Department of Health/Faculty of General Dental Practice (UK)

Guidelines for the Appointment of Dentists with a Special Interest (DwSI) in Conscious Sedation
<table>
<thead>
<tr>
<th>Policy</th>
<th>Estates</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR/Workforce</td>
<td>Commissioning</td>
</tr>
<tr>
<td>Management</td>
<td>IM&amp;T</td>
</tr>
<tr>
<td>Planning</td>
<td>Finance</td>
</tr>
<tr>
<td>Clinical</td>
<td>Social Care/Partnership Working</td>
</tr>
</tbody>
</table>

**Document purpose**: Best practice guidance

**Title**: Guidelines for the Appointment of Dentists with a Special Interest (DwSI) in Conscious Sedation

**Author**: DH/Dental and Eye Care Services and FGDP(UK), Royal College of Surgeons of England

**Publication date**: December 2007

**Target audience**: PCT CEs, NHS Trust CEs, Care Trust CEs, Medical Directors, PCT PEC Chairs, Directors of HR, Consultants in Dental Public Health, Dental Practice Advisors, Directors of Commissioning, Clinical Directors of PCT Salaried Dental Services

**Circulation list**: SHA CEs, Directors of PH, GPs, Communications Leads

**Description**: Guidance to PCTs on the appointment of DwSIs in Conscious Sedation, including a competency framework, contract requirements, assessment standards and the scope of treatment that can be undertaken. This will be of particular use when reviewing contracts for advanced mandatory services in sedation.

**Cross ref**: Implementing a Scheme for Dentists with Special Interests (DwSIs): A Step by Step Guide to Setting Up a DwSI Service. DH/FGDP (UK), May 2004. NHS Primary Care Contracting, 2006

**Superseded docs**: N/A

**Action required**: N/A

**Timing**: N/A

**Contact details**: Tony Jenner, Deputy Chief Dental Officer
Dental and Eye Care Services, Commissioning and System Management Director
Section 11/035, New Kings Beam House
22 Upper Ground
London SE1 9BW
020 7633 4247
www.dh.gov.uk/cdo

**For recipient’s use**
Guidelines for the Appointment of Dentists with a Special Interest (DwSI) in Conscious Sedation
Members of DwSI Conscious Sedation Working Group

Christine Arnold – Salaried Primary Dental Care Services
David Craig – King's College London Dental Institute (Chair)
Tom Cripps – Consultant Anaesthetist
Derek Debuse – Society for the Advancement of Anaesthesia in Dentistry
Sharon Drake – Project Manager, Faculty of General Dental Practice (UK) and Department of Health
Robert Elford – Lay member
Ruth Gasser – Department of Health
Andrea Goring – Southwark Primary Care Trust
Richard Hayward – Faculty of General Dental Practice (UK)
Tony Jenner – Department of Health
John Lowry – Faculty of Dental Surgery, Royal College of Surgeons of England
Nigel Robb – Association of Dental Anaesthetists
Michael Wood – General Dental Practitioner
# Contents

## Introduction
- Rationale for a DwSI in conscious sedation 2
- Definition of a DwSI in conscious sedation 3
- Contract requirements 4
- General requirements 5

## Competency framework and assessment standards for a DwSI in conscious sedation

## Competency framework for a DwSI in conscious sedation
- Evidence of maintenance of competencies 18

## Accreditation of DwSIs in conscious sedation for PCTs
- Contract specification 19
- Appointment of DwSIs in conscious sedation with PCTs 19
- Monitoring of the conscious sedation service 21
- PCTs – needs assessment and delivery 22
- System of assessment and evidence required to demonstrate competence 23
- Sources of evidence 23
- Process 24

## Appendices
1. Standard and alternative conscious sedation techniques 25
2. Conscious sedation practice requirements 26
3. Person specification for an experienced specialist in conscious sedation 27

## References 28
Introduction

1. *Guidelines for the Appointment of Dentists with a Special Interest (DwSI) in Conscious Sedation* is one of a series of framework documents jointly developed by the Department of Health and the Faculty of General Dental Practice (FGDP) (UK).

2. The frameworks aim to provide guidance to primary care trusts (PCTs) on the development of local DwSI services, and include the competencies for the scope of treatment that can be undertaken by DwSIs.

3. The conscious sedation guidance has been written in conjunction with representatives from the Society for the Advancement of Anaesthesia in Dentistry (SAAD), the Association of Dental Anaesthetists (ADA), the British Dental Association (BDA), primary care dentists, specialists, consultants, university departments, dental faculties, PCT managers, strategic dental health leads and patients. It acknowledges the work of the Dental Sedation Teachers Group (DSTG) in developing a curriculum that is the basis of the core competencies described in this document.

4. The guidelines apply to England and should be read in conjunction with a number of other documents.1–7

Rationale for a DwSI in conscious sedation

5. The General Dental Council (GDC) document *The First Five Years – A Framework for Undergraduate Dental Education*8 states that all dental graduates should have a range of practical experience in the administration of basic conscious sedation techniques.

6. This framework document acknowledges that basic (or ‘standard’) conscious sedation techniques can be carried out by all primary care dentists who are competent to do so, and is not designed to reduce the widespread access to conscious sedation for dental patients. ‘Basic’ conscious sedation techniques are defined as ‘standard’ techniques within *Standards for Conscious Sedation in Dentistry: Alternative Techniques:*3

7. The standard conscious sedation techniques are:

- inhalational sedation using nitrous oxide/oxygen
- intravenous sedation using midazolam alone
- oral/transmucosal benzodiazepine (provided that adequate competence in intravenous techniques has been demonstrated – see Appendix 1)
8. In addition, it is expected that the DwSI in conscious sedation may be able to:

- accept referrals from other practices, clinics and hospitals
- offer more advanced or ‘alternative’ conscious sedation techniques
- provide conscious sedation for patients with more complex medical histories and/or dental treatment needs
- provide conscious sedation for patients under 12 years of age using techniques other than inhaled nitrous oxide and oxygen

**Definition of a DwSI in conscious sedation**

9. A DwSI in conscious sedation is a primary care dentist who:

- is able to demonstrate a continuing level of competence in their general dental activities
- **is able to demonstrate a continuing level of competence in standard conscious sedation techniques, as well as demonstrating competence in some or all of the alternative techniques as defined in Standards for Conscious Sedation in Dentistry: Alternative Techniques** as follows:
  - any form of conscious sedation for patients under the age of 12 years other than nitrous oxide/oxygen inhalation sedation
  - benzodiazepine plus any other intravenous agent, e.g. opioid, propofol or ketamine
  - propofol either alone or with any other agent, e.g. benzodiazepine, opioid or ketamine
  - inhalational sedation using any agent other than nitrous oxide/oxygen alone
  - combined routes, e.g. inhalational plus intravenous agent (except for the use of nitrous oxide/oxygen during cannulation)
10. While not offering the same breadth of activity, the DwSI in conscious sedation will be required to practise to a standard consistent with that expected from the established specialists who cover this area of clinical expertise.

11. It is not necessary for the DwSI in conscious sedation to be competent in all alternative conscious sedation techniques. The proposed activity will have been identified and agreed by the PCT in consultation with all relevant care agencies.

Contract requirements

12. NHS sedation services can be provided in the primary care setting by:

• primary dental care services managed directly by PCTs
• independent contractors under Personal Dental Services (PDS) agreements (which could be solely for the provision of sedation services)
• independent contractors under General Dental Services (GDS) contracts (provided that sedation is an agreed ‘additional service’)

13. From April 2006, the legislation has provided for two types of NHS dental contracts: GDS contracts and PDS agreements. Under a GDS contract, the dentist is required to provide a range of services set out in Regulation 14 of the NHS (General Dental Services Contracts) Regulations 2005, known as ‘mandatory services’. In addition, a GDS contract can include, where agreed between the PCT and the contractor, other ‘additional services’ which include sedation services.

14. The contract between the PCT and the contractor will include the annual number of courses of treatment involving sedation.

15. Sedation services are provided as an entire course of treatment by one contractor. The contractor is credited with units of dental activity for the banded course of treatment. Dental charges are those appropriate to the banded course of treatment and there is no charge for the administration of sedation.
16. The number of courses of treatment that include sedation are reported to the contractor and PCT on a monthly basis by the Dental Services Division (DSD).

17. For courses of treatment involving the use of conscious sedation, mixing of private and NHS treatment is not permissible under current NHS regulations. This regulation is designed to protect patient safety and maintain quality assurance by ensuring that, where treatment is provided under NHS arrangements, any conscious sedation provided in association with that treatment is provided in accordance with the recommendations of the report of the Standard Dental Advisory Committee (SDAC).

**General requirements**

18. In order that PCTs might satisfactorily contract with a primary care dentist to carry out an agreed area of special interest work, the PCT should, first and foremost, ensure that the primary care dentist is a competent and experienced generalist.

19. In addition, it is recommended that a PCT satisfies itself that a primary care dentist wishing to be contracted as a DwSI in conscious sedation is able to satisfactorily demonstrate that they:

   a. are able to manage patients with specified indications for conscious sedation to a high standard as defined in the guidelines
   
   b. recognise their limitations of knowledge and competence and are aware of the appropriate time to refer on for treatment
   
   c. have the necessary knowledge and skills, reflecting an approved period of training and experience as defined in the regulatory guidelines
Competency framework and assessment standards for a DwSI in conscious sedation

20. Some of the competencies may already have been assessed either at an undergraduate or postgraduate level, but it will be necessary to obtain confirmation of competence.

21. The work of a DwSI in conscious sedation will be specified by the PCT based upon the needs of the local community. Consequently, there may not be a requirement for the practitioner to have developed competence in all conscious sedation techniques.

22. They will, however, be required to provide evidence of competence in all fields relevant to those conscious sedation techniques specified by the PCT.

23. This document is intended to assist PCTs in reviewing existing conscious sedation services and in assuring the quality of future services offering both standard and alternative conscious sedation techniques.
## Competency framework for a DwSI in conscious sedation

### MAJOR AREAS OF SUGGESTED SOURCES COMPETENCY SUPPORTING COMPETENCIES PERFORMANCE OF EVIDENCE

### ACADEMIC

<table>
<thead>
<tr>
<th>Knowledge pertaining to standard conscious sedation techniques</th>
<th>A knowledge and understanding of:</th>
<th>Areas of performance</th>
<th>Suggested sources of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of pain and anxiety control in dentistry</td>
<td></td>
<td>Acquisition and appropriate use of knowledge</td>
<td>Portfolio</td>
</tr>
<tr>
<td>Causes, signs, symptoms of dental anxiety/phobia</td>
<td></td>
<td></td>
<td>Structured discussion at interview</td>
</tr>
<tr>
<td>Range of patient management techniques</td>
<td></td>
<td></td>
<td>Continuing professional development (CPD)</td>
</tr>
<tr>
<td>Importance of effective use of topical and local anaesthesia</td>
<td></td>
<td></td>
<td>Undergraduate/postgraduate examinations</td>
</tr>
<tr>
<td>The distinction between conscious sedation and general anaesthesia as defined in the UK</td>
<td></td>
<td></td>
<td>Case presentations</td>
</tr>
<tr>
<td>Behavioural/non-pharmacological anxiety management techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient assessment techniques and criteria (e.g. American Society of Anesthesiologists Classification of Physical Fitness) including specific problems relating to young and elderly patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiovascular and respiratory anatomy and physiology relevant to sedation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of medical history and drug therapy in patients undergoing sedation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of patients with disabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indications and contraindications to the use of conscious sedation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied pharmacology of current conscious sedation agents, including important drug interactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAJOR COMPETENCY</td>
<td>SUPPORTING COMPETENCIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacological conscious sedation techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of the principle of minimum intervention, i.e. using a technique that will enable treatment to be carried out but which subjects the patient to the least physiological and psychological stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of monitoring basic physiological variables (e.g. heart rate, respiratory rate and depth, arterial blood pressure, oxygen saturation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment required for the administration of conscious sedation and for monitoring, including the principles of pulse oximetry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of effective airway protection/management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of caring for a sedated patient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulties and dangers of over- and under-sedation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of safe recovery and discharge following sedation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role of antagonist drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drugs and methods used for the relief of acute and chronic pain, including interactions with sedative agents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicolegal aspects of the provision of conscious sedation (e.g. GDC/Department of Health (DH) regulations, PCT commissioning framework, consent, patient instructions), including the operator's legal requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact of the dental procedure on the provision of sedation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role of the dental nurse (or 'second appropriate person'), including the importance of providing a chaperone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of minor mishaps/accidents (e.g. extravascular injections, bruising)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition and management of complications of sedation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### MAJOR COMPETENCY

- Occupational exposure limits for nitrous oxide including methods of monitoring
- Evidence base for current recommended practices
- Guidelines for conscious sedation, e.g.:
  - GDC *Standards for Dental Professionals* General Dental Council May 2005 London
  - SDAC *Conscious Sedation in the Provision of Dental Care, Report of an Expert Group on Sedation for Dentistry*
  - *Standards for Conscious Sedation in Dentistry: Alternative Techniques*
  - *Commissioning Conscious Sedation Services in Primary Dental Care*

### SUPPORTING COMPETENCIES

- Applied pharmacology of alternative conscious sedation agent(s) to be administered, including important drug interactions
- Anatomical and physiological differences between adults and children
- Differences in the pharmacokinetic and pharmacodynamic effects when sedative drugs are administered to children
- Indications and contraindications for selected alternative conscious sedation drugs
- Importance of selecting the most appropriate sedative agent (or agents) for the individual patient, taking into account the proposed dental treatment, degree of anxiety, working environment, experience of the team and the principle of minimum intervention (see above)
- Awareness of the importance of the order of administration of sedative agents when multiple drugs are used
- Equipment required for the administration of the selected alternative agent (e.g. intravenous infusion pump, patient/target-controlled infusion device, volatile anaesthetic vaporiser)
Medicolegal aspects of the use of alternative conscious sedation techniques e.g. GDC/DH/Royal College of Surgeons of England and Royal College of Anaesthetists regulations and recommendations, PCT commissioning framework, including the operator’s legal requirements when there is a separate operator and sedationist

<table>
<thead>
<tr>
<th>MAJOR COMPETENCY</th>
<th>SUPPORTING COMPETENCIES</th>
<th>AREAS OF PERFORMANCE</th>
<th>SUGGESTED SOURCES OF EVIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLINICAL Assessment and treatment planning for standard and alternative conscious sedation techniques</td>
<td><strong>A knowledge and understanding of:</strong></td>
<td>Knowledge</td>
<td>Portfolio</td>
</tr>
<tr>
<td></td>
<td>The impact a patient’s medical and dental history and socioeconomic background may have on the provision of conscious sedation</td>
<td>Reasoning</td>
<td>Direct observation</td>
</tr>
<tr>
<td></td>
<td>The requirement to assess the patient’s need for sedation and the importance of selecting the most appropriate conscious sedation technique for the patient in relation to the proposed dentistry and the environment in which the treatment is to be delivered</td>
<td>Logical thought</td>
<td>Case reviews</td>
</tr>
<tr>
<td></td>
<td>The potential impact of conscious sedation upon a patient’s medical health</td>
<td>Self-awareness</td>
<td>Record of experience</td>
</tr>
<tr>
<td></td>
<td><strong>The ability to:</strong></td>
<td>Insight</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognise when treatment under sedation is outwith the competence of the DwSI and describe the appropriate referral procedures</td>
<td>Communication and written skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formulate an appropriate treatment plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present to the patient (and relatives/carers where appropriate) an appropriate sedation option</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss with the patient alternative options to the preferred sedation technique including general anaesthesia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss with the patient possible complications of the proposed conscious sedation technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAJOR COMPETENCY</td>
<td>SUPPORTING COMPETENCIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assess mental capacity to consent to treatment, taking into account the Mental Capacity Act 2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obtain appropriate consents from patients/relatives/carers for the proposed treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluate the effectiveness of conscious sedation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognise opportunities for providing care without conscious sedation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maintain legible and contemporaneous records</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assess the suitability of staff and premises for the provision of dental treatment under conscious sedation with reference to current guidelines.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Intravenous conscious sedation using midazolam alone**

The ability to:
- Select the patients for whom this is the most appropriate sedation technique
- Select an appropriate vein and perform intravenous cannulation
- Recognise signs and symptoms of extravascular injection
- Titrate midazolam to a recognised conscious sedation end point
- Adjust the titration regime for elderly patients
- Administer supplemental oxygen via nasal cannulae when indicated
- Recognise the clinical signs of early airway obstruction and have airway management skills appropriate to the age of the patient being treated
- Remove intravenous cannulae safely and at the appropriate time
- Assess when a patient is fit to be discharged
- Provide appropriate post-operative instructions
- Maintain legible and contemporaneous records
<table>
<thead>
<tr>
<th>MAJOR COMPETENCY</th>
<th>SUPPORTING COMPETENCIES</th>
</tr>
</thead>
</table>
| Additional skills pertaining to intravenous conscious sedation using an alternative intravenous sedation agent or combination of agents (including patient and target-controlled conscious sedation) | The ability to:  
Provide intravenous conscious sedation with midazolam competently (including the insertion of an intravenous cannula)  
Select the most appropriate conscious sedation drug/s according to the principle of minimum intervention, i.e. using the simplest conscious sedation technique that will enable treatment to be carried out satisfactorily  
Comply with requirements for a separate operator and sedationist (where appropriate), including the selection of an appropriate individual to provide the conscious sedation which is outwith the operator's competence  
Select the most appropriate route or routes of administration for an individual patient  
Recognise signs and symptoms that might complicate or contraindicate administration of specific drugs or techniques  
Select appropriate drugs and dosages for an individual patient, administer the sedative agents in the correct order and recognise the conscious sedation end point  
Operate and confirm correct function of the equipment used for intermittent/continuous intravenous infusion, patient-controlled infusion or target-controlled infusion techniques |
| Inhalational conscious sedation using nitrous oxide/oxygen alone | The ability to:  
Check the function and safety features of the inhalational sedation machine  
Select the appropriate breathing system and nasal mask  
Adjust the inhalational sedation machine (gas mixture and flow, including observation of reservoir bag) in preparation for administration of sedation  
Titrante nitrous oxide concentration and recognise the conscious sedation end point |
<table>
<thead>
<tr>
<th><strong>MAJOR COMPETENCY</strong></th>
<th><strong>SUPPORTING COMPETENCIES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure the correct functioning of anti-pollution measures (gas scavenging)</td>
<td></td>
</tr>
<tr>
<td>Assess when a patient is fit to be discharged</td>
<td></td>
</tr>
<tr>
<td>Provide appropriate post-operative instructions</td>
<td></td>
</tr>
<tr>
<td>Maintain legible and contemporaneous records</td>
<td></td>
</tr>
<tr>
<td>Recognise the clinical signs of early airway obstruction and have airway management skills appropriate to the age of the patient being treated</td>
<td></td>
</tr>
</tbody>
</table>

**Additional skills pertaining to inhalational conscious sedation using an alternative agent**

**The ability to:**

- Provide inhalational conscious sedation with nitrous oxide and oxygen competently
- Select the most appropriate conscious sedation agent/s according to the principle of minimum intervention, i.e. using the simplest sedation technique that will enable treatment to be carried out satisfactorily
- Comply with requirements for a separate operator and sedationist (where appropriate), including the selection of an appropriate individual to provide the conscious sedation which is outwith the operator’s competence
- Select the most appropriate equipment for administration of the agent
- Recognise the signs and symptoms that might complicate or contraindicate administration of specific drugs or techniques
- Select the appropriate drugs and dosage for an individual patient and recognise the conscious sedation end point
- Operate and confirm correct function of the equipment used for administration (e.g. anaesthetic machine, vaporiser)
<table>
<thead>
<tr>
<th>MAJOR COMPETENCY</th>
<th>SUPPORTING COMPETENCIES</th>
</tr>
</thead>
</table>
| Oral and transmucosal conscious sedation | The ability to:  
Competently provide intravenous conscious sedation with midazolam, including the insertion of an intravenous cannula  
Select the most appropriate conscious sedation drug  
Select the most appropriate route of administration (e.g. oral, intranasal, transmucosal) for an individual patient, as defined within *Standards for Conscious Sedation in Dentistry: Alternative Techniques*  
Select the most appropriate formulation of the selected sedative drug and the equipment required for its administration  
Recognise signs and symptoms that might complicate or contraindicate administration by these routes  
Select an appropriate drug and dosage for an individual patient and recognise the conscious sedation end point  
Administer supplemental oxygen via nasal cannulae when indicated  
Recognise the clinical signs of early airway obstruction and have airway management skills appropriate to the age of the patient being treated  
Assess when a patient is fit to be discharged  
Provide appropriate post-operative instructions  
Maintain legible and contemporaneous records |
<table>
<thead>
<tr>
<th>MAJOR COMPETENCY</th>
<th>SUPPORTING COMPETENCIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring</td>
<td>The ability to:</td>
</tr>
<tr>
<td></td>
<td>Select appropriate monitoring techniques for individual patients in compliance with</td>
</tr>
<tr>
<td></td>
<td>published guidelines</td>
</tr>
<tr>
<td></td>
<td>Measure arterial blood pressure</td>
</tr>
<tr>
<td></td>
<td>Perform clinical monitoring of respiration (rate and depth), pulse (rate and rhythm)</td>
</tr>
<tr>
<td></td>
<td>and level of consciousness</td>
</tr>
<tr>
<td></td>
<td>Use a pulse oximeter, interpret readings and respond to change</td>
</tr>
<tr>
<td></td>
<td>Recognise equipment artefacts and malfunctions</td>
</tr>
<tr>
<td>Management of conscious sedation-related complications</td>
<td>The ability to:</td>
</tr>
<tr>
<td></td>
<td>Recognise and respond to over-sedation, respiratory depression and airway obstruction</td>
</tr>
<tr>
<td></td>
<td>using appropriate procedures in a step-wise manner</td>
</tr>
<tr>
<td></td>
<td>Demonstrate the use of airway adjuncts (ventilating bag, pocket mask and oral airways)</td>
</tr>
<tr>
<td></td>
<td>Perform oral/pharyngeal suction</td>
</tr>
<tr>
<td></td>
<td>Connect and adjust oxygen supply</td>
</tr>
<tr>
<td></td>
<td>Administer specific antagonist and/or resuscitation drugs</td>
</tr>
<tr>
<td></td>
<td>Comply with contemporary guidelines on resuscitation and the management of medical</td>
</tr>
<tr>
<td></td>
<td>emergencies</td>
</tr>
<tr>
<td>MAJOR COMPETENCY</td>
<td>SUPPORTING COMPETENCIES</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>VERBAL AND WRITTEN COMMUNICATION</strong></td>
<td></td>
</tr>
</tbody>
</table>
| With patients/carers  | Be able to explain benefits, risks and alternatives to treatment under sedation to patients/carers  
Involve patients (and their carers, where appropriate) in their care through feedback, motivation and decision making  
Ensure that patients, carers and escorts are fully aware of their responsibilities in relation to compliance with post-operative instructions and aftercare                                                                                                                                                                                                                       | Communication skills | Portfolio                      |
<p>| With referring practitioners | Communicate progress of treatment, verbally and in writing, where appropriate                                                                                                                                                                                                                                                                                                                                                           |                      |                               |
| With specialist services | Where there is a need for secondary care, be able to write an appropriate referral letter and provide relevant documentation and copies of relevant investigations                                                                                                                                                                                                                                                                                               |                      |                               |
| With other healthcare professionals | Where there is a need for liaison with other professionals about the management of the patient, be able to write an appropriate letter, providing relevant documentation and copies of relevant investigations                                                                                                                                                                                                                                   |                      |                               |
| With the team         | Have an appreciation of the concept of multidisciplinary care within the current regulatory framework                                                                                                                                                                                                                                                                                                                                                              |                      |                               |</p>
<table>
<thead>
<tr>
<th>MAJOR COMPETENCY</th>
<th>SUPPORTING COMPETENCIES</th>
<th>AREAS OF PERFORMANCE</th>
<th>SUGGESTED SOURCES OF EVIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LEADERSHIP AND MANAGEMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td>Demonstrate an appreciation of the importance and role of audit and the audit cycle in monitoring self-performance and reviewing practice</td>
<td>Governance and self-audit skills</td>
<td>Portfolio Peer review</td>
</tr>
<tr>
<td>Team training</td>
<td>Ensure that all members of the sedation team are appropriately trained and committed to statutory CPD in relation to conscious sedation Recognise the desirability of supporting the team to acquire formally recognised qualifications in sedation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROFESSIONALISM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethics/legislation</td>
<td>Appreciate and respond to health and safety issues relating to the practice of sedation Demonstrate a commitment to keeping up to date with developments in conscious sedation techniques and their application to dentistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical reading</td>
<td>Be able to critically evaluate the current literature on conscious sedation drugs and techniques</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Evidence of maintenance of competencies

24. The DwSI in conscious sedation will be expected to maintain their competencies through CPD and education. It is recommended that they undertake CPD relevant to their special interest area as part of the general and verifiable CPD requirements laid down by the GDC.
Accreditation of DwSIs in conscious sedation for PCTs

Contract specification

25. The contract for a service provided by a DwSI in conscious sedation should specify as appropriate:

- the core activities and the competencies required (see Competency framework for a DwSI in conscious sedation on pages 7–17 and Appendix 1)
- the types of patient suitable to be treated by and referred to the service, including inclusion and exclusion criteria
- the minimum/maximum caseload
- the facilities, including the staffing, that must be present to deliver the service (see Appendix 2)
- the clinical governance, accountability and monitoring arrangements, including links with other relevant disciplines working in primary care
- the agreed arrangements with the secondary care sector to facilitate the management of patients not able to be dealt with in the primary care setting, including the provision of emergency cover where appropriate
- remuneration at an appropriate level

Appointment of DwSIs in conscious sedation with PCTs

26. In appointing a primary care DwSI in conscious sedation, the PCT should consider:

- the development of a managed local clinical network appropriate for the delivery of the necessary services and need for conscious sedation
the views of key people in delivering the dental services locally, including clinicians and managers in other relevant acute trusts and PCTs, and local dental practitioners – it is important that the primary care DwSI in conscious sedation commands the support and respect of others involved in delivering sedation services and of potential service users

• evidence of generalist primary dental care competencies. The DwSI in conscious sedation will be able to demonstrate a continuing level of competence in their generalist skills. Evidence of training and experience in generalist skills should be provided through a portfolio approach and should demonstrate competence in the following areas:

  – clinical record keeping
  – infection control
  – legislation and good practice guidelines
  – medical emergencies
  – radiography
  – risk management and communication
  – team training

The FGDP(UK)’s Key Skills in Primary Dental Care learning package is one means by which generalist skills can be demonstrated and independently assessed. The Key Skills assessment is part of the Diploma of Membership of the Joint Dental Faculties’ (MJDF) portfolio of evidence, which provides a portfolio approach to the validation of general fitness to practise. The audit or research project and evidence of clinical skills component of the MJDF portfolio can be met through the overall requirements for the assessment of special interest competencies. Other clinical governance packages such as the BDA’s Clinical Governance Kit and Smile-on.com Clinical Governance Package can assist in the demonstration of generalist skills.

• evidence of successful acquisition of the defined special interest competencies. It is important that the service provided meets local needs and that the skills and competencies are appropriate to the service requirements. Applicants will be able to offer a range of evidence, as confirmation of competency, which will include both formal qualifications and/or experiential evidence (see paragraphs 20–22 and 32–35)
• ensuring that the following are in place before the service can be delivered:

– support of the local population, primary care dentists and specialist dental practitioners, PCTs and acute trusts

– induction, support and CPD arrangements for the DwSI in conscious sedation and their team

– facilities and staffing to allow satisfactory delivery of dental treatment under conscious sedation

– local guidelines on the use of the service having been developed by the PCT in consultation with the clinical network

– monitoring and clinical audit arrangements

– appropriate indemnity cover. If the primary care dentist is employed directly by the PCT or acute trust, they will be covered by the Clinical Negligence Scheme for Trusts run by the NHS Litigation Authority. The PCT should notify or discuss its proposed scheme with the NHS Litigation Authority and its own legal advisers. If the primary care dentist is an independent contractor, they will normally be covered by their professional indemnity provider. However, in all circumstances the primary care dentist should notify their defence organisation

**Monitoring of the conscious sedation service**

27. In reviewing the service and the work of the DwSI in conscious sedation (through clinical governance, annual appraisal, annual review of the contract and future revalidation requirements), the following should be sought:

• evidence that the guidelines for use of the service are being followed

• evidence that the caseload is appropriate
• evidence of relevant CPD in general and in their special interest area, clinical audit, exploration of the views of patients, carers and other health professionals, peer observation and compliance with future revalidation requirements

• evidence of involvement in appropriate clinical governance arrangements, including when appropriate in the local acute trust(s)

• evidence of satisfactory process and outcomes of care

• evidence that the individual's generalist service is not being adversely affected

**PCTs – needs assessment and delivery**

28. PCTs should identify their priorities in the context of key national policies (e.g. NHS Plan, National Service Frameworks), local needs and local service delivery. In order to meet a priority, a service may require configuration. PCTs in an area should work together, or singly, to consider the options for service development. These options will include the appointment of a primary care DwSI in conscious sedation. In deciding how to develop the service, the PCT may also wish to consider the views of other trusts and of the current service providers. Dental public health colleagues may provide an independent assessment of needs and demands to determine whether the service is a priority for development.

29. If it is decided to appoint a primary care DwSI in conscious sedation as part or all of a service development, then the PCT (acting singly or as a lead PCT for other local PCTs) should make an appointment, after due process, in line with this guidance and in collaboration with relevant stakeholders, including clinicians and providers.

30. Where there are no appropriately skilled candidates, the PCT (acting singly or as a lead PCT for other local PCTs) could consider sponsoring a suitably motivated local primary care dentist on an appropriate programme to acquire the necessary competencies. Where a PCT sponsors training it might be appropriate to seek evidence of a continuing commitment by the practitioner(s) to the commissioning PCT.
31. As in all commissioning decisions, the PCT should review the appointment regularly. Where the PCT is both commissioner and provider, there is a special responsibility to review service quality rigorously. In doing so, it will wish to take into account the views of the local health community and service users, clinical governance and audit data, and the outcomes from appraisal.

System of assessment and evidence required to demonstrate competence

32. Evidence of successful acquisition of the competencies is required. It is important that the service provided meets local needs and that the skills and competencies are appropriate to the service requirements. Applicants will be able to offer a range of evidence as confirmation of competency, which will include both formal qualifications and/or experiential evidence.

Sources of evidence

33. In the absence of an appropriate supporting testimonial from an experienced specialist in conscious sedation with whom the applicant has worked, there will be an assessment of the applicant’s ability and competence by an appropriately trained and experienced specialist working in the secondary care sector (for a suggested person specification see Appendix 3).

34. Alternatively, the applicant can provide evidence of either a formal qualification or experience.

• Formal qualification:

  – The applicant must provide evidence of a formal qualification in conscious sedation (MSc, Diploma, etc.) relevant to the competencies (alternative conscious sedation techniques) required, accompanied by appropriate experiential evidence if the qualification was obtained more than three years prior to the application.

  – Experiential evidence must be collected in a professional portfolio demonstrating evidence of continuing experience.
Experience:

- The applicant must provide evidence of having worked under direct supervision with an experienced specialist in conscious sedation in primary or secondary care (minimum of one session per week for one year) or the equivalent.

- Experiential evidence offered, by way of clinical attachments, etc., must be presented in a professional portfolio containing a detailed record of experience and must be accompanied by an appropriate reference from the supervising specialist.

- Experience gained post attachment, or its equivalent, must also be presented in the professional portfolio.

35. In addition, the applicant must provide evidence of CPD and audit:

- Documented evidence of attendance at relevant courses must be included within the professional portfolio.

- Documented evidence of relevant audit, either carried out personally or in association with others, must be included in the professional portfolio.

Process

36. The process will usually be an evaluation of the evidence presented in the applicant’s professional portfolio together with the clinical assessment (see paragraph 20 and 34 above).

37. The evaluation should be carried out by a local accreditation panel, which would normally include an experienced specialist in conscious sedation (see Appendix 3), a member of the FGDP(UK), representing primary care dentistry, a local dental committee representative and a PCT representative.

38. PCTs may consider it appropriate to interview potential candidates for accreditation as DwSIs in conscious sedation.
Appendix 1

Standard conscious sedation techniques

- Inhalational sedation using nitrous oxide/oxygen.
- Intravenous sedation using midazolam alone.
- Oral/transmucosal benzodiazepine,* provided that adequate competence in intravenous techniques has been demonstrated.

Oral or intranasal sedation should only be used where it is not possible to use one of the titratable techniques. Oral and intranasal sedation must only be administered by those who:

- are trained and experienced in intravenous sedation
- are competent at intravenous cannulation
- are competent in the management of sedation-related complications
- have evidence of training in these techniques

Alternative conscious sedation techniques

- Any form of conscious sedation for patients under the age of 12 years,† other than nitrous oxide/oxygen inhalation sedation.
- Benzodiazepine plus any other intravenous agent, e.g. opioid, propofol or ketamine.
- Propofol, either alone or with any other agent, e.g. benzodiazepine, opioid or ketamine.
- Inhalational sedation using any agent other than nitrous oxide/oxygen alone.
- Combined routes, e.g. inhalational plus intravenous agent (except for the use of nitrous oxide/oxygen during cannulation).

* In this context, ‘sedation’ is defined as the attainment of the state described in Conscious Sedation in the Provision of Dental Care by the oral or intranasal administration of midazolam. It is distinct from pre-medication, where the aim is to make the subsequent anxiety management technique easier. Oral and transmucosal sedation must be administered in the dental surgery under the supervision of the sedationist.
† It is recognised that the physical and mental development of individuals varies and may not necessarily correlate with chronological age.
Appendix 2

Conscious sedation practice requirements

PCTs that place a contract for services with a DwSI in conscious sedation need to ensure that the service they commission is, in all its aspects, fit for purpose, as the commissioner, in the event of any untoward incident, has a vicarious liability. This includes ensuring that the standards of facilities and support staff available for a particular service at each site meet contemporary standards. See Annex A of *Commissioning Conscious Sedation Services in Primary Dental Care* for further details.

Many of these standards will have been checked and met via the local general dental practice inspection system. Additional requirements for the practice of a DwSI in conscious sedation are defined in guidelines 1–3 and need to be monitored on an annual basis. It is suggested that this could be the responsibility of the local consultant in dental public health and general dental practice adviser working closely with the person who leads the local conscious sedation network (if set up) within which the DwSI would operate, or an experienced specialist in conscious sedation as defined in Appendix 3.
Appendix 3  
Person specification for an experienced specialist in conscious sedation

<table>
<thead>
<tr>
<th>QUALITY</th>
<th>ESSENTIAL</th>
<th>DESIRABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration</td>
<td>General Medical Council (GMC)/General Dental Council (GDC)</td>
<td></td>
</tr>
<tr>
<td>Qualifications</td>
<td>BDS/MB BS or equivalent and Diploma/MSc in the relevant conscious sedation techniques awarded by a recognised institution or equivalent alternative seniority and recognised expertise</td>
<td></td>
</tr>
<tr>
<td>Training and experience</td>
<td>Evidence of appropriate theoretical and practical training, with annual refresher training Continuing clinical activity to include a minimum of 100 administrations per year of standard or alternative conscious sedation techniques</td>
<td>Additional experience such as the acceptance of patients referred by other colleagues and participation in teaching courses and research</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Knowledge of a wide range of conscious sedation techniques</td>
<td>Knowledge of the latest developments and research in the field of conscious sedation</td>
</tr>
<tr>
<td>Practice visit</td>
<td>Willingness to comply with documentation and checklist</td>
<td>Willingness to comment on and recommend adjustments to the documentation in the light of knowledge and experience</td>
</tr>
<tr>
<td>Continuing professional development (CPD)</td>
<td>Compliance with GMC/GDC requirements</td>
<td>Additional relevant CPD</td>
</tr>
<tr>
<td>Peer review</td>
<td>Evidence regular peer review involving sedation, including participation in clinical audit</td>
<td></td>
</tr>
<tr>
<td>Mobility</td>
<td>Ability and willingness to travel to the dental clinic and to attend relevant administrative meetings</td>
<td></td>
</tr>
</tbody>
</table>
References

   www.advisorybodies.doh.gov.uk/sdac/conscious_sedationdec03.PDF#search="Conscious%20Sedation%20for%20the%20Provision%20of%20Dental%20Care"

   www.rcseng.ac.uk/fds


4. National Health Service (General Dental Services Contracts) Regulations 2005
   www.opsi.gov.uk/si/si2005/20053361.htm

5. National Health Service (Personal Dental Services Agreements) Regulations 2005
   www.opsi.gov.uk/si/si2005/20053373.htm

6. Implementing a Scheme for Dentists with Special Interests (DwSIs). Department of Health and Faculty of General Dental Practitioners (UK), 2004
   www.dh.gov.uk/cdo
   www.fgdp.org.uk/dws/docs/dwsi_org_framework.pdf

7. Dentists with Special Interests (DwSIs): A Step by Step Guide to Setting Up a DwSI Service, NHS Primary Care Contracting, 2006
   www.dh.gov.uk/cdo
   www.fgdp.org.uk/dws/docs/dwsi_step_guide.pdf

8. The First Five Years – A Framework for Undergraduate Dental Education. General Dental Council, 2002
Further reading

www.nes.scot.nhs.uk

*Conscious Sedation: A Referral Guide for Dental Practitioners.* Dental Sedation Teachers’ Group in liaison with Society for the Advancement of Anaesthesia in Dentistry, 2001
www.dstg.co.uk/teaching/conc-sed/

*Implementing and Ensuring Safe Sedation Practice for Healthcare Procedures in Adults.* UK Academy of Medical Royal Colleges, 2001
www.rcoa.ac.uk/docs/safesedationpractice.pdf

*A Step by Step Guide to Setting Up a Dentist with Special Interests (DwSI) Service,* 2006.
www.dh.gov.uk/cdo
www.fgdp.org.uk