Pain Medicine regional committees

ANZCA Trainee Committee

Airway Management Special Interest Group (SIG)

Day Care Anaesthesia SIG

Obstetric Anaesthesia SIG

Regional Anaesthesia SIG

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