

**Guidance for Commissioning  
NHS England Dental Conscious Sedation  
Services**

**A Framework Tool**



**May 2013**

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## 1. Background

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Pain and anxiety control is central to modern ethical dental practice and should be a priority for all dental practitioners during the delivery of clinical care for their patients. Dental procedures are diverse in their nature and patients' dental needs, anxiety levels and medical conditions can vary greatly. This report provides an indication for a range of clinically justified management modalities, both non-pharmacological and pharmacological, which are available to dental professionals to assist patients in coping with dental treatment.

Effective local anaesthesia and quality behavioural management techniques, together with a calm, sympathetic manner should be at the core of all patient interactions and therefore central to all dentists' approach to patient care. However, there will always be a cohort of patients who are unable to cope with these simple techniques and require more complex techniques to allow them to accept invasive dental treatment.

This leads to a necessity for the availability of appropriate, safe, predictable and effective conscious sedation techniques within each geographical area which are designed to deliver care for those patients unable to access dental care in a routine manner.

It is imperative that dental sedation services operate within well governed and organised clinical networks, which have strong clinical leadership and are managed by well trained, experienced and dedicated teams of dental professionals.

Providing dental care under conscious sedation can be challenging due to the diverse range of patients' needs and requirements related to levels of anxiety, the patient's ability to cope with treatment, co-morbidities and the proposed dental care. This requires experienced clinicians to carry out detailed and thorough patient assessment exploring all areas of the patient's dental, medical and social history, and make evidence-based decisions about the most appropriate treatment modality for the patient. Clinicians need to have a good understanding and appreciation of all conscious sedation techniques and the use of general anaesthesia (GA) to support quality and effective decision making that leads to the best possible patient outcomes.

Sedation services need to be delivered by well organised facilities with highly trained and experienced teams of dental professionals. These teams need to operate within a culture of regular feedback and be integrated into local and national organisations within NHS England. Regular quality assurance and clinical audits should be integral aspects of the management structures to ensure that premises, teams and treatment are maintained at the highest possible standards and in accordance with current national guidance and best practice.

This document adopts the principles of the World Health Organisation Surgical Safety Checklist.

## 2. Introduction

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This framework proposes a potential common approach to dental conscious sedation service delivery models throughout England.

The framework aims to support the delivery of safe, high quality, patient-centred care which encourages a system of robust and transparent quality assurance, and the appropriate use of resources in a cost effective and evidence based manner.

The framework supports a service design which encourages the use of a variety of conscious sedation techniques which has, at its core, the assessment process delivered by well-trained and experienced dental sedationists capable of making robust and predictable decisions regarding patient care.

The guidance in this framework builds upon the recommendations in the Department of Health's 2006 guidance document "Commissioning Conscious Sedation Services in Primary Dental Care".

This document adopts the principles of the Mid Staffordshire NHS Foundation Trust Inquiry (The Francis Report), which recommends standards defined by the following statements:

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**Fundamental standards** of minimum safety and quality – in respect of which non-compliance should not be tolerated. Failures leading to death or serious harm should remain offences for which prosecutions can be brought against organisations. There should be a defined set of duties to maintain and operate an effective system to ensure compliance;

**Enhanced quality standards** – such standards could set requirements higher than the fundamental standards but be discretionary matters for commissioning and subject to availability of resources;

**Developmental standards** which set out longer term goals for providers – these would focus on improvements in effectiveness and are more likely to be the focus of commissioners and progressive provider leadership than the regulator.

All such standards would require regular review and modification.

It is essential that professional bodies in which doctors and nurses have confidence are fully involved in the formulation of these standards and in the means of measuring compliance.

## 3. Evidence Base

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This Service Specification takes into account best practice guidance:

- A Conscious Decision, Department of Health (2000)
- Conscious Sedation in the Provision of Dental Care, Standing Dental Advisory Committee, Department of Health (2003)
- Standards for Conscious Sedation in Dentistry: Alternative Techniques, Standing Committee on Sedation for Dentistry (2007)
- NICE: Sedation in Children and Young People (2010)
- NICE: Sedation in Children and Young People: Costing Report, Implementing NICE guidance (2010)
- A guide to maintaining professional standards in conscious sedation for dentistry (2011) Independent Expert Group on Training Standards for Sedation in Dentistry

- Safe Sedation Practice, Standardised Evaluation of Conscious Sedation Practice for Dentistry in the UK – a toolkit for implementing National Standards, SAAD (2013)
- Guidelines for the Appointment of Dentists with a Special Interest (DwSI) in Conscious Sedation, Department of Health/Faculty of General Dental Practice (UK) (2007)
- Commissioning Conscious Sedation Services in Primary Dental Care, Department of Health (2006)
- The Mid Staffordshire NHS Foundation Trust Public Inquiry, Chaired by Robert Francis QC, February 2013 HC947
- WHO Surgical Safety Checklist  
[http://www.who.int/patientsafety/safesurgery/tools\\_resources/SSSL\\_Manual\\_finalJun08.pdf](http://www.who.int/patientsafety/safesurgery/tools_resources/SSSL_Manual_finalJun08.pdf)

#### **4. Aims of Framework**

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To provide a comprehensive specialised dental conscious sedation referral service, meeting the needs of any given population/region and manage dental treatment where conscious sedation is indicated. This service should run alongside regular GDS services and compliment local arrangements for secondary care general anaesthesia and special care dental services.

Providers will be expected to play a leadership role, providing support to GDPs with respect to referral criteria and operating within a managed clinical network supporting best practice and regular peer review.

The aims for NHS Dental Conscious Sedation Service provision are:

- To provide access to high quality NHS Anxiety Management & Sedation Services for local populations to ensure equity and consistency of provision
- To deliver appropriate, efficient and cost effective services
- To reduce the number of patients referred for general anaesthetic in secondary care

To improve patient choice through an increased range and availability of highly skilled providers working within a well governed clinical network;

To provide access to high quality anxiety management and sedation services that meet the specific needs of the local population;

To establish a positive working relationship between the local area teams (LATs) and providers to facilitate and maximise service delivery; and

To develop services in line with the evolving local strategic approach to primary care dental provision and guidance from local professional networks (LPNs).

#### **5. Service Objectives**

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To provide a high quality specialised dental conscious sedation referral service for those patients who meet the referral criteria. There are a variety of clinical circumstances that may indicate a the need for conscious sedation, including:

- Patients that are anxious or phobic
- Patients that have a strong gag reflex making it difficult to accept dental treatment
- Those patients with movement disorders, physical and/or mental disabilities, or who are otherwise unlikely to allow safe completion of treatment
- To enable a particularly unpleasant and complicated procedure to be carried out without distress to the patient

- To avoid the need for general anaesthesia, for example in patients with long-standing dental phobia.

To provide services that will ensure accessibility for all residents within the local region.

To provide, where appropriate, access to a defined range of NHS general dental services under conscious sedation, leading to an improvement in oral health.

To provide a service that is delivered by suitably qualified support personnel, who are appropriately registered with their professional bodies.

It is expected that all clinicians providing treatment will operate in accordance with agreed protocols for assessment and treatment.

## 6. Definitions

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In the UK, conscious sedation is currently defined as:

*“a technique in which the use of a drug or drugs produces a state of depression of the central nervous system enabling treatment to be carried out, but during which verbal contact with the patient is maintained throughout the period of sedation. The drugs and techniques used to provide conscious sedation for dental treatment should carry a margin of safety wide enough to render loss of consciousness unlikely.”*

Conscious sedation should not be interpreted as light general anaesthesia. The use of any technique where there is loss of consciousness or protective reflexes is general anaesthesia, and GA is only permitted within an environment with facilities equivalent to an Acute NHS Trust. The drugs and techniques used in conscious sedation should therefore have a margin of safety wide enough to render loss of consciousness unlikely.

## 7. Clinical Service Requirements

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The Dental Conscious Sedation Service will be delivered under a “hub and spoke” model which manages a number of providers and delivers access to a two Tier structure of conscious sedation techniques (Appendix 1).

Patient assessment must be undertaken by an experienced dental sedationist (such as a practitioner who fulfils the requirements of the DwSI document listed at section 3) with knowledge and appreciation of all available techniques. Patient assessment may occur in a variety of centres which may or may not provide both Tier 1 and Tier 2 techniques. The intention is that Tier 1 services will be available through a network of centres, but that Tier 2 services are likely to operate from a much smaller number of clinics, and potentially only one in any given locality in a spoke and hub arrangement. Tier 2 centres should also have Tier 1 capabilities to reduce over-prescription of Tier 2 techniques.

**Tier 1 services will provide basic conscious sedation techniques:**

- Inhalation sedation with nitrous oxide and oxygen.
- Intravenous sedation - the standard technique involves the administration of a titrated dose of a single drug.
- Oral and intranasal sedation - only be used by practitioners who have received appropriate training and who are experienced in the use of intravenous techniques.

**Tier 2 services will provide some or all of the advanced conscious sedation techniques (previously defined as alternative techniques) outlined in Alternative Techniques (2007). These techniques will commonly, but not exclusively, be delivered via a separate operator-sedationist model:**

- Any form of conscious sedation for patients under the age of 12 years<sup>#</sup> other than nitrous oxide/oxygen inhalational sedation.
- Benzodiazepine + any other intravenous agent, for example opioid, propofol or ketamine.
- Propofol, either alone or with any other agent, for example benzodiazepine, opioid or ketamine.
- Inhalational sedation using any agent other than nitrous oxide/oxygen alone.
- Combined (non-sequential) routes, for example intravenous + inhalational agent (except for the use of nitrous oxide/oxygen during cannulation).

\* It is recognised that the physical and mental development of individuals varies and may not necessarily correlate with the chronological age.

Any conscious sedation technique used should be:

- Safe
- Effective
- Appropriate for the needs of the individual undergoing the technique on a particular occasion
  - The simplest technique based on the following factors (please note; it is not a requirement to have tried and failed with a technique before progressing to more advanced techniques):
  - what the procedure involves
  - target level of sedation
  - contraindications

- side effects
- patient preference
- Evidence based as evaluated by the guidance for standards in the Francis Report

A variety of conscious sedation techniques are available, and practitioners may also offer a combination of techniques. In some situations, the dentist carrying out the treatment will also administer the sedation. He or she must be supported by someone appropriately trained in sedation. In other situations, a dentist will carry out the dental treatment with either another dentist or a medically or dentally qualified practitioner administering the sedation, who is appropriately trained and experienced in the techniques used.

## **Tier 2 techniques**

The majority of cases will be suitable for treatment using Tier 1 techniques. However, there is a proportion of patients, particularly but not exclusively children, for whom Tier 1 techniques do not allow comprehensive dental care and who require more advanced techniques to facilitate treatment. Such techniques include the use of multiple drugs (polypharmacy) for intravenous sedation, inhalation sedation using agents other than nitrous oxide and combined routes, for example: inhalational and intravenous agents (except for the use of nitrous oxide / oxygen during cannulation), any form of paediatric sedation (other than nitrous oxide) and continuous infusions of a drug or drugs. The use of Tier 2 techniques should be restricted to specialised sedation teams working in an appropriate environment. (Fundamental Standard)

Providers should collaborate locally on developing agreed referral protocols for working with commissioners, referring practitioners and engaging with other stakeholders, e.g. local dental committees, local professional networks and patient groups.

Referral criteria should be designed to minimise inappropriate referrals. Engagement with referring practitioners is a vital role for sedation providers in developing effective services.

Providers should develop local clinical sedation networks, and participate in annual peer reviewed assessments with other sedation providers to share best practice. Such groups should also interact with the new NHS structures.

## **8. Service Delivery Model**

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### **Clinical Objective and Principles**

The clinical objective of the sedation service is that the Provider will deliver high quality clinical services, which are defined as:

*“Patient-centred and value for money primary dental services, delivered in a safe and effective manner, through a learning environment, which includes the training of dentists, doctors and other healthcare professionals.”*

The following clinical principles underpin this clinical objective and form the basis of the clinical quality requirements in this section:

- Services will be patient-centred and accessible
- Services must be delivered safely and through a learning environment
- Services must be effective
- Services must be prevention focused
- Services must be appropriately funded

Best practice recommendations on the use of conscious sedation are set out in the contemporaneous national guidance, as outlined in Section 3. The provider is expected to meet or exceed the required standard for conscious sedation in dentistry.

There is an expectation that lead clinicians within the Tier 2 hubs will provide clinical leadership, support quality assurance and promote peer review and good governance.

Tier 2 hubs should promote collaborative working relationships between all sedation providers and performers within a locality, and be formalised as part of a local sedation clinical network. These networks will be expected to provide intelligence to commissioning structures, helping shape sedation services. (Enhanced Standard)

Tier 2 centres should link nationally to provide support for training, research, peer review and innovation within conscious sedation for dentistry. (Developmental Standard)

All sedation services should use a common dataset to gather information about service activity to allow standardised collection of data for service evaluation. A recommended dataset can be seen in Appendix 2.

## **Clinical Quality Requirements**

### **Referral (Fundamental Standard)**

Patients will be referred to the service by primary care dental practitioners using agreed referral criteria.

Referring practitioners should enclose all recent radiographs with the referral.

All referrals should be triaged using the referral criteria, and prioritised as urgent or routine, as per locally agreed protocols.

Inappropriate referrals should be returned to the referring practitioner with an explanation being provided to the patient and GDP.

### **Assessment (Fundamental Standard)**

Assessment should normally occur in a separate appointment and should be carried out via a systematic and reproducible approach.

The assessing and treating dentist(s) must take full responsibility for the formulation of an appropriate treatment plan for the patient which is consistent with their clinical findings.

Treatment plans received from referring colleagues should only be followed if the treating dentist is satisfied that it is appropriate, necessary, in the patient's best interest and consistent with a responsible body of dental opinion and professional standards.

As a minimum, patient assessments should include recording of:

- Reason for referral
- Relevant medical history
- Physical status (including the airway)
- Psychological development status of children/special care patients
- Liaison with suitable medical practitioner/anaesthetist before delivery of sedation if there is a concern about a potential airway or other co-morbidity
- ASA classification
- Body Mass Index (BMI) (not indicated for children)
- Blood Pressure (for all sedations except inhalation conscious sedation), (may not be necessary for children)
- Social history
- Dental history, including previous sedation and date
- Assessment and recording of patient anxiety level and degree of co-operation
- Dental examination
- Appropriate radiographic examination and interpretation
- Ability to provide suitable escort and travel arrangements

Before using conscious sedation techniques, other methods of pain and anxiety control including behaviour management techniques should first be considered. The patient's notes should include a justification of the need for sedation and choice of sedation technique.

Treatment plans should be provided and explained to patients and carers, so that they can make fully informed choices and consent can be obtained. This process should include an explanation of the proposed sedation technique, alternatives to the proposed treatment plan and the risks and benefits of the proposed treatment and sedation. In addition, if a child is being sedated, ensure the information is appropriate for the developmental stage of the child or young person and check they have understood the information.

Written consent must be obtained and documented for all patients for both the dental treatment and sedation.

Verbal and written pre and post operative instructions must be provided at this visit to the patient and carer, including escorts, transport arrangements, emergency care and contact telephone numbers etc.

Ensure that patients, particularly children and young people, are prepared psychologically for sedation by offering information about:

- The procedure
- What the patient should expect
- The sensation associated with the procedure
- How to cope with the procedure
- Offer parents and carers the opportunity to be present during sedation if appropriate. If a parent or carer decides to be present, offer them advice about this role during the procedure.

The simplest method of sedation should be employed at each stage to achieve the desired treatment. Discussion between the patient/carer and the assessor should minimise the risk of inappropriate sedation failure. Patients should be assessed for their individual needs. A cascade of increasing complexity of sedation exposure is to be avoided.

The most suitable sedation technique should be selected based on the following factors and recorded:

- What the procedure involves
- Target level of sedation
- Contraindications
- Side effects
- Parent (or parent and carer) preference
- Published evidence

The clinician should discuss dental treatment options that would obviate the need for sedation in the future.

### **Treatment (Fundamental Standard)**

The patient record for each treatment episode will include contemporaneous recording of:

- The type, dose and timing of sedative agent used, including batch number, expiry date and route of administration.
- The treatment performed, including details of topical and local anaesthetic, and any issues with treatment or complications.
- Duration of the treatment.
- Duration of recovery and time of discharge.
- Details of staff present during delivery of sedation.
- The escort arrangements.
- The transport arrangements.
- The level of patient's consciousness and co-operation.

### **Monitoring**

For conscious sedation excluding nitrous oxide (in oxygen), continuously monitor, interpret and respond to changes in all of the following:

- Depth of sedation
- Blood pressure
- Respiration rate
- Oxygen saturation
- Heart rate
- Pain
- Degree of comfort – Coping with distress/Patient behaviour /Quality of the sedation
- CO2 monitoring as appropriate (Developmental Standard)

For Tier 2 techniques, additional monitoring may be necessary.

Providers should develop a standardised *pro forma* for monitoring patients being treated under both Tier 1 and Tier 2 sedation techniques.

## **Recovery**

After the procedure monitoring will continue until the patient:

- Remains haemo-dynamically stable.
- Has returned to their pre-sedation ambulant state.
- Is safe to be discharged into the care of a suitable, able-bodied adult.

The patient should be regularly monitored by a suitably qualified member of staff throughout the recovery period who is immediately available if the escort raises the alarm.

Monitoring should continue during recovery consistent with the patient's reducing level of sedation.

## **Discharge (Fundamental Standard)**

The following criteria must be met before the patient is discharged:

- The patient is "street safe"
- Vital signs are stable
- The patient is awake and there is no risk of further reduced level of consciousness
- Nausea vomiting and pain have been adequately managed
- Haemostasis has been achieved

After each treatment episode:

- A protocol including criteria for discharge should be followed.
- The patient should be discharged into the care on their escort by an appropriately trained healthcare professional..
- The patient and escort must be provided with written and individualised verbal after-care instructions and emergency contact information.

On completion of the course of treatment:

- Patients should be discharged to the care of their referring GDP.
- A discharge letter will be sent to the referring dentist, together with any film radiographs supplied by the referring dentist and copies of any radiographs taken by the sedation practice if monitoring of a particular tooth condition is required.

Those unable to accept treatment with the aid of sedation should be referred to a general anaesthetic (GA) service or another specialised service appropriate to their needs.

Referrals of patients from this service into another should be made according to local referral protocols based on published care pathways.

Any further treatment needs should be made known the referring dentist.

### **Self-care and patient and carer information**

Providers will provide:

- Information on the service, including details of the clinical team with relevant qualifications, experience and training.
- Information on the range of conscious sedation techniques available.
- Information on sedation including what to expect during and after sedation, when to contact the surgery, requirements for an accompanying person and transport arrangements required.
- Ensure the information provided is appropriate for the development stage of the child or young person and check that the child or young person has understood the information.
- Information on fasting as appropriate
- Information for parents and carers on oral health promotion, e.g. fluoride toothpaste, healthy eating advice etc.
- Aftercare instructions following dental treatment, for example post-extraction advice
- Information on how to access emergency care if required.
- Information on patient charges.
- Information on how to comment on or raise concerns about the service received.

## **9. Premises and Equipment**

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The provider will be required to operate from premises that are modern, provide a safe and secure environment for staff and patients, are clinically fit for purpose and have fulfilled legislative and regulatory requirements.

Premises must be registered with the Care Quality Commission.

The provider will be required to ensure that the premises are inspected and approved by a recognised sedation independent authority. This should be based on the checklist developed by the Society for the Advancement of Anaesthesia in Dentistry (SAAD). A report of this should be made available to both commissioners and referring practitioners and revisited on a three-yearly rolling cycle.

The facilities will, at all times meet the current legal and professional standards for the provision of primary care dental services.

The premises must have as a minimum:

- A surgery fully equipped for the provision of sedation services.
- Active scavenging where inhalation conscious sedation is employed.
- The facility to take appropriate x-rays for diagnosis and treatment planning.

- Emergency equipment and drugs appropriate for managing medical emergencies in dental practice and sedation-related complications should be readily available and compliant with current guidelines.
- Facilities for the safe storage of controlled drugs, and protocols in place controlling their use.

### **Tier 1 & 2 Services**

Particular emphasis is put on the following;

All areas should have:

- Adequate lighting, heating and ventilation
- Adequate number of surgeries for patient throughput
- A chair or trolley that can be rapidly moved to a supine position suitable for CPR.
- Sufficient space for management of medical emergencies and complications, including resuscitation, in waiting, surgery and recovery areas.
- Access for emergency services

There should be:

- Separate waiting and recovery areas
- A suitably sized waiting area relative to patient flow
- Dental surgeries of adequate size to accommodate the patient, escort, sedationist, dentist and other staff.
- Sedation gas scavenging and ventilation in accordance with the Control of Substances Hazardous to Health Regulations (COSHH) and Health & Safety Executive Regulations (2002).
- Appropriate privacy for assessment, treatment and recovery

### **Tier 1 service - Inhalation conscious sedation**

There should be a dedicated inhalational sedation machine that is unable to deliver less than 30% oxygen and has an emergency nitrous oxide shut off and an adequate reserve supply of oxygen.

Active scavenging should be used in the surgery.

Gases should be stored according to current safety requirements.

### **Intravenous conscious sedation (single drug), Oral and Intranasal sedation**

The following should be available:

- Supplemental oxygen if required
- IV cannulae and equipment required to gain IV access

- Serious consideration should be given to the use of safety cannulae (Enhanced Standard)
- IV sedative agent in date, with batch numbers recorded
- IV Sedation reversal agent, where available, in date with batch numbers recorded.
- Syringe labels

### **Monitoring equipment**

The following should be available:

- Pulse oximeter with an audible alarm
- Equipment for measuring blood pressure

### **Tier 2 services**

In addition to the facilities required for a Tier 1 service, further consideration should be given to waiting areas, surgeries and recovery facilities sufficient to manage the throughput of patients and escorts, consistent with the complexity of the conscious sedation techniques.

There should be a separate recovery area adequate for the safe recovery of patients and appropriate for the type of case being managed, with suitable recovery beds/chairs and staffed by suitably trained recovery staff.

Drugs & equipment should be appropriate for the techniques utilised. These include those required for sedation, monitoring and the management of complications and resuscitation.

If opioids are being used, the reversal agent naloxone with batch numbers recorded must be available.

## **10. Performers and Workforce**

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This conscious sedation service must be dentist-led, and at each location service delivery must be led and delivered by a dentist with a Diploma/MSc in conscious sedation for dentistry, or who is able to demonstrate an equivalent level of experience and training. Recommendations for training in Tier 1 and Tier 2 techniques can be seen in Appendix 3.

### **Clinicians**

The Provider must ensure that:

- All clinicians have full registration with the GMC or GDC as appropriate
- All clinicians have approved indemnity cover
- All dentists assessing patients for treatment under both Tier 1 and Tier 2 conscious sedation techniques should have a Diploma/MSc in conscious sedation for dentistry or are able to demonstrate equivalent experience and training (e.g. a DwSI in Conscious Sedation).
- All clinicians delivering Tier 1 conscious sedation techniques are able to demonstrate appropriate training and experience in these techniques.

- All dentists providing treatment for patients under Tier 2 conscious sedation techniques should have a Diploma/MSc in conscious sedation for dentistry, or be able to demonstrate equivalent experience and training.
- All clinicians delivering Tier 2 conscious sedation techniques should have a Diploma/MSc in conscious sedation for dentistry, or be able to demonstrate equivalent experience and training or alternatively be a medically qualified practitioner, able to demonstrate equivalent training and experience in the use of these techniques. They will also provide audit records of safe administration in that clinical setting for children or adults as appropriate.
- All clinicians can provide evidence of regular and recent sedation related CPD activity appropriate to the techniques they will be providing.
- All clinicians providing the sedation elements of this service will be able to demonstrate a minimum caseload of at least 25 cases for adults and 25 cases for children in the last year appropriate to the Tier of service.
- Each patient is attended by at least two appropriately trained and experienced members of the conscious sedation team.
- For adults, a dedicated sedationist administers any technique requiring the continuous IV infusion of a drug or drugs OR when three or more sedative drugs are used in combination regardless of the route.
- For children below the age of 12, an operator-sedationist may administer only N<sub>2</sub>O/O<sub>2</sub> or midazolam (IV,IN,Oral). However, if evidence becomes available that Ketamine (or other drugs) may exhibit the same level of efficacy and safety to that of Midazolam, it might be considered suitable for use by an operator-sedationist in the future. Until such time, such drugs should only be used by an appropriately trained and experienced sedationist who is not also carrying out the dental treatment.
- Where a dentist works with a dedicated sedationist, either employed by the dentist or employed by a third party, there must be a formal or contractual responsibility for the treating dentist to clarify the responsibilities and accountability of each member of the dental team involved with each patient during preparation, sedation, recovery and discharge.
- Evidence is available of annual team training in immediate life support and in paediatric immediate life support as appropriate.

### **Dental Care Professionals (DCPs)**

The Provider must ensure that all dental nurses, therapists and hygienists are fully registered with the GDC. Non-sedation trained dental nurses may participate in the service in a supernumerary capacity only. Dental nurses assisting the operator-sedationist should also be able to demonstrate that they have received specific training in conscious sedation, and are in possession of the Certificate in Dental Sedation Nursing from the National Examining Board for Dental Nurses (NEBDN), or be able to demonstrate equivalent training.

## **11. Clinical Governance**

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Clinical Governance (CG) is a system through which healthcare organisations are accountable for continuously improving the quality of their services and safe guarding high standards of care, by creating an environment in which clinical excellence will flourish.

The provider will need to have a framework of accountability including clinical accountability for processes such as practitioner audit, clinical appraisals and the implementation of NICE guidance.

The provider should put in place a standard operating procedure for each sedation technique delivered by their service. This should include details of assessment protocols, structure of treatment sessions, roles of team members and systems for incident reporting.

The provider must be able to demonstrate that appropriate changes are made to the clinical service to comply with best practice recommendations from appropriate bodies.

The provider must be able to demonstrate that robust clinical governance, risk assessment and risk management strategies are in operation.

The provider is required to log and report incidents and accidents. A system of team feedback and improvement should be linked to this reporting structure.

The provider will be required to comply with current Health and Safety legislation.

The provider is required to implement any relevant safety alerts as specified by the Department of Health's Central Alerting System.

All providers will be required to be registered with and be approved by the Care Quality Commission.

The provider is expected to work within and promote the Medicines Management Strategy and Prescribing Guidance, and to comply with all relevant NHS policies.

The provider is required to have procedures in place in relation to the management and use of controlled emergency drugs in compliance with the misuse of drugs regulations, including access, storage, security (including in relation to transport), disposal and destruction and record-keeping.

The provider will undertake regular audits of the systems in place for controlled drugs.

The provider is expected to comply with the key requirements of the children's NSF by providing:

- Services which create as little disruption as possible to the child's home and education
- Child and family centred services (Developmental Standard)
- Services provided by staff trained in the needs of treating children (Developmental Standard)

All staff operating within this contract will be familiar with local Child Protection Guidelines, and will be required to attend formal training in Safeguarding Children every 3 years.

All staff delivering this contract must be enhanced Disclosure and Barring Service (DBS) checked.

All staff operating within this contract should be familiar with the practical implications of the Mental Capacity Act.

## **12. Cost Recommendations**

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Conscious sedation services for dentistry should be funded- appropriately. There must be no barrier to accessing a service providing the fundamental standards as described in this document.

Cost recommendations are taken from published evidence in the NICE guidance on sedation for children and young people costing report, pages 12-19.

### Tier 1

The assumptions made in the report with reference to Tier 1 services are:

- Costs for training and investment in equipment, scavenging, maintenance and facilities to meet sedation guidance are NOT included.
- A success rate of 95% for the chosen technique is anticipated.

- Costs are based on patients requiring a simple procedure. For longer or complex procedures, costs will be higher.
- Assessment costs are NOT included.

The NICE 2010 figures quote £134 for a 30 minute treatment session with inhalation conscious sedation using nitrous oxide and oxygen, and £162 for a 30 minute treatment session with intravenous midazolam.

It is anticipated that a significant majority of referred patients will be high need patients who require extensive and multiple dental interventions. It is therefore reasonable to expect an average treatment time of approximately 60 minutes plus a 30 minute assessment. Charging only staff costs, this brings the per-case cost for inhalation conscious sedation using nitrous oxide and oxygen to £180, and the per-case cost for intravenous midazolam to £242.

In addition to these staff costs, resources are required to ensure compliance with contemporary regulation and governance for facilities and the wider dental and administrative team to manage and deliver a sedation referral service.

The NHS accepts the cost of dentists for superannuation purposes is a maximum of 43.9% of the gross resources. Adding 40% to the baseline staff costs is considered reasonable to cover all other aspects of delivering a referral Tier 1 sedation service. The total per-case cost recommended for inhalation conscious sedation using nitrous oxide and oxygen is £252, and the per-case cost for intravenous midazolam is £339.

## Tier 2

The NICE 2010 report quoted a figure of £273.01 for Tier 2 conscious sedation techniques. Based upon three years of inflation, and increased costs of compliance with contemporary regulation and governance, the 2013 per-case cost should be in excess of £300. These figures are based upon a Dental Sedation Service in the North East of England. It is reasonable to assume that the costs incurred by this service, in terms of staffing, utilities and ground rent, may not be representational of other geographical areas.

## Assessment

It is accepted for both Tier 1 and Tier 2 services that patients may attend for assessment, but not proceed to treatment, e.g. an inappropriate referral, failure to return for treatment, or the requirement for onward referral.

In this event, an assessment fee of a minimum of £60 is recommended.

An alternative model of commissioning could also be considered in certain situations. This model would support providing conscious sedation services on a private basis in combination with an NHS course of dental treatment. This would be applicable where the provider is able to demonstrate full compliance with contemporary guidance and the standard described within this document.

## 13. Conclusions

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This proposed service design specification aims to provide a framework through which high quality, safe and effective conscious sedation services for dentistry can be organised, commissioned and delivered.

The details within this document provide a generic structure and set some minimum requirements for a comprehensive conscious sedation service for dentistry within any given region or locality.

It is beyond the scope of this document to include full details of local arrangements, referral criteria, payment structures etc. These would need to be finalised between providers, commissioners and other stakeholders e.g. LDC's, LPN's, patient groups.

There is an expectation that all providers within a given locality would work together and collaborate as a managed clinical network to ensure services are delivered in a consistent, predictable and effective manner with clear patient care pathways. This aims to minimise inconvenience both for patients and referring practitioners and maximise clinical outcomes.

Such networks would require strong clinical leadership from experienced and dedicated individuals who were engaged with all key stakeholders.

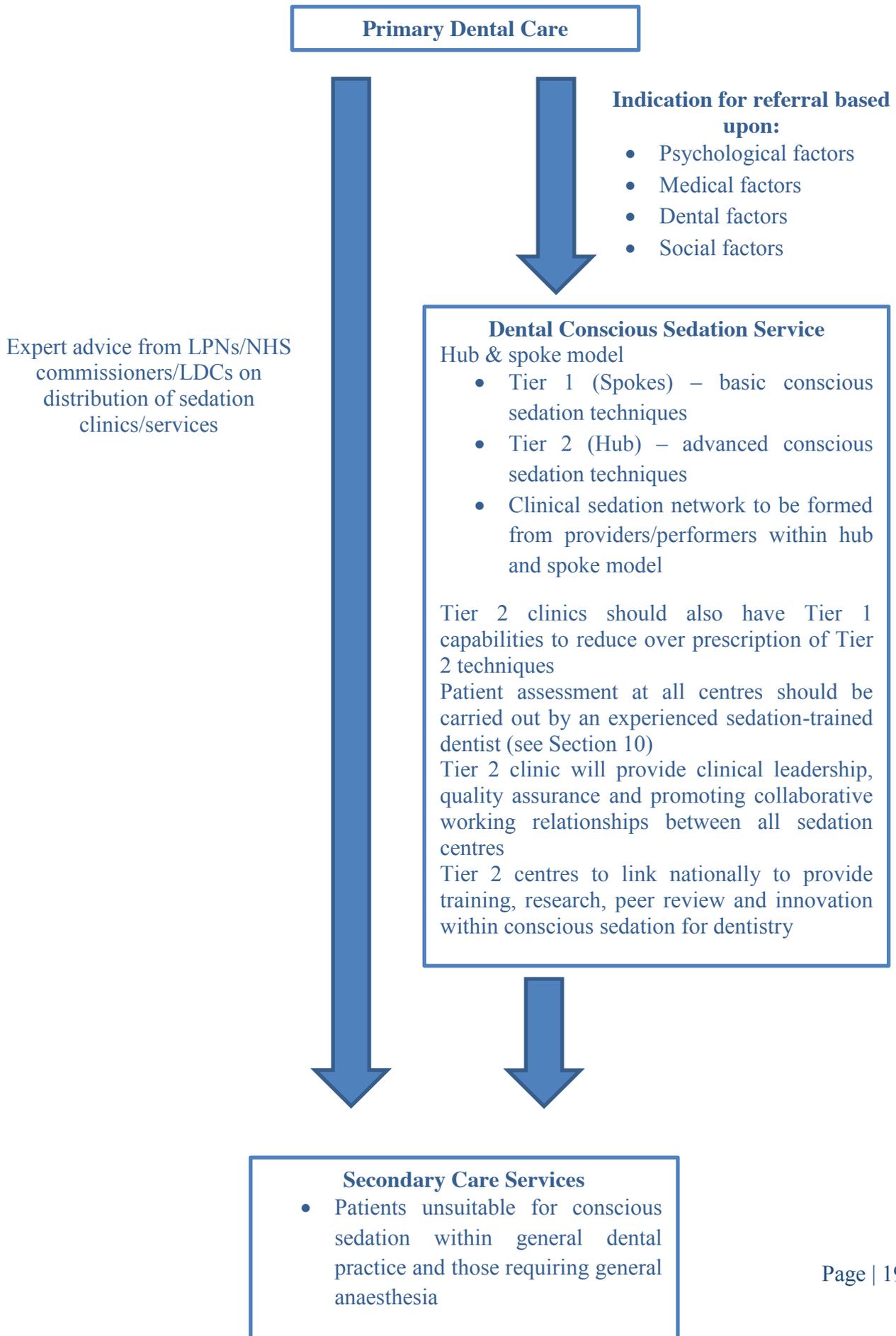
To be able to deliver the aims of this specification, services would need to be adequately resourced and invested in accordance with national guidelines and published evidence.

In the event that existing services are not fully compliant with the standard outlined in this framework, serious consideration should be given to re-commissioning these services to ensure full compliance.

It is recommended that this guidance document and framework tool should be reviewed after a maximum two year period or earlier, in the event of changing guidance for the provision of conscious sedation for dentistry.

## Appendix 1 – Recommended referral pattern for a locality

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## Appendix 2 – Recommended data set

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Monitoring Information	Reporting Frequency
The facility should provide a monthly report of the <b>number of urgent referrals</b> seen within one working day.	Monthly
The facility should provide a monthly report of the <b>number of urgent referrals</b> completing treatment within one week.	Monthly
The facility should provide a monthly report of the <b>number of referrals</b> into the practice	Monthly
The facility should provide a monthly report of the number of <b>assessments</b> undertaken	Monthly
The facility should provide a monthly report on the number of <b>treatments</b> completed successfully and conscious sedation technique used	Monthly
The facility should provide a monthly report of the number of <b>assessment</b> appointments available	Monthly
The facility should provide a monthly report of the number of <b>review/treatment</b> appointments available	Third Quarter
The facility should provide a monthly report on the <b>waiting times from referral to assessment</b>	Monthly
The facility should provide a monthly report on the <b>waiting times from assessment to treatment</b>	Monthly
The facility should provide the <b>number of DNA's and surgery time affected</b>	Monthly
The facility should provide details of significant events and untoward incidents and demonstrate the actions and learning from such events and produce a quarterly report	Quarterly return
The provider should carry out a postcode analysis of patients receiving treatment	Quarterly return
The facility should set up a patient forum to meet at least once a year and will provide a written report detailing the actions taken to implement changes	Annual written report
The facility should report on the number of complaints and actions received and demonstrate action and learning from such complaints	Quarterly
The facility should complete an annual self assessment	Annually
The provider should provide an annual written report of actions and improvements to the service following a survey of referring GDPs	Annually

## Appendix 3 – Team Training

The Provider is required to ensure that all staff are trained in accordance with the professional standards in conscious sedation for dentistry as set out below:

	<b>Verifiable CPD 12 Hours / 5 Years</b>	<b>Non – Verifiable CPD</b>	<b>Life Support Training</b>	<b>Complications of Sedation</b>	<b>Clinical Audit</b>	<b>Checks of clinical facilities</b>	<b>Team Training</b>
<b>Tier 1</b>	Attendance at regional / national courses / meetings and / or verified journal questionnaires	Study of published articles relevant to pain and anxiety control in dentistry	Basic life support	Regular practice in dealing with common sedation-related complications  Recognise the sedation “End Point” and avoidance of over sedation	Audit of sedation activity (in proportion to practice activity)  Recording of adverse events  Justification for sedation technique selected	Complete checklist for facilities where sedation is carried out  Regularly updated when any changes in staff or equipment/facilities occur	Ensure whole team has undergone appropriate training and maintain CPD
<b>Tier 2</b>	As above but to include advanced sedation techniques including paediatric advanced sedation techniques	As above but to include advanced sedation techniques including paediatric advanced sedation techniques	Immediate life support and paediatric immediate life support	Management of complications specific to the techniques used and regular rehearsals of the management of sedation-related complications in paediatric patients	Maintaining a log or database diary for advanced techniques  Ensure justification of advanced techniques is recorded and audit of paediatric cases	Checklist of facilities (e.g. SAAD checklist) specific to advanced techniques (updated as for level 1)	Training and CPD should be specific to advanced sedation techniques and paediatric advanced sedation techniques

## **Membership of the Working Party**

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