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Welsh Government

Dental Services

Service Standards for Conscious Sedation in a dental care setting

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- Members of the Conscious Sedation Strategic Advisory Forum (see Appendix 1).

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1. Foreword

Conscious sedation is an important adjunct to the provision of high quality dental care. It has particular relevance for people with high levels of dental anxiety or where dental treatment is more advanced or complex. It can be used to support care provision for people who require special care or children who cannot co-operate with routine care.

These Standards focus on and describe the consensus regarding conscious sedation in dentistry and the need for change following publication of:

- Safe Sedation Practice for Healthcare Procedures : Standards and Guidance, Academy of Medical Royal Colleges (AoMRC), 2013[1]
- The Intercollegiate Advisory Committee for Sedation in Dentistry (IACSD) Standards for Conscious Sedation in the Provision of Dental Care, 2015[2]
- Conscious Sedation in Dentistry, third edition, published by Scottish Dental Clinical Effectiveness Programme (SDCEP), 2017[3]

The Standards replace a number of documents:

- Standing Dental Advisory Committee (SDAC) 2003 Guidance 'Conscious Sedation in the Provision of Dental Care'
- SDAC 2007 'Standards for Conscious sedation in Dentistry: Alternative Techniques'
- Commissioning conscious sedation services in primary dental care – Department of Health, June 2007
- Scottish Dental Clinical Effectiveness Programme (SDCEP) Conscious Sedation in Dentistry, 3rd edition, 2012

- Independent Expert Group on Training Standards for Sedation in Dentistry (IEGTSSD) Guides – Paediatric | Advanced Conscious Sedation Techniques for Paediatric Patients – Training Syllabus
- IEGTSSD Guides – CPD – A Guide to Maintaining Professional Standards in Conscious Sedation for Dentistry
- IEGTSSD Guides – Adult – Advanced Conscious Sedation Techniques for Adult Patients Training Syllabus

They are primarily for health boards who commission and/or provide NHS dental conscious sedation services and dental teams who provide these services. They will also be relevant for those providing private dental conscious sedation services.

These standards apply to dental teams providing conscious sedation for dental treatment by both operator/sedationists and teams where sedation is provided by a separate sedationist.

The standards:

- support health boards to contract and/or provide safe and effective conscious sedation in dental care;
- support clinicians and their teams to provide safe and effective care in line with agreed standards; and
- Further outline the Welsh Government's policy intentions.

They align with the Welsh Government's NHS Planning Framework (2018 to 2021) which includes requirements for:

- Quality and Safety – the constant driving of improvement in safety, outcomes, efficiency and service user satisfaction;
- Prudent and value based healthcare - healthcare that fits the needs and circumstances of patients.

They support the wider aims of the National Strategy *'Prosperity for All'* which sets out a shared view of the challenges ahead and the choices about health and care services in the future; it applies to all service areas including dentistry.

Policy leads, clinicians and health board personnel have contributed to development of the standards which describe how dental care with sedation should develop to ensure patient safety, consistency and excellence in NHS dental care sedation services (see Appendix 1 - contributors).

2. Executive Summary

These Standards have been produced to clarify the Welsh Government's requirements for conscious sedation in dental care. They reflect the Service standards for Conscious Sedation in a primary care setting published in England in 2017:

https://www.england.nhs.uk/publication/commissioning-dental-services-service-standards-for-conscious-sedation-in-a-primary-care-setting/.

They will:

- support health boards to contract or provide safe and effective conscious sedation in dental care;
- support clinicians and their teams to provide safe and effective care in line with agreed standards;
- further outline the Welsh Government's policy intentions.

These standards apply to dental teams providing conscious sedation for dental treatment by both operator/sedationists and teams where sedation is provided by a separate sedationist.

Ensuring access to conscious sedation based on a thorough needs assessment is important for the provision of high quality dental care. Equity of access to conscious sedation services will support care for people who may have previously found dental treatment upsetting to endure; who may require unpleasant procedures; who may require complex care or who may be unable to undergo dental treatment due to impairments including being learning disabled. Conscious sedation may also facilitate treatment in patients who are anxious about dental treatment but who also have a medical condition which may worsen with anxiety. Health boards should support conscious sedation provision across General Dental, Community Dental and Hospital Dental Services.

Health Boards are required to ensure the delivery of dental services, including conscious sedation, to meet current needs of the population and plan for future needs. The need for conscious sedation services should be understood and be an integral part of planning, especially when dental services are transferred from an acute hospital setting or delivered in primary care.

3. Introduction

These standards set out:

- The standards which providers who offer dental care under conscious sedation are expected to work towards and meet by 1 April 2020;
- The standards that health boards must use when contracting with current and future providers of conscious sedation in dental care.

They do not apply to specialist services provided in acute or teaching hospital settings.

For the purposes of these standards an acute hospital setting means *a general hospital with inpatient and acute care facilities.*

Health boards need to work with existing providers and agree a timetable for adoption of these new standards. Health boards and providers should try to comply as soon as possible but in any event all providers must be compliant with the standards by 1 April 2020.

4. What is conscious sedation?

Conscious sedation is formally 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 is maintained throughout the period of sedation. The drugs and techniques used to provide conscious sedation should carry a margin of safety wide enough to render loss of consciousness unlikely. The level of consciousness must be such that the patient remains conscious, retains protective reflexes and is able to understand and respond to verbal commands*'[2]

Conscious sedation is recognised internationally to be an integral element of the control of pain and anxiety and is an important aspect of the modern practice of dentistry. It should be accessible in primary dental care and all clinical dental specialty pathways.

The General Dental Council (GDC) Standards for the dental team identify that patients expect "that their dental pain and anxiety will be managed appropriately" and that dental team members "should take patients' preferences into account and be sensitive to their individual needs and values". This is both a right for the patient and a duty placed on the dentist.

4.1 Context

Conscious sedation is important to the provision of high quality dental care for some patients. It has particular relevance where dental treatment may be more advanced or complex or in the case of special care and paediatric dentistry where patients cannot co-operate with routine care.

Dental sedation services facilitate provision of comprehensive patient-centred care to patients who suffer disproportionate anxiety or phobia in relation to routine dental care and to those facing potentially distressing dental procedures such as oral surgery or invasive diagnostic interventions.

Any dental service which includes the provision of conscious sedation must provide needs assessment and treatment planning for each individual patient. This will include consideration of a range of behavioural and pharmacological options so as to offer the most appropriate treatment. For instance, it is often possible to achieve successful treatment in some patients by using behavioural management techniques and alternative local analgesia delivery systems such as 'The Wand'.

There is evidence that other behavioural techniques such as Cognitive Behavioural Therapy can be beneficial in reducing the need for conscious sedation. Such techniques may be provided through the use of skill-mix within the Community Dental Service.

Valid consent is necessary for all patients receiving dental care under conscious sedation and this must be confirmed in writing (Appendix 2). Consent should follow Welsh Government Guidance on consent, the principles set out in the GDC's 'Standards for the Dental Team' and with regard to developments in case law (*Montgomery v Lanarkshire Health Trust* (2015)). The law now requires that a doctor, dentist or dental care professional must take '*reasonable care to ensure that the patient is aware of any material risks involved in any recommended treatment, and of any reasonable alternative or variant treatments.'* A patient is entitled to decide the risks that they are willing to run (a decision which may be influenced by non-medical considerations).

In the UK, the most commonly used dental conscious sedation techniques (titrated intravenous midazolam or titrated inhaled nitrous oxide and oxygen) have an excellent safety record. For many patients, conscious sedation combined with effective local anaesthesia (LA) is an acceptable alternative to general anaesthesia (GA) and makes treatment possible for a wider group of patients. Despite the safety, efficacy and cost-benefits of using conscious sedation techniques, there are still indications for general anaesthesia for some dental/surgical procedures and certain patients.

5. Considerations for contracting dental conscious sedation services

There is variation in conscious sedation provision across Wales which is not explained by population need. Before changing service delivery, health boards require a population need assessment to support service planning and subsequent provision of equitable access to sedation services.

At present there is little evidence of robust application of needs assessment or equity of access in the delivery of services. There is, however, some information on the volume of sedation activity that is currently contracted in NHS primary care through data/information available from the NHS Business Services Authority.

A needs assessment and service planning will be necessary to manage risk and stabilise existing provision during any transformation of services.

Highly anxious and phobic dental patients often present late in the disease process and with very high treatment needs. They are also more likely to fail to keep appointments. Health boards will need to make contractual allowances for these complicating factors when designing new sedation services and supporting existing ones. Health boards need to involve and consult patients and service users before making service changes.

There is a need to reduce the number of children having general anaesthesia for dental treatment. The use of IV midazolam in young people aged 12-16 is a technique which is acceptable in dental care[2]. This is, therefore, an opportunity to reduce exposure to general anaesthesia and health boards are encouraged to support providers willing to deliver this technique and to explore developing future services for this age group and technique.

Health boards must assess local referral rates and patterns of treatment services currently provided. The Welsh Government is establishing a system whereby all referrals for dental treatment under sedation will go through a local referral management system. By using this system it will be possible for health boards to better understand the need and volume of services to be contracted to best meet the needs of the population. Health boards are encouraged to establish specialist sedation services within acute hospital settings for patients with complex needs who require SCD using sedation.

Contracting of all sedation services must be based on a rigorous assessment of clinical need and robust evidence of compliance with the criteria. In addition to the mandatory elements covered in section 5 below, health boards will need to determine:

- The quantity of sedation services that are needed to reasonably meet the requirements and identified needs of the population;
- The most appropriate geographic location(s) from which services need to be provided to ensure appropriate access to services; and
- The hours that sedation services need to be available to meet the needs of their population which may include services outside of normal hours and weekends.

Children and young adults who require more complex interventions will need to be referred via the appropriate specialty pathway to a secondary care/acute setting provider. Health boards may need to understand the likely numbers of these referrals to ensure that any ‘peaks’ in onward referral can be managed and their impact mitigated.

Indicator of Sedation Need (IOSN)

Selecting the most appropriate conscious sedation technique for an individual patient must be based on a careful assessment of:

- the patient’s age and stage of development;
- degree of anxiety/phobia;
- medical and social histories; and
- the proposed dental treatment.

The Indicator of Sedation Need (IOSN) is a means of identifying, assessing and delivering appropriate sedation to patients. The IOSN tool has been developed to help support dentists in their clinical decision-making and uses information about a patient's anxiety, medical and behavioural status and treatment complexity. However the IOSN may not be suitable for patients with additional complex needs.

Health boards may use the IOSN to inform their needs assessment. Good practice in dental care includes identifying which methods of pain and anxiety management are required. Referral systems and patient assessment should include a valid and reliable

assessment of sedation need. The premise of IOSN is that patients requiring sedation are not just dentally anxious but that their health, behaviour and physical and dental treatment complexity should also be considered.

IOSN is composed of three main elements:

- Modified Dental Anxiety Scale (MDAS);
- Medical and behavioural indicators; and
- Dental treatment complexity.

The IOSN has been used to measure sedation need and published studies have shown that 5.1% of patients attending general dental practices have a high need of conscious sedation. IOSN has also been used to investigate the need for conscious sedation in the general population among dental practice attenders and those who don't attend. The proportion was found to be 6.7%[4].

5.1 What will be contracted in dental care?

5.1.1 Expected standards

Good clinical practice in dental conscious sedation and prudent healthcare principles require that the most straightforward, safe and effective technique be used to achieve the planned result. The number of administrations of sedative should be kept to a minimum.

Using the most straightforward effective techniques will ensure equity in provision, in particular for older patients and those who are ASA 1 and 2 (the **American Society of Anesthesiologists** physical status classification system is a system for assessing the fitness of patients before surgery. There are 6 categories).

Contracting of conscious sedation services should be based upon Service Level Agreements where the provider is contracted per case and not per administration of the sedative.

New and current conscious sedation procurements in a dental setting will be on the following basis:

- Dental assessment and treatment planning should only be carried out by a trained and experienced dentist.
- It is important to minimise the risk of a patient receiving inadequate or inappropriate dental treatment which then necessitates a further treatment episode within a short space of time.

Detailed age-related guidance on the appropriate levels of specialism required of the dentist treating children and adults is included in the clinical sedation techniques described in Appendix 3. In general, the more complex the sedation technique and the patient's medical history, the greater the degree of specialist knowledge required.

For adults 18+

- Single drug midazolam or inhaled nitrous oxide/oxygen outside of an acute or teaching hospital setting. Except in Special Care Dentistry, where oral or trans-mucosal techniques may be used, the sedative must be titrated to effect in individual patients.

Around 95% of dental procedures can be successfully completed with single drug sedation[2]. This may be based upon robust patient assessment including consideration of past sedation exposure. During the transition period up to 1 April 2020, the administration of multiple sedation drugs should only be contemplated when all other options have either failed or where there is clear clinical need. The sedationist must be able to justify their use, record this decision in the clinical notes and report it to the contracting health board for the purposes of needs assessment and pathway design. A skilled clinical team as defined in the IACSD Standards is required (appendix 4).

The decision to limit the sedation techniques available for patients is a development of the implicit reservations on multi-drug sedation expressed in recent sedation guideline documents (appendices 3 and 5; references 1,2 and 3) and supported by 'expert opinion', sedation practice inspectors and some providers of multi-drug sedation for this age group. It is also a reflection of the excellent success rates from single drug techniques. By reducing complexity the margin of safety is as wide as possible.

For young people aged 12-17 inclusive

- Inhalation sedation using nitrous oxide and oxygen and/or;
- Single-drug midazolam. As for the 18+ age group, titratable techniques must be used unless exceptional circumstances pertain where oral or trans-mucosal techniques are required within existing specialist service led pathways.

For children under 12 years of age

- Inhalation sedation using nitrous oxide and oxygen.

Children and young adults who require more complex interventions than described above should be referred to an acute or teaching hospital setting via the locally agreed specialty pathway.

The single drug techniques described above are suitable for operator/sedationist practice.

5.1.2 Who should be involved in assessing future tender responses?

When tendering for new sedation services, the health board must ensure they have appropriate clinical advice and support to provide advice on the clinical aspects of any bid (see appendix 5).

5.1.3 Existing service provision and requirements to conform

Where existing sedation contracts exist, health boards must work with those providers to agree timescales by which they will comply with these standards and which must be by 1 April 2020 at the latest. This is supported by GDS contracts and PDS agreements

which contain clauses that require contract holders to comply with any guidance issued by health boards (see Appendix 6 for additional information on Transitional Arrangements).

Staging of implementation will allow time for service adjustment and reduce any impact on secondary care sedation providers and those providers offering paediatric general anaesthesia.

6 Service specification

The requirements below outline the minimum service specification that any new provider must comply with and current providers must work towards compliance by 1 April 2020 at the latest:

- Referral - all providers must only accept referrals which comply with soon to be implemented referral management systems in Wales and that comply with referral minimum data sets. The minimum data set will include all of the following drawn from Conscious Sedation in Dentistry, third edition, SDCEP, 2017:

    - A fully recorded medical history (including prescribed and non-prescribed drugs and any known allergies).
    - ASA status.
    - A dental history.
    - A social history.
    - Any relevant conscious sedation and general anaesthetic history.
    - The dental treatment plan proposed.
    - Assessment of anxiety or sedation need and any tools used such as IOSN and MDAS.
    - Any individual patient requirements.

    Providers must not accept patients who have self-referred or who have been referred outside of the agreed local referral management processes.

- Patients should be seen for assessment and consent prior to treatment. There may be occasions, however, when it is clinically justified for patients to be assessed and treated in a single appointment such as those experiencing acute pain or sepsis. This should be the exception rather than the rule.

- In all instances of single appointment care providers must document the clinical justification in the patient record.

- For ‘new starter’ procurements, health boards should ensure they verify that sedation training has been obtained through one of the accredited training providers (see appendix 7) or meets the transitional arrangements outlined in Appendix 6.

- In line with GDC E-CPD, each provider will be required to submit annually at 31 December detail of CPD undertaken to ensure compliance with GDC registration requirements.

- Each provider of sedation services will be required to submit annually to the contracting health board at 31 March, for each location where sedation is provided, a completed self-certified service compliance record. (see appendix 8).

Minimum Service Specification

Personnel	Requirement
1	All staff including dental care professionals must be trained and experienced in the provision of sedation services and able to evidence this.
2	Healthcare professionals have current indemnity cover and provide evidence of this.
3	All staff must be registered with the relevant bodies and regulators.
4	Clinician carrying out pre-sedation assessment has sedation training and experience and can evidence this.
5	Dentist or DCP providing operative treatment has the necessary knowledge to provide dental care under conscious sedation and is able to provide evidence of this.
6	Sedationist has the required training and experience in conscious sedation for dentistry and is able to provide evidence.
7	Dental Nurse (second appropriate person) has training and experience in conscious sedation for dentistry and is able to provide evidence.
8	Registered healthcare professional assisting with recovery has training and experience and is able to provide evidence.
9	Evidence of age related immediate life support training or equivalent for all healthcare professionals in the sedation team.
10	Evidence of dental sedation CPD for all healthcare professionals in the sedation team (currently 12 hours in a five year cycle).
Premises	**Requirement**
11	Must be clinically fit for purpose and fulfil legislative and regulatory requirements (lighting, heating, ventilation, safe access).

12	Waiting room, surgery and recovery room are of adequate size for treatment and management of emergencies.
13	Must provide adequate access for emergency services.
14	Patients must be able to recover either in the surgery or in a dedicated recovery room prior to discharge where there are no patients awaiting treatment.
15	Privacy assured in surgery.
16	Individual privacy assured in recovery area and where possible on exit from practice.
Sedation delivery and equipment	**Requirement**
17	Chair/trolley rated to the patient's weight that can be rapidly moved to a head down tilt position during treatment.
18	Facilities for the appropriate storage and disposal of drugs.
19	Equipment serviced regularly and in line with manufacturers recommendations.
20	Active scavenging and ventilation appropriate to COSHH recommendations and Health and Safety Regulations (2002) if applicable. Evidence of annual testing of nitrous oxide levels in surgery to meet WEL limit as defined by HSE document EH40/2005.
21	Inhalation sedation machine unable to deliver <30% oxygen.
22	Inhalation sedation equipment maintained within manufacturers recommendations and serviced annually.
23	Cylinder in use and full cylinder back up on inhalation sedation machine.
24	Adequate central gas supply and cylinder empty alarms or automated switchover.
25	Full and in use cylinder markers used.
26	Central gas supply storage safety compliant.
27	Central gas supply regulators in date and serviced.
28	Appropriate gas storage in line with current guidelines.
29	Emergency oxygen supply available.

30	Automatic external defibrillator (charged and batteries in date) equipment available with age appropriate and in date pads.
31	Selection of blood pressure cuff sizes available.
32	Variety of sizes of full face masks.
33	Emergency suction available.
34	Yankauer suckers available.
35	Continuous pulse oximeter (with audible alarm) for use prior to and during treatment under sedation and until safe recovery and discharge of patient. (Not necessary for inhalation sedation). Pulse oximeter calibrated, maintained and serviced within manufacturers recommendations.
36	Bag/valve/mask system for positive pressure ventilation (adult and/or paediatric as appropriate) with reservoir and tubing.
37	Oro-pharyngeal airways available.
38	Emergency equipment readily available. Flumazenil and positive pressure oxygen (with a bag valve mask) should be immediately at hand whenever midazolam sedation is used.
Patient Information	**Requirement (all documentation for patients must be content, age and capacity appropriate)**
39	Patient information about the range of anxiety management care options available.
40	Patient information regarding the sedation technique to be used.
41	Written escort information where midazolam sedation is used.
42	Written pre and post sedation instructions.

7. Quality and outcome measures

In addition to the collection of the quality and outcome measures, each provider will be expected to collect patient related outcome measures (PROMs) and patient related experience measures (PREMS) and provide a summary report of these to health boards for the purpose of service improvement.

Clinical records should include:

- Justification of need for sedation (e.g. IOSN score);
- Record of written patient pre-, intra- and post-operative instructions given;
- Where midazolam sedation is used, the provision of written patient escort information should be recorded;
- Describe completion of planned dental treatment and any reasons why it could not be completed as planned;
- Medication used;
- Recovery and discharge checks completed and recorded;
- Return for additional/emergency care relating to treatment provided at the last sedation appointment;
- In cases where midazolam sedation is used the pre- and post-operative blood pressure and where indicated, the intra-operative blood pressure should be recorded; and
- In cases where midazolam sedation is used, records of intra-operative oxygen saturation and heart rate should be kept.

Quality and safety assurance

Dental conscious sedation services are expected to comply with quality and safety assurance systems. These include:

- Clinical and service audit (for example referral patterns)/improvement projects.
- A clinical log book must be kept.
- Patient safety incident reporting/sharing/learning.
- Compliance with HIW practice inspection.
- Compliance with Quality Assurance Self Assessment process (QAS).

Patient Reported Outcome Measures (PROMs)

The mandated outcome measure to be collected is:

Was the sedation you received adequate for you to receive your dental treatment comfortably?

Other additional outcome measures may be added for local purposes.

Patient Reported Experience Measures (PREMs)

The Welsh Government's framework on seeking patient feedback is outlined in *Listening and learning to improve the experience of care - Understanding what it feels like to use services in NHS Wales.*
A patient experience questionnaire which can be used by all primary care dental practices in Wales is available at this link:

https://dental.walesdeanery.org/practice-quality-improvement/patient-experience-questionnaire

It can be adapted /enhanced to include questions for patients having conscious sedation. Examples include:

- Did you have enough information before you had your sedation?
- Were you and your escort given enough information to look after you in the recovery period after your sedation?

Appendix 1

Contributors

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Appendix 2

Consent for Dental Treatment (taken from IACSD Standards for Conscious Sedation in the Provision of Dental Care; GDC Standards for the Dental Team; Scottish Dental Clinical Effectiveness Programme)

The patient requires clear and comprehensive information regarding the proposed treatment as part of the process of gaining valid consent. Valid consent is necessary for all patients receiving dental care under conscious sedation and this must be confirmed in writing. Consent should follow the principles set out in the GDC's *Standards for the Dental Team*. Consent is a complex process and different laws and regulations apply at different ages in different countries in the UK. For Welsh Government general guidance on consent for healthcare procedures please use this link:

http://www.wales.nhs.uk/governance-emanual/page/65162

Patients and when required, those with parental responsibility and carers need information to be provided in a way that can be understood before the process of valid consent can be completed. Patients who are already sedated cannot be regarded as competent to take valid decisions regarding consent for treatment. Consent for dental treatment attempted under these circumstances is not valid.

Consent obtained on the day of treatment is not encouraged except when immediate treatment is in the best interests of the patient. Consent obtained prior to the day of treatment must also be re-confirmed on the actual day of treatment and confirmation documented in the clinical records.

The capacity to consent depends on a person's ability to understand and voluntarily weigh up options rather than age. A person is unable to make a decision if they cannot do one or more of the following:

- understand the information given to them that is relevant to the decision.
- retain that information long enough to be able to make the decision.
- use or weigh up the information as part of the decision-making process.
- communicate their decision – this could be by talking or using sign language and includes simple muscle movements such as blinking an eye or squeezing a hand.

The *Mental Capacity Act 2005* states that if a person lacks mental capacity to make a particular decision, then whoever is making that decision or taking any action on that person's behalf must do this in the person's best interests. For the purposes of consent, 'children' refers to people aged below 16 years and 'young people' refers to people aged 16–17 years. All people aged 16 years of age and over are presumed in law to have the capacity to consent to treatment unless there is evidence to the contrary. Children aged under 16 can be legally competent if they have sufficient understanding and maturity to enable them to understand fully what is proposed. If the child is deemed not legally competent, consent will need to be obtained from someone with parental responsibility, unless it is an emergency.

Families of children under the age of 16 years should be involved in decisions about their care unless there is a very good reason for not doing so. If, however, a competent child under 16 is insistent that their family should not be involved, their right to

confidentiality must be respected unless such an approach would put the child at serious risk of harm.

Appendix 3

Clinical sedation techniques

Techniques of sedation

A range of techniques is available for conscious sedation. The selection of a technique must be appropriate for the individual patient and not chosen simply for operator or sedationist convenience or at the insistence of a third party.

The practitioner providing the sedation must be trained and competent in the technique used and each individual in the team caring for the patient must also have the necessary validated skills. For current providers of conscious sedation services in Wales please refer to the 'Transitional arrangements' (Appendix 6).

1. The use of sedative drugs does not negate the need for good communication skills and a sympathetic manner. It is not a substitute for local analgesia.

2. No one technique is suitable for all patients. However, adopting the principle of minimum intervention, the simplest and safest technique that is likely to be effective, based on robust patient assessment and clinical need, should be used.

3. Titrating a drug /drugs to effect is critical to safely achieving a recognised sedation endpoint (i.e. conscious sedation) and avoiding inadvertent over-sedation. The initial dose must have taken full effect before an additional dose is given. Safe sedation demands knowledge for each drug of time of onset, peak effect and duration of action.

4. While over-sedation must be avoided, under-sedation will have an adverse effect on the patient and the delivery of effective treatment.

5. As a general rule single drugs are easier to titrate to effect and safer than sequential administration of two or more drugs. Drugs used in combination may produce synergistic effects, have differing times to onset and peak effect, and may be unpredictable or difficult to titrate to effect. Safety margins may be narrowed, increasing the likelihood of overdose, loss of consciousness, respiratory depression and the need for airway interventions.

6. Anaesthetic drugs and infusions (e.g. propofol) used as sedative agents have narrower therapeutic indices and reduced margins of safety, potentially increasing the likelihood of adverse events.

7. Multiple/anaesthetic drug techniques should only be considered by those skilled in their use, where there is clear clinical justification, after having excluded simple techniques, and must only be used in an approved setting where team skills are sufficient to resuscitate and stabilise a patient until the arrival of the emergency. In Wales an *approved setting* is an acute hospital setting or a dental teaching hospital as defined on page 7 of these Standards.

Specific Techniques (as applicable to these standards):

1. **Oral anxiolysis/pre-medication and oral sedation.** There is a difference between oral pre-medication/anxiolysis and oral sedation. Oral premedication/anxiolysis is the self-administration of low-dose benzodiazepines to achieve a state of reduced anxiety in patients. It usually takes place outwith the dental practice. It may be used by non-sedation teams to allow some patient groups to access care. The dose used *must* be calculated not to induce sedation and careful consideration given to the patient's age and medical history. The anxiolytic drug should be prescribed by the dental practitioner and not another healthcare professional. It should be in a form which is suitable for the patient and accompanied by suitable written patient advice.

   Oral sedation involves the administration of much larger doses of benzodiazepines within the dental setting and is accompanied, whenever possible, by intravenous cannulation. It carries with it the same requirements for assessment, equipment, monitoring, escort arrangements and discharge as intravenous sedation. The skills and training are the equivalent of those expected for dental teams providing intravenous sedation. Because oral sedation is a non-titratable technique, its use is nearly always limited to special care dental patients.

2. **Inhaled nitrous oxide/oxygen.** A titrated dose of inhaled nitrous oxide and oxygen is the first choice inhalation sedation technique.

3. **Intravenous midazolam sedation.** A titrated dose of intravenous midazolam is the first choice intravenous sedation technique.

4. **Oral midazolam sedation.** As detailed above. Midazolam can be administered as an oral sedative, usually disguised by a fruit drink. This is a non-titrable technique although cannulation should be carried out as soon as practicable and as often as possible, once the oral sedative allows. This technique should be used only where titratable techniques are unsuitable because of a patient being unable to comply. For this reason it is used almost exclusively, in special care dental patients and because the drug is disguised, carries a requirement to follow 'covert medication' policies. It carries with it the same requirements for assessment, equipment, monitoring, escort arrangements and discharge as intravenous sedation. The skills and training are the equivalent of those expected for dental teams providing intravenous sedation.

5. **Midazolam intranasal sedation**. Intranasal sedation is one of a group of techniques referred to as 'transmucosal sedation' (the others include buccal administration and rectal administration). As with oral sedation, this is not a titrable technique and it's used is almost always limited to special care dental patients. Cannulation should be carried out whenever possible once the intranasal sedative allows. It carries with it the same requirements for assessment, equipment, monitoring, escort arrangements and discharge as

intravenous sedation. The skills and training are the equivalent of those expected for dental teams providing intravenous sedation.

6. **Other techniques**. The use of other techniques such as intravenous propofol/fentanyl/ketamine or other multi-drug techniques should take place only with an acute or dental teaching hospital setting.

Appendix 4

Requirements for Clinical Sedation Techniques (taken from IACSD Standards for Conscious Sedation in the Provision of Dental Care)

Sedation technique	Initial theory and skill training	Additional theory and skills training	Recommended minimum clinical experience in monitored practice to achieve competency (number of cases appropriate to age group)	Life support training for all team members	Other rescue measures	Monitoring (in addition to clinical monitoring)	Operator-sedationist (with second appropriate person)	Dental nurse training	Environment (1= Primary Care; 2= secondary care)
Nitrous oxide/oxygen inhalation sedation	Y	N	10	ILS PILS	Resp Dep Airway	None	Y	CDSN/ Equivalent	½
Intravenous midazolam	Y	Adults: N Paeds: Y	20	ILS PILS	Resp Dep Airway	NIBP Pulse oximetry	Y	CDSN/ Equivalent	½
Oral/buccal midazolam	Y	Adults: N Paeds: Y	20	ILS PILS	Resp Dep Airway	NIBP Pulse oximetry	Y	CDSN/ Equivalent	½
Intranasal midazolam	Y	Adults: N Paeds: Y	20	ILS PILS	Resp Dep Airway	NIBP Pulse oximetry	Y	CDSN/ Equivalent	1/2
Other techniques i.e. propofol/midazolam+ fentanyl	Acute/Teaching Hospital setting.								

Appendix 5

Individuals who can offer advice and support to assess future tender responses

Individuals must be registered with the General Dental Council or General Medical Council:

- BDS/MB BS or equivalent.
- Diploma/MSc in the relevant conscious sedation techniques awarded by recognised institution OR equivalent seniority and recognised expertise.
- Evidence of appropriate theoretical and practical training with updates which comply with the recommendations for Continuing Professional Development (CPD) related to conscious sedation as recommended by IACSD.
- Continuing clinical activity to deliver a minimum of 20 administrations per year of basic or advanced conscious sedation techniques.
- Additional experience including the acceptance of patients referred by other colleagues and/or participation in delivering teaching courses and in research.

Appendix 6

Transitional Arrangements in Wales.

Everyone involved in the provision of conscious sedation must be trained and experienced (appendix 7). There is no intention within this Welsh Health Circular and standards to prevent, or stop, current providers from continuing to provide safe conscious sedation services. These standards contain below information on transitional arrangements for current services provided by experienced dentists, sedationists and dental nurses for whom retraining and/or additional qualifications are not required. Clinicians intending to practice under these transitional arrangements must, by April 1st 2020:

- maintain a log in either written or electronic form of all sedation cases undertaken, with comprehensive details of patient type, baseline vital signs, sedation agent used/route/dose/reversals/untoward incidents and reflections.

- undertake similar validated, continuing professional development relevant to the conscious sedation technique(s) being used. Such CPD might be accessed, for example, via Wales Deanery (HEIW).

- undertake sedation-based audit and reflection frequently and regularly in each location sedation is provided.

- clinical teams must be competent in the appropriate 'rescue' skills. 'Rescue' is a term used to describe the management of adverse events that may occur during the delivery of dental treatment under conscious sedation. It is essential that the team delivering care is able to recognise such adverse events and manage them appropriately and safely. These events may be medical, dental or related to the sedation itself.

- meet the requirements for the environment and equipment contained within the minimum specification by 1 April 2020.

- ensure that appropriate clinical governance is in place to comply with these Standards.

The records described above, should be available to those who contract or carry responsibility for NHS provision of conscious sedation for dentistry.

These recommendations on training, experience and CPD apply to dentists, doctors, dental hygienists, dental therapists and dental nurses and health boards need to take these into account when reviewing current contracts. Evidence of compliance with CPD requirements (a minimum of 12 hours in a 5 year cycle) must be reported via the QAS with an annual declaration of the hours undertaken in the calendar year ending 30 November.

In addition, all sedation providers will be required to undertake an annual self-declaration assessing their compliance with the standards using the service compliance checklist (appendix 8**)**. The first submission of this will need to be completed as at 30 November 2018 and submitted to the contracting local health board. This will then be

required by the end of November each year for as long as the sedation contract remains in place. Further assurance will be provided by HIW through their practice inspection process.

Appendix 7

Training in Conscious Sedation and accredited training providers

Training in Conscious Sedation in Wales

The following notes on the provision of training in conscious sedation for dentistry are aligned with recent reports on sedation from the Academy of Medical Royal Colleges (AoMRC)[1], the Intercollegiate Advisory Committee for Sedation in Dentistry (IACSD)[2] and the Scottish Dental Clinical Effectiveness Programmes (SDCEP).[3]

Full details of the training requirements and syllabuses can be found at:

https://www.rcoa.ac.uk/system/files/PUB-STDS-CONSC-SEDN-DNTL-2015.pdf Pages 34-85

Background -

The AoMRC, IACSD and SDCEP reports all recommend that:

1) Where conscious sedation is provided, all members of the care team must have undertaken appropriate and validated education and training and have demonstrated an acceptable level of competence by means of a robust assessment process.

2) Educational programmes intended to provide training in the clinical delivery of conscious sedation and to prepare the team for independent practice must be assessed, externally quality assured and incorporate supervised clinical practice.

3) Courses which are solely didactic and/or skills-based are suitable for experienced practitioners and nurses but do not constitute sufficient training for novice sedation practitioners (‘new starters’) working without supervision.

4) Both knowledge and clinical skills must be maintained and it is the responsibility of individual team members to undertake relevant Continuing Professional Development (CPD) at appropriate intervals. For ‘revalidation’ in a sedation technique, a practitioner must undertake a minimum of 12 hours of CPD every 5 years. The CPD must be relevant to the sedation technique(s) practised.

5) The above recommendations apply to all dental and medical practitioners, dental nurses, recovery nurses, dental hygienists and dental therapists who are involved in the delivery of conscious sedation.

6) Practitioners and DCPs who are not regularly practising a sedation technique must consider either the need for mentoring and/or retraining or discontinuing its use.

The Sedation Training Accreditation Committee (STAC) accredits all courses in conscious sedation for dentistry other than those run by UK universities, Health Education England, NHS Education for Scotland, the Wales Deanery, the Northern Ireland Medical and Dental Training Agency, Schools of Anaesthesia and the National

Examining Board for Dental Nurses where quality assurance mechanisms, including supervised clinical practice are in place.

The Sedation Training Accreditation Committee is administered by the UK Dental Faculties from the Faculty of Dental Surgery of the Royal College of Surgeons of England (FDS RCS Eng). The Committee comprises a Chair, a Panel of Assessors and an administrator. The Panel of Assessors includes DCPs with appropriate knowledge and direct clinical experience of conscious sedation for dentistry and the assessment and quality assurance of education and training programmes. The Chair of STAC reports to IACSD and the Joint Meeting of Dental Faculties (JMDF).

The content to be covered in the education and training of the dental team is described in the syllabuses within the Education and Training Section of the IACSD Standards.[2] These are derived from documents produced by specialist societies [6,7,8] expert groups [4,5,8,9,10,11] and the surgical Royal Colleges.[12] There is a separate syllabus for anaesthetists published by the Royal College of Anaesthetists.[13]

The syllabuses in the IACSD Standards are a guide for those currently practising or planning to practise conscious sedation for dentistry as well as for those who provide or plan to provide education and training in conscious sedation for dentistry. They apply to the dental team and also to medical practitioners wishing to provide conscious sedation for dental procedures.

Accredited Training Providers

IACSD and SDCEP states that courses should be provided by nationally accredited institutions and bodies and that teachers must be appropriately trained dental sedationists who are experienced in the techniques that are being taught. Courses that are not quality assured by a national body or institution and which are designed to prepare 'new starters' for independent clinical practice require accreditation. Application for course accreditation involves electronic submission of an application form which is available on the FDS RCS Eng. website - www.rcseng.ac.uk. The applicant must supply the following information:

1) Aims and objectives of the course;
2) Learning outcomes mapped against the syllabus: knowledge, skills, attitudes and behaviours;
3) Course content mapped against the syllabus: knowledge, skills, attitudes and behaviours;
4) Proposed course programme;
5) Course providers: qualifications and relevant experience;
6) Methods of learning, assessment and evaluation;
7) Details of supervised clinical practice;
8) Selection criteria for candidates;
9) Venue for course and/or clinical skills training (outlining suitability);
10) A draft course certificate to record trainee attendance, CPD hours and which must incorporate an explicit statement itemising the knowledge and/or skills and/or competencies gained by the trainee on successful completion. The certificate must include the names and GDC numbers of the trainee and course provider(s); and
11) Internal and external quality control and assurance processes.

Accreditation for a course may be retained for three years provided that there have been no substantive changes to the programme.

Records of training and assessment for every course should be retained by the trainee as part of their log of continuing experience. The lead course provider should also retain all the records of training, as well as the course evaluations and attendance sheets. Records of training should be retained by the course provider for a minimum of five years.

A summary of the course evaluation should be submitted to the STAC which reserves the right to inspect all the records relating to a course.

With revalidation in prospect, all trainers should be working towards collecting and maintaining documented evidence of clinical practice (e.g. log records). Trainers should conform to equality and diversity legislation.

Supervised clinical practice should contain the following elements:

i. Work based assessments (WBAs) and patient feedback questionnaires;

ii. The WBAs should sample the organisational aspects of conscious sedation and the whole patient experience from assessment to discharge. They should cover a wide a range of patient care; and

iii. One WBA should assess the management and provision of an entire patient episode of care.

Training providers must also ensure that trainees understand the importance of complying with contemporary guidance relating to the environment, facilities and equipment required for each sedation technique.

The learning outcomes are specific to the particular drugs listed. The development in the future of new treatment modalities and the regular review of existing ones will necessitate revision of the existing syllabuses and provision of specific education and training courses. It is not envisaged that one course will offer training in the use of all drugs/drug combinations.

Although written primarily for dental professionals, the principles within the IACSD Standards document apply to all who administer conscious sedation for dentistry. This includes those anaesthetists not in possession of a Certificate of Completion of Training and documented evidence of satisfactory completion of equivalent training in conscious sedation for dentistry under the auspices of a Royal College of Anaesthetists approved training programme.

Role of the Sedation Training Accreditation Committee (STAC):

1) **To increase access to affordable accredited training in conscious sedation.**
   The wider the range and location of sedation training facilities, the more likely it is that individuals interested in providing a sedation service will be able to

access training. The accreditation process for new course providers must be accessible and efficiently administered.

2) **To build on current successful programmes and delivery options.**
At the time of writing, more than 30 independent (i.e. non-university or HEE) sedation training courses have been accredited. This is in addition to the many long-established university (Certificate, Diploma and MSc) and HEE (Deanery) programmes. However, opportunities offered by distance and blended learning options have not been sufficiently explored.

3) **To assist health boards and potential sedation providers.**
Health boards need clear, non-technical documentation and data in order to assess present and proposed sedation services. Practitioners wishing to establish a sedation service also need clear guidance on the information required during the tendering process. The availability of sedation services for those patients who need them depends on the efficiency and appropriateness of contracting. There is also a need for improved assessment of the current and future need (as distinct from demand) for conscious sedation services.

Responsibilities of the Sedation Training Accreditation Committee (STAC):

1) Accreditation of non-university, non-HEE (Deanery) training programmes, including clinical supervisors. Programmes for 'new starters' intending to provide sedation without supervision requires that the trainee undergoes knowledge and skills teaching followed by supervised clinical experience as specified in Table 1 of the IACSD Standards.[2] University and HEE programmes do not require STAC accreditation.

2) Publication of a list of sedation training programmes accredited by STAC, universities and HEE. This will be of assistance to individuals seeking training and to Health Boards who need to verify that a practitioner tendering for a sedation contract has attended an accredited course.

3) Publication of a list of trained sedation providers, including, for example, location, range of sedation techniques offered, patient groups accepted. In time, this should be extended to include dental nurses, dental hygienists and dental therapists.

4) Course providers applying for accreditation are liable for a fee to cover the assessment and administration costs.

5) STAC is subject to FDS RCS Eng. quality assurance procedures. This will benefit commissioners, providers, performers and patients. The chair of STAC reports to IACSD and the Joint Meeting of Dental Faculties (JMDF).

6) STAC devises and runs courses for trainers and clinical supervisors.

7) STAC will liaise with training providers and commissioners to predict and plan for future training needs in conscious sedation.

8) It should be noted that STAC does not undertake the inspection of sedation practices. This is the responsibility of Healthcare Inspectorate Wales (HIW) and other competent groups (e.g. The Society for the Advancement of Anaesthesia in Dentistry).

Training for Dental Sedation Nurses

The IACSD Standards (2015) state that dental sedation nurses (referred to historically as 'the second appropriate person') must be trained and experienced in the sedation technique being used. A formal post-registration qualification, for example, the Certificate in Dental Sedation Nursing of the National Examining Board for Dental Nurses (NEBDN) is desirable but not essential.

Dental nurses who are registered with the GDC and were working as a dental sedation nurse before 20 April 2015 are covered by the 'Transitional Arrangements' on page 87 of the IACSD Standards but they must comply with requirements 1 - 6 on that page. Additional training or qualifications are not mandatory.

Dental nurses who are not covered by the 'Transitional Arrangements' and do not hold a post-registration qualification in conscious sedation are known as 'New Starters'. In order to assist during conscious sedation they must be able to demonstrate that they have attended an accredited course providing the knowledge and skills defined in Appendix 5 of the IACSD Standards. They must also provide written evidence of having gained supervised clinical experience in accordance with the recommendations in Table 1 of the IACSD Standards (e.g. 20 IV cases and/or 10 RA cases).

The NEBDN Certificate in Dental Sedation Nursing and SAAD Assessed Sedation Nurse (SASN) scheme are examples of national programmes which provide independent verification of compliance with the IACSD Standards. It is likely that additional national and local training schemes will become available in the near future.

Appendix 8

Service Compliance – Self certified checklist (adapted from the SAAD safe sedation practice scheme)

This checklist is derived from contemporaneous standards and guidance. The checklist is designed to evaluate conscious sedation services for dentistry. It is not a pre-requisite that all services require a "Yes" answer to all fields. Some fields are mandatory, whereas other may not be applicable to the techniques evaluated.

Date:

Providers name:

Clinic address

Telephone Numbers

Sedation techniques to be evaluated (please tick all that apply):

Sedation Technique	Basic	Advanced
Over 16 years		
Age 12 – 16 years		
Under 12 years		

DOMAIN Essential	STANDARD MET YES - confirmed	Working towards meeting the Standard	Explanatory notes
PERSONNEL **(Evidenced by sedation staff training and experience record)**			
The sedation service is dentist led			
The dentists / DCPs have training and experience as set out in the standards?			
Healthcare professionals within the sedation team are registered with the regulator			
Healthcare professionals have current indemnity cover that includes use of sedation			
Clinician carrying out pre-sedation assessment has sedation training and/or experience and can document this.			
Dentist / DCP providing operative treatment has the necessary knowledge to provide dental care under conscious sedation			
Sedationist has training and experience in conscious sedation for dentistry in line with the standards			

Dental Nurse (second appropriate person) has training and experience in conscious sedation for dentistry in line with the Standards			
Registered healthcare professional assisting with recovery has training and experience in line with the Standards			
Record kept of staff induction programme for sedation and sedation-related complications.			
PREMISES			
Clinically fit for purpose and fulfill legislative and regulatory requirements (lighting, heating, ventilation, safe access)			
Information relating to the healthcare team providing sedation services is displayed in the waiting room			
Waiting room, surgery and recovery room of adequate size for management of emergencies			
There is access for emergency services			
Patient able to recover in surgery or in a dedicated recovery room where there are no patients awaiting treatment			
Privacy assured in surgery			
Individual privacy assured in recovery area and where possible on exit from practice			

Patient confidentiality and privacy maintained throughout the patient journey			

POLICIES AND CARE PATHWAYS			
The service has and adheres to, a contemporary written sedation policy			
The service has and adheres to, a current standard operating procedure			
The service has and adheres to, a current consent policy procedure			
Inappropriate or incomplete referrals are returned to the referrer with an explanation and feedback			
The service has a policy for critical incident, patient safety and near miss reporting and learning			
WRITTEN PATIENT INFORMATION (All documentation for patients must be suitable for their age and capacity)			
Patients (and carers when required) are given: • information about options to manage their anxiety			
• written treatment plan			
• information regarding the sedation technique to be used			
• pre- and post-sedation instructions. In cases other than			

inhalation sedation these should include escort requirements			
• Information relating to the healthcare team providing sedation services is displayed in the waiting room			
PATIENT ASSESSMENT (Evidenced by patient records)			

Carried out at separate appointment			
If not carried out at a separate appointment, justification recorded			
Standardised assessment template followed, including medical, dental (and past sedation/GA experience) and social histories			
ASA status documented			
Assessment of patient's physical status including airway			
Alternative anxiety management approaches discussed			
Assessment of patient's anxiety using recognized system e.g. MDAS or IOSN			
Justification for sedation provision and choice of technique established and documented			
Assessment of capacity and best interest forms completed, if required			

Written record of consent process			
Confirmation that verbal and written pre and post-operative sedation instructions have been given and understood			
Pre-operative clinical monitoring measured and recorded			
Pre-operative electro-mechanical BP and SaO2 monitoring used and data recorded			
SEDATION DELIVERY (Evidenced by patient records and observation)			
Chair/trolley rated to the patient's weight, that can be rapidly moved to a head down tilt position during treatment			
Persons present at sedation appointment (staff and escort) documented			
Pre-sedation equipment, drugs and consumables checks followed			
Patient identification confirmed			
Medical history updated			
Confirmation of treatment intended, including the use of WHO/ other safety checklist where appropriate			
Written consent checked			

radiographs available			
Confirmation of compliance with pre-operative instructions			

Each patient attended by at least 2 team members (sedationist and at least one other appropriately trained person)			
Baseline blood pressure reading taken			
Baseline SaO_2 and pulse taken			
Cannula used to secure IV access			
EQUIPMENT			
The administration of sedative agents is consistent with these standards			
Drugs stored correctly Drugs disposed of correctly			
Continuous pulse oximeter (with an audible alarm) used prior to and during treatment and recovery under sedation where patient is not receiving IS only			

NIBP used during sedation where appropriate			
Selection of BP cuff sizes available			

Equipment serviced regularly and in line with manufacturers' recommendations			
Active scavenging and ventilation appropriate to COSHH recommendations and Health and Safety Executive Regulations (2002) where IS is being provided			
Inhalation sedation machine unable to deliver < 30% oxygen (IS only)			
Titrated dose of nitrous oxide in oxygen is the only inhalation sedation technique used			
Cylinder in use and full cylinder back up on inhalation sedation machine (IS only)			
Full and in use cylinder markers used (IS only)			
Central gas supply storage safety compliant			
Central gas supply regulators in date and serviced			
Adequate central gas supply and cylinder empty alarms or automated switchover			

Evidence of staff training for cylinder safety and changing			
Appropriate gas storage in line with current guidelines			
Patients receive IV sedation, by titrated dose of midazolam only			
intranasal sedation is delivered by a mucosal atomization device			
Emergency oxygen supply available			
Emergency suction available			
Bag/Valve/Mask System used for positive pressure ventilation (Adult and/or paediatric as appropriate) with reservoir and tubing			
Variety of sizes of full face masks are available			
Yankauer suckers available			
Oro-pharnygeal airways available			
Emergency equipment readily available			
AED charged and batteries in date			

Defibrillator pads in date and age appropriate			
Emergency drugs compliant with BNF guidance including flumazenil being present for immediate use when midazolam sedation is used.			
Emergency equipment and drugs checked regularly and checks recorded			
RECOVERY AND DISCHARGE (Evidenced by patient records and observation)			
Chair/trolley rated to patient's weight, that can be rapidly moved to a head down tilt position			
Adequate staff/patient ratio			
Post-operative BP and SaO_2 taken			
Discharge criteria followed			
Discharge by an appropriately trained health care professional			
With the exception of adults receiving IS, all patients are discharged to the care of a responsible adult			

Emergency contact number given			
Patient management summary letter to referring practitioner			
PATIENT RECORD KEEPING in LINE with STANDARDS			
Full and contemporaneous record of assessment			
Full and contemporaneous record of treatment			
Full and contemporaneous record of recovery and discharge			
CLINICAL ACTIVITY, GOVERNANCE AND AUDIT			
Evidence of Immediate Life Support training or equivalent for all healthcare professionals in the sedation team			
Evidence of Paediatric Immediate Life Support training or equivalent for all healthcare professionals in the sedation team if sedating patients under 12 years with anything other than inhaled nitrous oxide/oxygen			

Evidence of training and experience for sedation techniques used for all healthcare professionals in the sedation team			
Evidence of relevant CPD for all healthcare professionals in the sedation team			
Evidence of audit/peer review/use of improvement methodologies in conscious sedation for dentistry			
Age appropriate patient information for techniques used			
Patient pre and post sedation instructions for each technique assessed			
Pre sedation assessment			
Intra operative conscious sedation record			
Discharge record			
Presence of a clinical logbook to record details of each case			
PATIENT SATISFACTION			
PREMs and PROMs are used, analyzed and acted upon to make improvements when required			
Evidence of complaints procedure			

DOMAIN Desirable	**STANDARD MET** **YES/NO/ NOT APPLICABLE**	**ACTION REQUIRED**	**NOTES**
PERSONNEL (Evidenced by sedation staff training and experience record)			
Operator/sedationist			
Separate sedationist			
WRITTEN PATIENT INFORMATION **(All documentation for patients must be suitable for their age and capacity)**			
Information relating to the healthcare team providing sedation services is displayed in the waiting room			
Patient escorts are given information on their responsibilities - Please indicate in right hand column if you have a specific leaflet for escorts			
PATIENT ASSESSMENT (Evidenced by patient records)			
Previous sedation/GA exposure documented			
Patients given choice of an accompanying person to be present during procedure, where necessary			

SEDATION DELIVERY AND EQUIPMENT (Evidenced by patient records and observation)			
Topical anaesthetic available for IV access			
Functioning blood glucose meter and in date testing strips			
CLINICAL ACTIVITY, GOVERNANCE AND AUDIT			
Patient referral form (inbound)			

Appendix 9

Maintaining knowledge and skills in Conscious Sedation.

Conscious sedation, like any skill, can be lost if regular practice and rehearsal is not maintained. There is a need for providers to:

- Maintain their skills in conscious sedation;
- Ensure regular, documented, team rehearsal of managing sedation-related complications;
- Maintain a reflective logbook of sedation practice;
- Engage in sedation-related verifiable CPD (minimum 12 hours over a 5 year period);
- Engage in age specific ILS standard training annually; and
- Conduct regular sedation-based audit and reflection.

Maintaining skills in conscious sedation requires frequent use of these skills. Although specific numbers of cases per annum is not specified in the IACSD Standards, SDCEP guidance or the NHS England Conscious Sedation Commissioning Guidance, at academic meetings following release of IACSD standards the following competencies have been suggested:

- Inhalation sedation – 10 cases per year.
- IV midazolam sedation – 20 cases per year.
- Oral/Transmucosal midazolam sedation. Because these techniques are used in Special Care Dentistry and a requirement is, wherever possible, that cannulation is performed, these techniques may be categorised as a variation of IV midazolam sedation.

References

1. Safe Sedation Practice for Healthcare Procedures: Standards and Guidance. AoMRC London 2013. http://www.aomrc.org.uk/publications/reports-a-guidance/doc_view/9737-safe-sedation-practice-for-healthcare-procedures-standards-and-guidance.html
2. The Inter-Collegiate Advisory Committee for Sedation in Dentistry. http://www.rcseng.ac.uk/fds/committees/intercollegiate-advisory-committee-for-sedation-in-dentistry
3. http://www.sdcep.org.uk/wp-content/uploads/2017/07/SDCEP-Conscious-Sedation-Guidance.pdf
4. Coulthard P, Bridgman C, Gough L, Longman L, Pretty IA, Jenner T. Estimating the need for dental sedation. 1.The Indicator of Sedation Need (IOSN) - a novel assessment tool. British Dental Journal 2011;9:211(5):E10.
5. The National Examining Board for Dental Nurses: Certificate in Dental Sedation Nursing. http://www.nebdn.org/documents/DSNProspectusNovember2012_000.pdf
6. Standards in Conscious Sedation for Dentistry. Dental Teacher Sedation Group. 2012. http://www.dstg.co.uk/standards-in-conscious-sedation-for-dentistry/
7. Training in Conscious Sedation for Dentistry. Dental Sedation Teachers Group 2005. www.dstg.co.uk/documents
8. Conscious Sedation in Dentistry: Standards for Postgraduate Education: Dental Sedation Teachers Group 2008. *http://www.dstg.co.uk/files/teaching/dstg-pg-standards.pdf*
9. Advanced Conscious Sedation Techniques for Adult Patients Training Syllabus. Independent Expert Group on Training Standards for Sedation in Dentistry (IEGTSSD) 2011 www.saad.org.uk/documents
10. Advanced Conscious Sedation Techniques for Paediatric Patients Training Syllabus: Independent Expert Group on Training Standards for Sedation in Dentistry IEGTSSD (2011 www.saad.org.uk/documents
11. A Guide to Maintaining Professional Standards for Conscious Sedation in Dentistry. Independent Expert Group on Training Standards for Sedation in Dentistry IEGTSSD 2011. www.saad.org.uk/documents
12. Special Care Dentistry, Specialty Training Curriculum, Specialist Advisory Committee for Special Care Dentistry General Dental Council 2012. http://www.gdc-uk.org/Dentalprofessionals/Specialistlist/Documents/SpecialCareDentistryCurriculum2012.pd
13. CCT in Anaesthetics - Higher Level Training. The Royal College of Anaesthetists. Edition 2, August 2010 Updated October 2013
14. Office of National Statistics , European Standardised population rates 2013 Office of National Statistics http://www.ons.gov.uk/ons/guide-method/user-guidance/health-and-life-events/revised-european-standard-population-2013--2013-esp-/index.htm