Clinical Examination & Record-Keeping

Good Practice Guidelines

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FOREWORD

Patients have a right to expect that clinicians will examine them thoroughly, ask the right questions, diagnose their needs correctly, provide a clear treatment plan, and treat them accordingly. Clinicians should also be expected to maintain records in such a state that any other clinician could seamlessly ensure continuity of care.

In recent years the Faculty has heard complaints from practitioners that our previous editions of these guidelines have been misinterpreted; that aspirational guidance has been interpreted as essential requirements. Although we were very clear in the last edition that the guidelines were not to be taken as a rigid constraint on practitioners, the feedback we received was that this was what was occurring. Consequently, when we commenced the process of revising the guidance, the FGDP(UK) took the decision to explicitly make a distinction between essential/baseline practice, and aspirational/gold-standard practice. This latest edition is the end product of that process.

We have categorised recommendations as **A** (aspirational), **B** (basic) and **C** (conditional upon circumstances). No practitioner should be censured for failing to meet **A** grade recommendations. Nor does a failure to meet **B** or **C** grade recommendations necessarily imply negligence on the part of the clinician. A clinician must assess each patient on their merits, in the circumstances in which they find themselves, and with the evidence available to them they must use their clinical judgement to settle on a course of action. It is possible to fail to adhere to our recommendations and still be acting in a patient's best interests. However, we would recommend that when taking a course of action other than that recommended in these guidelines, a clinician should clearly justify their reasoning in the records.

In the light of the explosion in Fitness to Practise proceedings, much consideration was given as to whether these guidelines should expressly address what constitutes a record that falls 'far below' expected standards. For the reasons stated above concerning the role of clinical judgement in the unique set of circumstances relating to each patient, we decided not to. It is for experts evaluating the evidence present in the records to make that judgement in each case.

The Faculty of General Dental Practice (UK) hopes that this new edition of *Clinical Examination and Record-Keeping* will provide much-needed clarity to clinicians and all other stakeholders within the profession. We share a common goal of ensuring that patients receive the care they need no matter who is treating them at any moment in time. Working together, we can refine and enhance this guidance in the coming years and ensure that it continues to meet the needs of the profession and patients.

Mick Horton
Dean, Faculty of General Dental Practice (UK) – 2016

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1 PREFACE

This book provides information about clinical dental examination and related record-keeping. The original guidelines (published by FGDP(UK) in 2001 and then again in 2009) resulted from the work of a panel whose remit was to:

- Review systematically the available evidence on the clinical dental examination – the need for it, its scope and methods of recording its findings.
- Produce national guidelines relevant to all dental primary care practitioners.
- Ensure that the guidelines are compatible with both paper and electronic record-keeping systems.

The remit for the current revision is:

'To update the guidance in the light of changes in standards of examination, and developments of the technology used in record-keeping.'

The guidelines describe what constitutes dental records (chapter 2), and then what encompasses a full examination (chapters 3 and 4). This is divided into a 'pre-exam', where information may be gathered prior to the patient seeing the clinician (chapter 3), and then the chairside examination (chapter 4). Some practitioners will carry out both processes at the chairside, while others will split the gathering and recording of information into two parts; it is for the individual to decide. The important point is that all this information is required in order to properly examine and assess a patient's care.

In primary dental care the majority of examinations are likely to be 'recalls' (see appendix 1) and these are discussed in chapter 5. Some examinations will be of those who attend on an unplanned visit for items such as pain relief, trauma or advice

concerning a soft-tissue lesion (chapter 6). In some cases, a patient will be referred for further care, and it is important to provide adequate detail for the referral practitioner, while information to be recorded by practitioners receiving a patient referred for care is noted (chapter 7). Electronic records are considered in Chapter 8.

The type and extent of examination will vary for each category of patient that presents. A new patient will require a more comprehensive baseline examination than a patient who has been seen previously. In some circumstances an examination may require more than one visit, for example if additional information from a patient's general medical practitioner or previous dentist is required, or if study models or diagnostic tests have to be evaluated. However, even for a patient in pain, there is still a minimum data set that must be collected and recorded prior to arriving at a diagnosis and providing appropriate treatment and/or advice.

This latest edition includes recommendations for information to be recorded at pre-examination, examination, recall examination, emergency dental, emergency trauma and receiving referral.

These are marked as follows:
A: Aspirational
B: Basic
C: Conditional.

A recommendations represent the 'gold' standard. Anything graded A, is included for completeness, but is not essential.

B recommendations represent basic or baseline information that should normally be recorded, or actions that should normally be undertaken, unless in the clinician's opinion there is a strong clincial reason for not doing so. In such an instance the clinician should record details of their rationale in the patient record.

C recommendations do not apply in every circumstance. Where they are relevant, actions labeled **C** should be considered to be **B** grade actions. In all other circumstances no action is required.

The full list of recommendations can be found in Appendix 16.

1.1 PHILOSOPHY AND SCOPE

These guidelines cover the collection and recording of information which enables a diagnosis to be made and then allows appropriate treatment options to be discussed with a patient enabling them to choose a treatment plan or, sometimes, make a decision to refer for care.

Each clinical discipline has its own record-keeping requirements, which the guidance introduces but does not detail.

In accordance with normal terminology, this book constitutes a 'national guideline'; a broad statement relating to a level of patient care. In this case it refers to the specification of dental examination to which practitioners in primary care can aspire. It is expected that the guidance may be modified to take account of the particular needs of practices or sectors, in the form of a 'local guideline' (see appendix 1).

1.2 WHAT ARE GUIDELINES?

Guidelines are systematically developed statements designed to assist the clinician and patient in making decisions about appropriate healthcare for specific clinical situations. They are not intended to be a rigid constraint on clinical practice, but rather, a description of the general approach against which the needs of the individual patient can be considered. These guidelines, for clinical examination and associated record-keeping, are intended to help practitioners assimilate, evaluate and implement the ever-increasing amount of evidence and opinion on how dentistry should be practised and recorded.

Guidelines are often used by dental advisers and experts, in courts and/or General Dental Council (GDC) Fitness to Practise proceedings, for defining a required standard. However, it is important to emphasise that the purpose of this book is to promote good clinical examination and relevant record-keeping aimed at enhancing clinical performance. Appendix 16 shows what is expected as a basic standard, and as an aspirational enhanced standard. Some aspects of examination will be present in certain situations, and these are described as 'conditional'. These guidelines should inform the clinician, however they are not a substitute for professional judgement.

There is wide acceptance in medicine and dentistry that diagnostic and laboratory tests, clinical decisions and clinical practice should be evidence-based, meaning they should be founded on the basis of rigorous scientific evidence. However, the evidence-based approach is not without problems as there is a lack of high-quality research evidence in a number of clinical fields, the topic of this guidance being a prime example. Where there is a large evidence base, the FGDP(UK) guideline programme follows the Scottish Intercollegiate Guidelines Network (SIGN) approach to methodology, which grades evidence for strength, providing guidance where the evidence is strongest and the risk of bias weakest. These good practice guidelines can help clinicians to identify and aim to adopt current best practice. They are based on expert opinion and consultation with specialist groups, , and thus they may contribute to improving the quality of patient care. Where the evidence base is weaker, the approach has to be more pragmatic (see appendix 2).

1.3 WHY ARE GUIDELINES NEEDED?

An appropriate clinical examination, coupled with an accurate recording of findings, is essential to all good clinical practice. At present, there is still considerable variation between practitioners in clinical examination practice, dental and medical history taking, and recording generally. There is a need to reduce inappropriate variation and enhance patient care by:

- reducing omissions in the performance of clinical examinations, thereby enhancing patient management and/or prognosis of treatment.
- undertaking enquiries for the relevant medical and dental information.
- avoiding unnecessary invasive examinations.
- assuring the recording of relevant clinical information.
- facilitating the retrieval of information when required, such as treatment planning, audit, clinical governance, and practice inspections by regulatory bodies.
- ensuring patient access through compliance with the Data Protection Act regarding subject access requests for medical records.

It is hoped that clinicians will review their current practices against these guidelines and, if necessary, modify their practice to ensure better patient care.

1.4 REVIEW OF GUIDELINES

The first and second editions of *Clinical Examination and Record-Keeping* were developed when there was a comparatively weak scientific basis for making recommendations. Much of the evidence of good practice was commended by recognised authorities. Although systematic reviews have been undertaken in the field, there are still limitations to the evidence currently available.

Comprehensive patient histories, examinations and records assist with quality assurance, audit and research. In addition, they benefit not only the patient but also the practitioner because clear documentation is invaluable when transferring patient care or in cases of query, complaint or litigation. Contemporaneous records are accepted by the courts and the GDC as providing evidence of the detail of dental care, and good, accurate, contemporaneous records are an important part of a dental professional's evidence. It is important that they contain sufficient detail and are of an acceptable standard, such that any clinician can fully understand the history of patient care.

1.5 IMPLEMENTATION AND AUDIT

Guidelines can be seen as useful and suitable aids to provision of care by their target group and, ideally, should act as catalysts for discussions at practice or local level.

In order to establish whether the national and local guidelines have had a beneficial effect, it is important that practitioners audit appropriate topics related to the guidelines. Suggestions of suitable topics are set out in appendix 15.

1.6 REFERENCES

References are indicated within the text. Where relevant literature could not be identified for review, the authors have attempted to provide recommendations based on 'good practice' and 'expert opinion' following consultation with specialist societies.

2 DENTAL RECORDS

This chapter clarifies what comprises the components of dental records. The principles are applicable to electronic and handwritten records, and the reader is referred to chapter 8 for additional information about electronic records.

Records will fall below acceptable standards when it is not clear to another clinician what was found, planned, discussed, and what treatment carried out.

2.1 WHAT CONSTITUTES DENTAL RECORDS?

2.1.1 Records comprise

- Personal information.
- Medical history.
- Note of initial discussion with patient (reason for attendance).
- Charting.
- Examination notes (including findings from special tests/investigations etc).
- Radiographs.
- Photographs.
- Study models.
- Audiovisual recordings.
- Note of diagnosis.
- Treatment options, discussion with patient, and treatment options offered but declined
- Evidence of consent.
- Treatment plan.
- Treatment notes (including sedation notes, anaesthetic charts, etc).
- Laboratory prescriptions.

- Prostheses, statements of manufacture (medical device certificate and patient statement)
- Correspondence (incoming and outgoing)
- Payment history.

The components relevant to clinical examination and record-keeping will be considered in subsequent chapters.

2.1.2 Files of formal complaints made by patients and other bodies

Details, such as documents relating to a patient complaint, should be kept in a separate file, and referenced in the clinical notes (e.g. 'see complaints file'). As this is beyond the scope of this book, the reader is advised to contact their indemnity organisation for further details about maintenance and retention of a patient's complaint file.

2.1.3 Other files/documents not regarded as part of the 'dental records'

- Medical reports e.g. for insurance cover.
- Medico-legal report for purpose of litigation e.g. negligence claims or GDC proceedings.
- Correspondence with solicitors.
- Correspondence with indemnity organisation/insurer.

These are prepared from information in the records, and may be supplemented by additional interview with the patient. They will often contain opinion about treatment and/or cause of injury, and the report is confidential between the party instructing the report and the clinician.

2.2 BASIC INFORMATION ABOUT RECORDS

All records should be written contemporaneously, and be accurate, complete, logical, clear, concise, legible, and easily understood by a third party. They should be made

in ink or ballpoint pen in a colour that can be reliably scanned or photocopied. It should be possible to identify the person carrying out the consultation or treatment, and relevant support staff.

If errors in records are identified, appropriate amendments should be made to the record, and annotated to clearly indicate the amendment. Errors on paper should be scored out using a single line and initialled. The corrected entry should be written alongside it, dated, timed if appropriate (e.g. If the error is discovered on the same day that the original entry was written), and signed. Any additions should be made as separate entries, and should be dated and cross-referenced to the original note they replace. For electronic records, it may be possible to make an amendment correcting any errors before the entry is locked in the system prior to 'backup'. If that is not possible, then an entry should be inserted as soon as any error is discovered, drawing attention to the original entry and error.

To summarise:

- Be factual, consistent and accurate.
- Write legibly in ink that can be accurately scanned and copied.
- Date, time (where relevant) and sign all entries ensuring the clinician is identifiable.
- Print your name and designation where such additional clarification is necessary to distinguish the clinician from other individuals.
- Make any alterations by scoring out with a single line; date, time and sign.
- Avoid abbreviations unless there is a previously agreed list.
- Demonstrate the chronology of events.
- Identify each page with the patient's name, date of birth and unique number (NHS number, CHI number, etc).
- Secure all papers within the record folder.
- For electronic records, the same principles apply. See chapter 8 for additional information.

REMEMBER:

Good record-keeping is an integral part of your professional practice and a mark of the skilled and safe clinician. It is important to record the salient points of any visit or consultation.

2.3 STATUTORY REQUIREMENTS FOR PATIENT RECORDS

Information on the records is personal to a patient and is therefore confidential. Patient access to records is enshrined in law, and statutory requirements include:

- Data Protection Act 1998 (DPA98).[1]
- Access to Health Records Act 1990.[2]
- Access to Health Records (Northern Ireland) Order 1993.[3]
- Freedom of Information Act 2000.[4]
- Freedom of Information (Scotland) Act 2002.[5]

2.3.1 The Data Protection Act 1998 (DPA98)

This Act governs how public bodies may handle and process personal data, including health records (dental practices are classified as public bodies under the Act, whether they are NHS or private). It provides that where personal data is held, it must be:

- Fairly and lawfully processed.
- Obtained only for a specified and lawful purpose.
- Adequate, relevant and not excessive in relation to the purpose for which it is processed.
- Accurate and up to date.
- Not kept for longer than is necessary for the stated purpose.
- Processed in accordance with the patient's rights.
- Stored securely.
- Not transferred to another country which does not offer an adequate level of data protection.

DPA98 also gives patients the right to apply for access to any information held about them. Any request should be in writing and, on receipt of such a request and any

applicable fee, the relevant data (copy of records, see 2.1) should be forwarded to the applicant within 40 calendar days. The applicant is not required to give a reason for the request. The practitioner is advised to retain the original records.

When a third party, such as a patient's solicitor or a relative, seeks access to the information, the request must include a mandate signed by the patient authorising release of the information.

There are circumstances in which a request may be refused, and the Act also provides for a number of exemptions. A comprehensive guide to data protection is outside the scope of this book. Readers are advised to consult their indemnity organisation for further advice should a request for records be received where the clinician is concerned that they have potential vulnerability to complaints or a claim.

2.3.2 Access to Health Records Act 1990, and Access to Health Records (Northern Ireland) Order 1993

These only apply to records of deceased patients. If a request is received, advice should be obtained from your indemnity organisation or insurers.

2.3.3 Freedom of Information Act 2000, and Freedom of Information Act (Scotland) 2002

These Acts place obligations on public bodies to release information to the public, and NHS dental practices are considered public bodies under Freedom of Information Act (FOIA) as they are publicly funded. However, it should be noted that FOIA relates to government activity only, and personal information about patients or employees must be kept confidential. Several other exceptions apply under the Act, and readers should seek advice from their indemnity organisation.

2.4 CONFIDENTIALITY

All patients are entitled to confidentiality, and it is therefore essential that all

members of the dental team understand the importance of this duty. A confidentiality statement should be included in staff employment contracts. There are many instances when confidentiality can be breached unintentionally, such as telephoning to change an appointment and leaving a message with a third party, or discussing personal information in the waiting room in front of other patients. It is vital that all information maintained is kept confidential. Team members must ensure that they are familiar with current guidelines published by the Department of Health[6] and the General Dental Council[7]. There are some rare circumstances where confidentiality must be breached, for example where safeguarding issues have arisen or where it is necessary for the detection and investigation of a serious crime. It is wise to discuss any situation where there is a need for a deliberate breach of confidentiality with your indemnity organisation.

2.5 RETENTION OF RECORDS

The Data Protection Act states that records should be 'not kept longer than is necessary'.[1] The Department of Health guidance suggests this is no longer than 30 years.[8] For adults it is recommended that treatment notes, radiographs, study models and correspondence be kept for minimum of 11 years after the completion of treatment. For children, records should be retained until the patient is 25 years old, or for 11 years after the completion of treatment, whichever is longer.[9] It is recognised that there are often practical difficulties in storing study models or working models, surgical guides or wax ups, and it reasonable to make a decision to retain these for a shorter period of time. It would be prudent to consider retaining models where complex treatment (e.g. restorative, implant or orthodontic) has been carried out, or if treatment has not gone to plan; initial and final models should then be retained as a minimum.[9]

The following scenario demonstrates why records should be accurate and retained.

SCENARIO

NOTE RECORDING OF AN ADVERSE EVENT, AND RECORDS RETENTION

The dentist was surprised to receive a letter from solicitors about a patient whom he had not seen for at least 10 years. The solicitors sought the record cards, and alleged that there would be a claim in negligence for fracturing an endodontic file and leaving it within a tooth during root canal treatment.

The patient had recently attended a dentist, as she had an abscess from a tooth, upper left 4. The new dentist had taken a radiograph and seen that within the radiopaque root filling material there were what appeared to be the remnants of a broken instrument in the tooth. He had informed the patient (wrongly) that this was the cause of her symptoms.

The dentist who had received the solicitor's letter had long since removed this former patient's records from his record stock, and stored it elsewhere. It was retrieved, and when he checked the records he was relieved to see there was a full account of the difficulties with carrying out the root treatment. His notes confirmed that part of a file had 'become separated' within the canal, and that despite his attempts to remove it, he had been unable to do so. The patient had been fully informed of the situation, and advised of several treatment options, which included specialist referral, or filling the root canal system as well as possible and monitoring the situation, or extracting the tooth. All this had occurred 12 years earlier. The records confirmed the patient opted to have the dentist fill the root canal system as well as possible. They also recorded she had returned on several occasions during the subsequent two years, and noted there were no symptoms from upper left 4.

A patient has three years from the date of any incident, or from the date of knowledge of any incident, in which to raise a negligence claim. In this

case, the patient's solicitors had taken the date of knowledge as the time of the patient's recent attendance at a new dentist who had commenced treatment of the abscess, as the patient had forgotten about the tooth being previously root treated. The records showed that the date of knowledge was a considerable time earlier, and the claim could not be pursued.

SUMMARY

If something untoward happens during treatment it is important that this is noted on the records, including that the patient has been informed. The records should be adequately complete to allow full recollection of the incident by the dentist. In this case, it was clear that the patient had been fully informed and advised of her treatment options. Records should ideally be retained for up to 30 years, and for a minimum of 11 years after the completion of treatment.

2.6 SECURITY OF RECORDS

Patient records, whether paper or electronic, must be stored in a manner that protects their security[10]. The security of electronic records is considered in chapter 8.

Records must be secured against unauthorised access. For paper records this would require the use of lockable storage, in an area that is not accessible to the public without staff supervision. This also means that records should not be left out in a surgery overnight where they can be viewed by anyone entering the building out-of-hours. Archived records held off-site should be in lockable storage within a lockable area of a secure archive storage facility.

2.7 SECURITY OF COMMUNICATIONS

All communication channels have security vulnerabilities. As a general principle, the more open the communication channel, the less information you should send. The clinician must assess the risks associated with any form of communication and restrict the patient data sent, accordingly. Ideally you should reach an agreement with each patient about which channel(s) of communication you may use for confidential information. This agreement should be documented in the record.

For example, confidential personal data should not be included within the subject line or body of an email message without permission. You should bear in mind that an email to a patient's work or family email address may be seen by any number of people who have access to that patient's inbox. When dealing with voicemail, you should be aware that family members may listen to the messages left. Therefore it is best practice to simply leave a message inviting the patient to return your call. Letters to a patient should be marked 'Private and Confidential' and addressed to the individual patient concerned. This is particularly important when sending treatment planning letters and estimates. Letters of referral which inevitably contain significant personal medical and dental information should be marked in the same way.

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3 HISTORY TAKING

In many practices, some information is provided by the patient prior to the chairside consultation with the clinician. It can be helpful to obtain information in advance as not only can this save valuable chairside time, but it can also enable the patient to provide detail when they do not feel under pressure. Usually a form is given to the patient to complete on arrival or sometimes in advance of the first visit, and this chapter describes information that can be gathered.

3.1 PRE-EXAMINATION

While the objective of a pre-examination is to ensure adequate detail about the patient, this procedure can also assist in finding out why the patient is attending, and if they have any concerns or are seeking any particular treatment.

It is for the practitioner to decide how much detail should be collected at this stage, and this is something that may vary between different patients and practices. Forms for patient completion can be constructed by the practice accordingly.

The information in the 'pre-exam' comprises:

- Personal information.
- Medical history.
- Socio-behavioural history.

Often this can be included in one form for the patient to complete.
The history and information may also include:

- Previous dental history.
- Reason for the patient attendance.
- Financial detail. Where relevant, this can include information about payment mechanisms such as NHS, private, or capitation scheme.

3.2 PERSONAL INFORMATION

Details to be recorded during a pre-exam should include:

- Name. **B**
- Address. **B**
- Date of birth. **B**
- Parent/Guardian contact – If the patient is a child, then detailsof the person with 'parental responsibility' need to be recorded.. This is usually self-evident when a family attends a practice and the child's record may simply note that parents attend. **C**
- Information of the responsible party – If the patient is in any way dependent on others for example due to disability, limited capacity, or as a vulnerable adult, full information of the responsible party (eg. carer, next of kin) should be recorded. **C**
- Phone numbers. These should include home, work, and mobile. The preferred contact number should be clearly indicated. A method of communication should be agreed and noted. **B**
- Email address (see 2.7). **C**
- Emergency contact details. **B**
- Patient's General Medical Practitioner (GMP), and contact details (although this may be available on the medical history form). **B**
- Relevant specialist practitioners, and contact details. **C**
- NHS identification number (where required, to confirm eligibility for NHS care). **C**
- Occupation. **B**
- Patient's signature (or that of the responsible party) – for verification details of various forms, or on requests for information. **B**

Not all the above information will be available or necessary for every patient and it is for the practitioner to decide the level of information required for patient care and safety.

3.3 MEDICAL HISTORY

Understanding a patient's medical history and being aware of the patient's medical condition throughout the time of providing care is essential[1] as medical care may influence the dental care provided. There are many conditions which can have a bearing on the dental treatment, and the clinician should be aware of the compromises necessary when treating patients with particular medical conditions or problems. It is not the purpose of this book to describe these in detail. The medical history must be recorded, and updated as necessary. Example forms are included in appendices 3a and 3b.

Prevention of a problem, by use of risk management, is useful and a method of highlighting relevant information should be adopted. Examples include penicillin allergy, or patients taking anticoagulants.

There are many examples of medical history forms available commercially, and some practices will produce their own. (see appendix 3). Guidance on the completion of the questionnaire should be given when appropriate, e.g. language difficulties, mental or physical impairment. In order to gain the most accurate information, a clinician should work through the questionnaire in collaboration with the patient.[2,3] It should be established that the patient fully understands each question. Clinicians should satisfy themselves that the information is correct and explore any area of ambiguity or concern, seeking clarification and obtaining details as required. Once complete, the form should be signed and dated by the patient, (unless software does not permit this – see chapter 8), and by the clinician.

Although there may be notices in the practice such as in the waiting room, or at reception, asking patients to inform the dentist of any changes to their medical history, particularly medication, it is easy for the patient to forget, unless prompted. It follows that the medical history should be checked, but not necessarily recorded, at each appointment where invasive treatment is to be carried out. Any changes should be noted, dated, and initialled.

At a recall exam the medical history should be confirmed, dated, and initialled by the patient and the dentist. This form can be 'pp' on behalf of the dentist by a suitably trained DCP who would verbally advise the dentist of change, if any, so that the dentist is informed. Any changes should be noted, the form dated and initialled by the patient (unless software does not permit this – see chapter 8) and the treating clinician.

Medical history information to be recorded at pre-exam, recall exam, emergency dental, emergency trauma, and on receiving referral:

- New form completed or updated. **B**
- Dated and signed by patient and clinician. **A**

3.4 SOCIO-BEHAVIOURAL HISTORY

This may be included as part of the medical history form. It can include:

- Tobacco/smoking habit. **B**
- Alcohol consumption. **B**
- Recreational drug use (the patient may not wish to divulge). **A**
- Eating habits. **A**
- Dietary information (where relevant). **C**
- Participation in contact sports. **C**
- Playing of musical instrument involving use of mouth. **C**
- Occupation. **B**

It may be easier for the clinician to discuss these above points directly with the patient at chairside, however having the questions on a form given to the patient will help stimulate the patient's thoughts in these areas.

3.5 PREVIOUS DENTAL HISTORY

This information can be sought with a suitably worded form, or as part of the medical history form, and completed by the patient prior to consultation. Prior to the formal

first clinical examination, the dental history should record details of previous dental care (e.g. orthodontic and/or implant treatment), including analgesia/anaesthetics, any oral allergic reactions not recorded in the medical history, and any other information that the patient volunteers.

Useful information would include:

- The ability and confidence to chew foods comfortably.[4-6] **B**
- Previous restorative procedures involving fixed and removable prostheses. **B**
- Orthodontic treatment. **C**
- Endodontic treatment. **C**
- Implant treatment. **C**
- Previous periodontal conditions and or treatments. **C**
- Previous difficulties. **C**
- Oral surgery procedures. **C**
- Oral hygiene regime (tooth brushing, oral hygiene aids, mouthwash). **B**
- Unease, apprehension, or anxiety and fear of dentistry. **B**
- Good or bad experience with dentistry. **C**
- Aesthetic concerns in respect of their teeth. **C**
- Changes that the patient has noticed within their own oral cavity. **C**
- History of fissure sealants or preventative treatment provided by schools dentist **C**
- Anything else the patient mentions. **C**

It is a matter of the clinician's personal preference whether to discuss the patient's dental history directly with the patient as part of general history taking or to provide the patient with a form to complete prior to chairside consultation. By using the form completed by the patient, the dentist can make additional notes on the same form for clarification as required.

When a new patient attends with a dental phobia it can be useful to assess the patient's condition quantitatively. This could, in turn, significantly modify the clinical management of the patient. Whilst there are many ways of measuring anxiety, the

Modified Dental Anxiety Scale[7] (see appendix 11) is a five-question, self-completion questionnaire that asks patients to rank their anxiety on a five-point scale ranging from 'not anxious' to 'extremely anxious'. It has proven to be a highly reliable and valid method of indicating a patient's anxiety status. Alternatively, a more subjective questionnaire, which includes more social aspects can be used.[8] (See appendix 10.)

3.6 REASON FOR PATIENT ATTENDANCE

This question can be included in the form given to the patient prior to consultation. However, many clinicians may prefer to ask the question directly at chairside. It is important to discuss this with the patient during the consultation to ensure an accurate understanding of the patient's needs and expectations. **B**

3.7 GENERAL PATIENT MANAGEMENT

Some clinicians will prefer to discuss much of the above at chairside, and this can help relax the nervous patient prior to examination. The most important point is that personal details and medical histories should be recorded. This is an essential part of information to be retained at each type of exam discussed in this book.

Other information that can be included:

- An agreed method of contacting the patient, to avoid any ethical or confidentiality issues (see 2.7). **A**
- Availability to attend appointments. **A**
- Whether a carer is required to be present. **C**
- Best time for an appointment. **A**
- Patient's mobility, eg coping with stairs. **C**
- Travel considerations. **A**

3.8 PATIENT ATTITUDE TO DENTAL HEALTH

It is helpful to understand a patient's attitude to dental care, and to see if the patient has any particular aims of treatment. A questionnaire, such as the one provided in appendix 10 may be helpful.

HISTORY TAKING – SUMMARY OF RECOMMENDATIONS

KEY: A – Aspirational B – Basic C – Conditional X – Check

Personal Information	
Name	B
Address	B
Date of birth	B
Phone numbers	B
Contact method	A
Child – parental contact	C
Patient dependent on someone	C
Email	C
Emergency contact	B
General Medical Practitioner	B
Relevant Specialist Practitioner	C
NHS identification number	C
Occupation	B
Signature for verification	B
Details checked/updated	B

Medical History	
New form completed or updated	B
Dated and signed by patient and clinician	A

Socio-behavioural History	
Smoking	B
Alcohol consumption	B
Eating habits	A
Dietary information	C
Contact sports	C
Musical instruments	C
Recreational drug use	A

Previous Dental History	
Chewing unrestricted	B
Restorative procedures	B
Orthodontic care	C
Endodontic care	C
Oral surgery procedures	C
Oral hygiene routine	B
Anxiety	B
Good/bad past experiences	C
Aesthetic concerns	C
Changes noticed by patient	C

Factors Affecting Appointment	
Timing	A
Mobility	C
Carer to be present	C
Travel considerations	A

Reason(s) for attendance	B
Payment method	B

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4 FULL EXAMINATION

This chapter refers to carrying out a full examination, and it is expected that this would be done when seeing a patient for the first time with a view to providing a full course of treatment. Though the full examination is carried out by dentists, other dental care professionals will carry out parts of the examination relevant to their standing, and within their scope of practice.

An examination will fall below acceptable standards when when any omissions compromise patient care. This will vary with the situation and purpose of the appointment.

4.1 OBJECTIVE OF CARRYING OUT AN EXAMINATION

Once an adult patient who is competent to consent to their treatment has been fully examined, the clinician should be able to discuss appropriate treatment options, their risks, benefits, costs, and the option of not having treatment. The patient is then free to choose, without being under any pressure (for example coercion or financial incentive), which treatment they would prefer. The patient, having been given and been seen to consider and understand the relevant information, can provide valid consent for treatment. (see appendix 13 for details on the types, and standards, of consent). A treatment plan is thus established. Consent for treatment may be withdrawn at any time.

It is good practice to prepare a written treatment plan (including costs) and have this signed by the patient; the practice retaining the signed copy. However, it is recognised that in some situations, where treatment is simple and can be completed at the same appointment as the examination, then verbal consent is acceptable and should be noted.[1]

The clinician taking the dental history and recording the reason for the patient's visit should aim to be a good listener. Patients, both regular and irregular attenders, may be reluctant to raise their concerns about their treatment wishes and management. Careful, attentive listening, followed by sensitive use of appropriately directed questions, is an effective way to discover any underlying or unstated concerns. It is important that patients' views of their dental problem and what they would wish by way of a clinical outcome to solve this problem are understood and recorded at this stage, prior to definitive treatment planning.

The pre-examination information should have been obtained, reviewed and, where appropriate, discussed with the patient. Many clinicians will prefer to carry out the pre-exam at the chairside. Whichever protocol is preferred, it is important that the clinician is aware of the patient's personal details, circumstances, and medical history (see chapter 3).

In this chapter, we look in more detail at:

- Initial discussion – referred to in the previous chapter (chapter 3), where information has been obtained from the patient on a pro-forma.
- Extra-oral examination.
- Intra-oral examination.
- Soft tissue examination.
- Tooth examination.
- Periodontal examination.
- Special tests.

4.2 INITIAL DISCUSSION

In addition to the information gathered from the patient, as outlined in the previous chapter, the clinician should ensure that they are familiar with the patient's details, medical history, dental history, and circumstances. They should also be aware of the patient's reason for attendance. It is often helpful if this is noted by quoting what the patient has said. Where the patient has no complaints, this should also be recorded.

If the patient has any symptoms, the detail about recording this will be noted as described in chapter 6 (Emergency appointments). However, sometimes a patient may report a problem and expect some remedial action at the full exam appointment. The limitations of the appointment should be discussed with the patient, and agreement reached about how to proceed. It may be necessary to deal with the symptoms and defer the full exam to a later visit.

4.3 EXTRA-ORAL EXAMINATION

The clinician should have a routine protocol for carrying out this procedure, thus helping to reduce the risk of omissions. The examination should be recorded as having been carried out, and the presence or absence of abnormality recorded.[2] It is acceptable to use an abbreviation confirming that no abnormality has been found. (see appendix 1). The exam is usually divided into three areas for recording (see below), and each may be further subdivided if the practitioner wishes or if the specific circumstances require further details. (see appendix 7a).

- The face, head and neck should be assessed at each examination, and any abnormalities or changes should be recorded such as swelling, asymmetry or abnormal colouration. Any areas of altered sensation on the face should be documented and may be supported with an illustration. It is recognised that a clinician will not normally seek out areas of numbness unless indicated by the patient or if the clinical situation indicates they should do so, e.g. previous trauma or gross swelling. **B**
- The neck should be palpated for tenderness, lumps, or abnormalities, particularly swelling of lymph glands. The major salivary glands should be palpated and any abnormalities noted. **B**
- The temporomandibular joint (TMJ) should be palpated at rest and during mandibular movements. Abnormal findings such as clicking, grating, limitation of movement, effusions, pain or tenderness must be recorded. **B**
- Practitioners should always be alert to the signs of non-accidental injury, especially in children and vulnerable adults, and appropriate action taken if required.[3] **C**

4.4 INTRA-ORAL EXAMINATION

This is divided into two parts:

- Soft tissues
- Hard tissues.

4.4.1 Soft-tissue examination **B**

A comprehensive and structured screening of the soft tissues of the mouth should be carried out at each course of treatment. Any abnormal or suspicious lesions should be recorded, and a note be made of their size, site, shape, colour and texture. If possible, intraoral photographs should be taken of any abnormal or suspicious lesions to provide visual documentation, and act as a baseline for future comparison. When taking photographs it is advisable to use a ruler to give an indication of the size of the lesion.

The importance of such a clinical examination is recognised by the fact that although many oral cancers arise anew, some oral mucosal diseases predispose to oral cancer. The detection and diagnosis of such potentially malignant disorders (PMD) permits patients to be referred for advice regarding lifestyle modifications and, where necessary, treatment.[4] A significant proportion of the public are unaware of the existence of oral cancer, yet its incidence is increasing, and this is most noticeable in younger age groups. Practitioners should seek specialist advice if white patches, red patches, or ulcers of more than three weeks' duration are present in the mouth. The tongue is the site most commonly associated with lesions, with the lateral borders being especially at risk. Other sites commonly involved are the lip, floor of the mouth, buccal mucosa and retromolar regions.

The major risk factor associated with carcinoma of the lip and basal cell carcinoma on the face is exposure to ultraviolet light. Those who work outside are therefore at increased risk.

Those with increased risk of developing oral cancer are smokers, heavy drinkers, the elderly, those with lower educational attainment and those from lower socio-economic groups. The combination of cigarette smoking and alcohol consumption results in a synergistic effect, giving a relative risk that is multiplied, rather than merely additive.[4] In addition to cigarette smoking and alcohol consumption, the use of betel quid and areca nut is of increasing concern, especially in younger Asian groups. Where patients are diagnosed as having a potentially malignant disorder or suspected oral cancer, they should be referred immediately for specialist advice.

Many other conditions present as soft tissue lesions and, if unsure as to their cause, the practitioner should refer the patient for specialist advice.

RESOURCES

Examples of soft tissue examination checklist and monitoring chart are provided in appendices 8a-8c.

Some software programmes for dental records also have a 'mouth map' and consideration can be given to its use. It is important to diagnose and record findings with regard to possible malignancy. A note should be made if the mucosa is healthy. The scenario below describes a possible situation where this was not done.

SCENARIO

ALLEGATION OF FAILURE TO DIAGNOSE AND REFER ORAL MALIGNANCY

A dentist received intimation from solicitors of a claim against her for failing to diagnose and treat oral cancer. The dentist could not remember the patient, and on examining her records, noted that the patient had been a regular attender who had complained on several occasions of symptoms on the left side of his face.

The notes did not describe the symptoms particularly well; they were not helpful in providing a location or source of pain, and there was no evidence of duration, severity, or nature of symptoms. There was no recording of diagnosis or treatment. Looking back on her notes, the dentist realised they were not adequate. She now remembered the patient, and thought that she had referred him to a local oral surgery unit for treatment of his temporomandibular joint. However, there was no copy of the letter of referral, and no note of a response from the hospital.

The worst failing in these notes in this situation was failure to record any mucosal screening. The dentist said it would have been her normal practice to fully examine the mucosa and she would have noted if any oral lesion was present. However, in the absence of any note there was difficulty in demonstrating she had fully examined the oral mucosa. The hospital records were obtained and confirmed the letter of referral, but it simply asked the hospital to 'treat as necessary', with no evidence of symptoms, diagnosis, or reason for referral. The dentist at the hospital had carried out a full examination and this was recorded in their notes; these demonstrated the presence of an oral lesion in the floor of the mouth. The patient had treatment for oral cancer, which included major surgery and radiotherapy. He felt that earlier diagnosis and referral would have meant this treatment would not have been as invasive.

SUMMARY

It is important to record the outcome of oral screening, even if the findings are negative. If a lesion is present, it should be recorded, with a note of the differential diagnoses. Appropriate treatment should be promptly instigated. If the patient is referred for further advice or care, the referral letter should contain adequate information, including the patient's details, description

of symptoms, possible diagnosis, medical history, and any other relevant information. A copy of the referral letter should be retained within the patient records, and a note made to follow this up if no acknowledgement or response is received within an appropriate period of time. Clearly the monitoring period of urgent referrals such as oral cancer is extremely important, and should be very short in comparison with the response time for cases of a more routine nature. In this instance, it was not possible to defend the dentist due to the serious shortcomings in proving adequate patient examination, and the claim was settled by her indemnity organisation.

4.4.2 Hard tissue – tooth examination

A full dental charting should be recorded, detailing teeth present, current restorations and their material, caries, mobility (if any), missing teeth and details of any prostheses. Details of endodontic treatment and status of root-treated teeth should be recorded (where possible). A note should also be recorded on the occlusion including any evidence of malocclusion, tooth wear and any harmful or parafunctional habits including bruxism or clenching. The findings from a TMJ examination should be recorded (see 4.3).

An examination should detail:

- Teeth present. Notation systems such as the Federation Dentaire Internationale (FDI) tooth-numbering system may be used. Alternative systems can be compared in appendix 14. For absent teeth, see 'prosthodontic considerations' 4.4.4. **B**
- Any prosthesis should be recorded and a note made of its type, material and condition. See also prosthodontic considerations, 4.4.4. **C**
- Previous treatment of teeth, which should include an accurate charting of restorations and the material used. This information gives a benefit of recording aspects of the dental disease history and is useful forensically, particularly in human identification. **B** However, it is recognised that it is not appropriate

to expose a tooth to radiation only for this information.

- The presence and the surface location of caries **C**, and defective restorations **C**.[5] Its early diagnosis is a necessary skill, and this is essential to both a preventative and restorative approach to patient care. A method must be used to record the stage of any carious lesion and the status of any restoration or sealant for each tooth surface (The International Caries and Detection System[6] [ICDAS] is such a method). This allows the dentist to monitor each surface of the tooth over time. It then becomes possible to monitor the effectiveness of any preventive measures. This can also minimise the scale of treatment required, and therefore lessen patient discomfort during treatment. A note should be made of the caries risk.
- Any teeth showing increased mobility. A tooth should be regarded as mobile where there is buccal/lingual movement of the tooth greater than 1mm in response to pressure from a hand instrument on either side of the tooth. It is not necessary to note that mobility is absent, and it would be assumed this is the case unless otherwise mentioned. **C** (See appendix 16).
- Endodontically-treated teeth and any associated signs, such as tenderness to percussion, discoloration, presence of a sinus, or apical tenderness. In the absence of symptoms, it is recognised that it is not appropriate to expose a radiograph only to chart if there has been endodontic treatment. **C**
- Nature of the occlusion **B** and presence of occlusal abnormalities. **C** The relationship and alignment of the dental arches can change throughout life.
- The presence of toothwear that is non-carious loss of tooth tissue. **C**. Toothwear is an increasing problem both in adults and in younger individuals. In a UK sample from the National Survey in 2013, 57% of five-year-olds showed toothwear of their primary incisors; 31% of 15-year-olds showed evidence of erosion of their permanent incisors.[7] Further studies have shown that moderate levels of erosion are common in 14-year-old schoolchildren,[8] and that linkages with acidic dietary intake and soft drink consumption need to be investigated further.[9] There is a need to take an adequate medical and dietary history where there is evidence of toothwear, to establish, where possible, the reason for its occurrence.

Possible aetiological factors include diet (such as carbonated drinks), gastro-oesophageal reflux disease (G.O.R.D), eating disorders and alcoholism. The collection of this data will allow the clinician to give appropriate advice on future prevention. The rate of progression of toothwear should then be monitored. The use of study models, photographs, radiographs (if appropriate), or impression stents may be helpful to this end and form part of the ongoing record.

4.4.2.1 Developing dentition

A full dental charting should be recorded detailing teeth present, missing or partially erupted, including deciduous teeth where relevent. Details of endodontic treatment and status of root-treated teeth should be recorded (where possible). A note should also be recorded on the occlusion including any evidence of malocclusion, tooth wear and any harmful or parafunctional habits including bruxism or clenching.

Evaluation of absent, malpositioned, submerged, unerupted, supernumerary, retained deciduous teeth, or impacted teeth should be systematic and should be recorded.

The monitoring of the developing occlusion in a child is a very important component of primary care. Note should be taken of malocclusions that may require interceptive treatment, including incisor and molar cross-bites, very large overjets and marked potential crowding. In addition, the eruption of teeth, and whether they are erupting at an accepted time, in an accepted pattern, and usually within six months of the contralateral tooth, should be noted.[10] This is most relevant if the child's upper canines have not erupted or are not palpable buccally by the time they are 10 years old, in which case further investigations, including referral, should be considered. The clinician should consider referral for orthodontic opinion at the appropriate time. The anterior teeth of a child should be examined for evidence of trauma and, if noted, the patient and the person with parental responsibility should be asked about any known history of trauma. Although there has been a decrease in the prevalence

of incisal trauma recorded in the latest national survey,[7] it is still a significant problem since 10% of all 15-year-old children show evidence of incisal traumatic injury. Trauma continues to be more common among boys (11%) than girls (8%).[7]

Note: The details of comprehensive occlusal or orthodontic examinations are beyond the scope of this text, but it must be remembered that functional contact between teeth is important, and a thorough occlusal assessment will be indicated in some situations, with referral for orthodontic opinion when relevant.

4.4.3 Periodontal considerations

Periodontal disease can be present at any age, and in different ways. The presence of a biofilm (previously referred to as plaque) in the gingival sulcus will lead to inflamed gingiva (gingivitis). At susceptible sites and in susceptible patients, gingivitis can progress to periodontitis, leading to loss of attachment, bone loss and, at an advanced stage, tooth loss.

There is considerable variability in the response of individuals to the microorganisms in their oral biofilm. Probing to determine clinical attachment loss, and to detect any sites with bleeding on probing, coupled with appropriate radiographs, is the preferred way to assess the disease.[11,12] From these assessments the clinician derives an understanding of what type of periodontal disease is present, where it is located, and its severity. These details subsequently form the basis upon which a treatment plan is formulated and, after treatment, can be extremely useful in evaluating treatment outcomes and progression or recurrence of disease.[12]

The starting point for all periodontal examinations should be a screening or basic periodontal examination (BPE) **B**, to identify those patients who require a more detailed examination. This is described more fully in appendix 9a. It may sometimes be pertinent to delay acting on pocket depth recording arising from BPE scores until basic oral hygiene has been established, to allow resolution of gingival inflammation

and associated swelling; which should be noted. However, if on subsequent short-term review a score still indicates further detailed exam is necessary, it should then be carried out and noted.

In addition to BPE, periodontal examination will include a periodontal charting where indicated. (Appendix 4d provides an example of a full periodontal chart). Such charting should include a six-point per tooth depth chart and also the presence of bleeding. The periodontal examination should consider the colour and form of the gingivae, any calculus, sensitivity, bleeding on probing, exudate, mobility and furcation lesions. Halitosis should be noted along with the potential for perio-endo involvement, and vitality testing should be considered. An evaluation of the patient's home care can also be undertaken. Plaque scores, oral hygiene measures (brushing, type of toothpaste, etc), and bleeding scores should be included when relevant. BPE guidelines no longer require a sextant six-point chart for BPE 3 until evaluation post-initial therapy. BPE 4 continues to require full mouth six-point charting from the outset

If the patient is referred to a dental hygienist or dental therapist, a written diagnosis and treatment plan should be provided. (see chapter 7). The treatment plan for a hygienist or therapist should be reviewed periodically by the dentist. When a patient goes directly to the hygienist/therapist the records should include a written diagnosis and treatment plan.

Depending on the extent of the disease and the experience and competence of the clinician, it may be prudent to consider referral for specialist advice and/or treatment. Detail of a full periodontal exam is beyond the scope of this book, and further information should be obtained from relevant texts and specialist societies. The British Society of Periodontology provides guidelines for referral of patients in need of periodontal treatment in a secondary care setting (see appendix 9b).[12]
The scenario below occurred when the dentist failed to carry out appropriate review and notes.

SCENARIO

SUPERVISED PERIODONTAL NEGLECT

A 45-year-old patient had attended the same dentist regularly since childhood. When the dentist retired, the patient continued to attend the practice and was examined by the new dentist.

The examination was thorough, and the notes, included:

- Extra-oral examination.
- Mucosal screening – soft tissue examination.
- Periodontal screening.
- Confirmation of charting.

Radiographs had not been taken for some time, and based on clinical findings, periapical films were taken. The patient had many old fillings, most of which were reasonably serviceable. The dentist was concerned by the BPE scores below:

4	2	4
4	4	4

and anxiously awaited the radiographs. When she looked at them (Figure 1), she was astonished at the loss of bone from around the teeth.

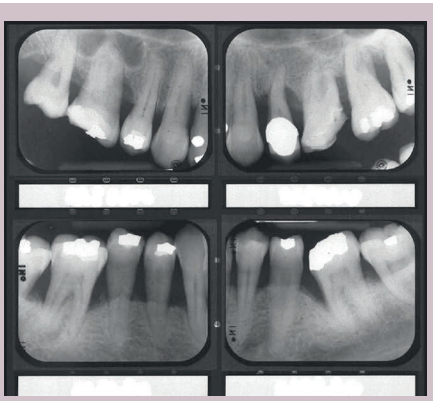


Figure 1

The patient was informed of his periodontal condition and advised of the poor prognosis of several teeth. A course of hygiene phase therapy was started, and he responded well. A note was made of the periodontal pocket depths (Figure 2). As well as recording the present condition, this was useful as a baseline charting, allowing future comparison and measurement of progress.

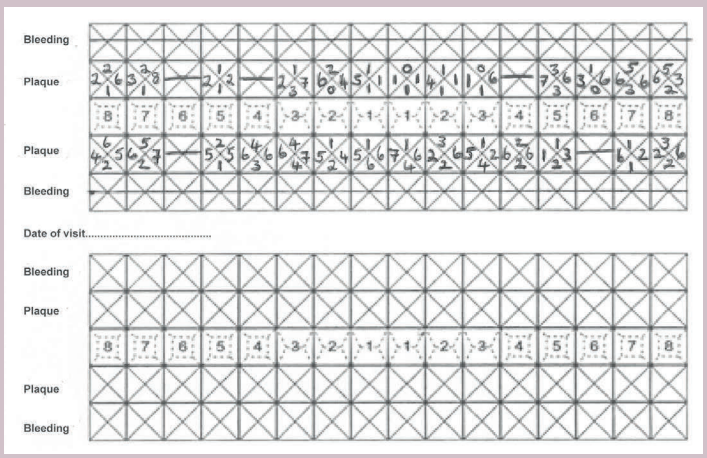
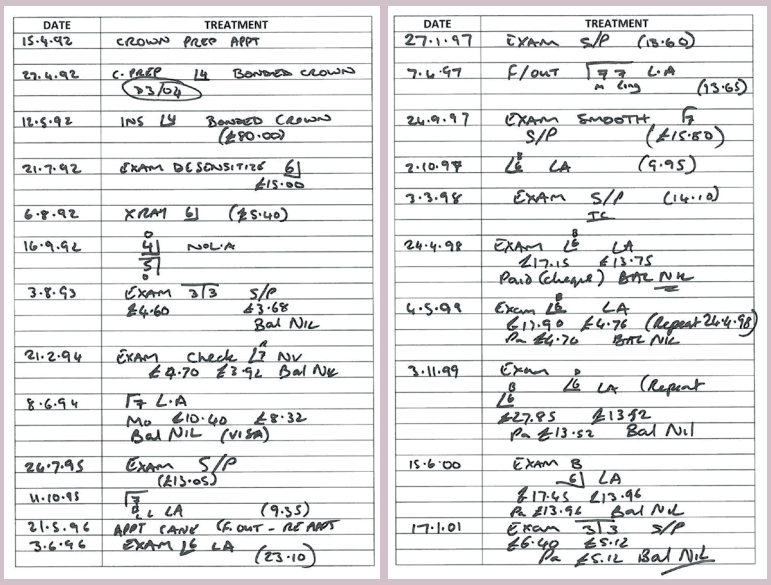


Figure 2

The patient was, not surprisingly, concerned about his periodontal condition, and asked how long it had been present. The new dentist looked at the old dental records (Figure 3), and realised their shortcomings. They did not show any periodontal screening, nor record any advice given to the patient about oral hygiene. There was no medical history form. The new dentist had a first duty to the patient, and not to the previous dentist. In answering the patient's question, she therefore advised him of the evident previous lack of periodontal care.



DATE	TREATMENT
15.4.92	CROWN PREP APPT
22.4.92	C. PREP 14 BONDED CROWN D3/04
12.5.92	INS 14 BONDED CROWN (£80.00)
21.7.92	EXAM DESENSITIZE 6| £15.00
6.8.92	XRAM 6| (£5.40)
16.9.92	4| 5| NOL.A
3.8.93	EXAM 3|3 S/P £4.60 £3.68 Bal NIL
21.2.94	EXAM Check 7 NV £4.70 £3.92 Bal NIL
8.6.94	7 L.A Mo £10.40 £8.32 Bal NIL (VISA)
26.7.95	EXAM S/P (£13.05)
11.10.95	7 L LA (9.35)
21.5.96	APPT CANC CF OUT - RE APPT
3.6.96	EXAM 6 LA (23.10)

DATE	TREATMENT
27.1.97	EXAM S/P (18.60)
7.6.97	F/OUT 7 7 L.A M Cing (13.65)
24.9.97	EXAM SMOOTH, S/P (£15.50)
2.10.97	6 LA (9.95)
3.3.98	EXAM S/P (14.10) IC
24.4.98	EXAM 6 LA £17.15 £13.75 Paid (cheque) BAL NIL
4.5.99	Exam 6 LA £17.90 £4.76 (Repeat 24.4.98) Pa £4.76 BAL NIL
3.11.99	Exam 6 LA (Repeat 6 £27.85 £13.92 Pa £13.92 Bal Nil
15.6.00	EXAM B 6| LA £17.45 £13.96 Pa £13.96 Bal NIL
17.1.01	EXAM 3|3 S/P £6.40 £5.12 Pa £5.12 Bal Nil

Figure 3

The patient responded well to treatment from the hygienist and the dentist, which showed that he could have avoided his periodontal problems had early advice been given to him. Despite this, he lost several teeth, and some of those remaining had a poor long-term prognosis. The restorative plan included implants and superstructure to replace the lost teeth. The patient sought legal advice, and his solicitors raised an action in negligence against the former dentist. The dentist's indemnity company examined the records, and in view of the lack of information about periodontal screening or oral hygiene advice, realised that they were unable to defend the claim. Additionally, the patient's solicitors had a strong argument for a sizeable claim for pain and suffering, general inconvenience, and the cost of remedial treatment. The claim was settled for £80,000 (as valued in 2015).

SUMMARY

It is important to examine patients regularly and thoroughly. A patient must be advised of any adverse findings and these should be noted on the records. Any necessary treatment should be recommended. This should include options, with their risks and benefits, along with a note of the patient's decision. If the patient declines treatment, or does not comply, this should be noted.

Images courtesy of The Medical and Dental Defence Union of Scotland

4.4.3.1 Children and adolescents

Periodontal screening for children and adolescents assesses six index teeth (UR6, UR1, UL6, LL6, LL1 and LR6) using a simplified BPE to avoid the problem of false pockets. The WHO 621 style probe with a 0.5mm ball end, black band at 3.5-5.5mm, and additional markings at 8.5mm and 11.5mm, is used. BPE codes 0-2 are used for 7 to 11 year olds while the full range of codes 0, 1, 2, 3, 4 and * can be used for 12 to 17-year-olds (see Figures 1 and 2, in appendix 9c).[13] Cases that warrant specialist referral are shown in appendix 9c.

4.4.4 Prosthodontic considerations

Where patients are wearing removable prostheses, these should be examined **C**, and deficiencies in function and aesthetics recorded. Patients should be asked for their assessment, which should also be taken into consideration during treatment planning. An assessment of the dentures should include examination of:

- Appearance.
- Charting of teeth on the prostheses.
- Material.
- Freeway space.
- Occlusion, including centric relations (retruded contact position), displacements, premature contacts, and interference.
- Problems with speech.
- Retention, stability, extension.
- Periodontal consequences.
- Review of the denture bearing areas, noting undercuts, tori, and other bony or soft tissue lesions.

4.4.5 Endodontic considerations

As patients are retaining their teeth for longer,[14] it is likely that more patients will have received endodontic treatment. It is important to monitor the periapical condition appropriately, and to record findings such as tenderness, mobility, swelling or sinuses. It is useful to note if no symptoms are present. **B** It is acceptable to consider that in the absence of recorded symptoms or findings (given the already noted examination of oral mucosa), that there are no clinical findings. Where radiographs are available or have been taken, an assessment of the quality of a root treatment can be made and unexpected findings noted, e.g. presence of a fractured instrument, apical pathology, or perforations. It may not be possible at a full examination to establish which teeth have been root-treated and it is recognised that it is not appropriate to take a radiograph only for this information. Appropriate radiographs should be taken if clinically indicated (see FGDP(UK)'s publication, *Selection Criteria for Dental*

Radiography),[15] and consideration should be given to obtaining radiographs from a patient's previous practice. C

If considering root treatment as part of the treatment options, a note should be made of the perceived difficulty, and prognosis; this could be part of the radiography report.

4.4.6 Orthodontic considerations

A comprehensive examination will not normally include a full orthodontic assessment and this assessment is outside the scope of these guidelines. Note should be taken of significant abnormalities in the occlusion which have a bearing on other problems and may require referral for specialist advice, such as large overjet (forward or reverse), traumatic overbite, open bite, crossbite, marked crowding, spaces, missing teeth or delayed eruption. Assessment should include palpation for the presence of the developing maxillary canine teeth in the buccal sulcus to ensure they are in the expected position. See 4.4.2.1.

The Index of Orthodontic Treatment Needs (IOTN) is included in appendix 12, and this will assist discussion with the patient, and parents/guardians, regarding a possible need for further specialist advice or treatment.

Some adult patients may be undertaking orthodontic treatment and their preventive regime should be reappraised. The contact details of the orthodontist should be noted with a written authority to correspond with the orthodontist secured if it is necessary to discuss any aspects of the orthodontic treatment. If orthodontic treatment is being considered as part of the treatment by the dentist carrying out the examination, a separate orthodontic examination would need to be undertaken in addition to the comprehensive examination discussed.

4.5 SPECIAL INVESTIGATIONS

In certain circumstances visual inspection alone does not provide sufficient information to formulate a treatment plan and special investigations are required. These may include radiographs, vitality tests and checking for cracked teeth or cusps. The outcomes should be recorded.

4.5.1 Radiographs

The use of radiographs for dental applications is covered by the Ionising Radiation Regulations 1999 and the Ionising Radiation (Medical Exposure) Regulations 2000 (IRMER).[16,17] Although there is no requirement for the explicit recording of the justification it is recommended that this should be done unless the justification is obvious from the records. There is however a regulatory requirement for reporting of the radiograph. A quality assurance programme should be established to optimise the quality of radiographs produced. Full details are provided in the Department of Health's *Guidance Notes for Dental Practitioners on the Safe Use of X-ray Equipment.*[18]

Justification: No person shall carry out a medical exposure unless it has been justified by the practitioner as showing sufficient net benefit. When referring a patient, the referrer must supply details of the patient's radiographic history to the receiving practitioner.

Optimisation: The practitioner and operator shall ensure that doses arising from the exposure are kept as low as reasonably practicable, consistent with the intended purpose.

Clinical evaluation (reporting): All radiographs must be reported. Dates, causes and repeat exposures should be recorded for any whose quality renders it of no diagnostic value.

Quality assurance: It is essential that a quality assurance programme is set up, and

that every radiograph is assessed for quality. Factors such as correct positioning, contrast and processing are assessed. This should be seen as a feedback mechanism for improving the quality of radiographs and as assisting in the detection of deficiencies in the current systems. A simple grading system (1 = no faults, 2 = faults but still of diagnostic value, 3 = of no diagnostic value) is helpful.

The following sections give only a very brief overview of guidelines published by the FGDP(UK) in *Selection Criteria for Dental Radiography*,[15] and the reader is encouraged to refer to this for more detailed consideration.

4.5.1.1 Radiographs and caries diagnosis

Bitewings have been shown to be of benefit for caries detection on both approximal and occlusal surfaces.

Patients are assessed for caries risk (see appendix 5) and placed into high, moderate or low caries risk groups. For patients with high caries risk, bitewings are indicated at six-monthly intervals until lesion progression has stopped and no new lesions are detected. Yearly bitewings are indicated for patients in a moderate caries risk category. For adults with a history of low risk, this period may be extended and it is appropriate to record if there has been a considered deviation from the guidance. For example, if a patient does not wish to have further exposure to radiation, or if the clinician considers there will be no diagnostic gain. The extended period should not be beyond two years unless there is 'explicit clinical evidence of continuing low caries risk.'[15]

It is recommended that children with a low caries risk should have bitewings taken at 12-18-month intervals in the deciduous dentition, with this period extending if there is evidence of continuing low caries risk.[15]

4.5.1.2 Radiographs and periodontology

The use of radiographs should be regarded as secondary to a clinical examination in the diagnosis of periodontal disease, and radiographs should only be taken after a thorough clinical examination has indicated their use as an adjunct. Bitewings, periapical radiographs and panoramic radiographs have all been recommended for use in periodontology. Horizontal bitewings are recommended if pocketing is limited to less than 5mm and there is little/no recession. For greater depths of pocketing, vertical bitewings or periapical radiographs are indicated. Panoramic radiographs can be considered an alternative to numerous intra-oral radiographs. However, there are limitations to the fine detail achievable with many panoramic machines. This may necessitate supplementary intra-oral radiographs, thereby negating any dose-reduction benefits of panoramic radiographs. Digital radiographs may offer improved measurement accuracy. Cone beam computed tomography (CBCT) may offer greater accuracy than conventional two dimensional intra-oral images compared with conventional radiographs, however it is not indicated as a routine method of imaging periodontal bone support.[15]

4.5.1.3 Radiographs and endodontics

Radiographs are essential for endodontic treatment to assist in diagnosis and treatment planning, and also in surgical and non-surgical endodontic care. The preoperative radiograph will confirm the diagnosis and reveal possible difficulties to be encountered during root treatment. A tooth should only be considered for root treatment if it is restorable, and has reasonable prognosis. Treatment planning should consider dental care as part of the patient's overall health. Following endodontic treatment, an immediate post-treatment radiograph is required to assess the quality of obturation and surgical treatment, and to act as a baseline for review and follow-up radiographs. Some clinicians recommend taking a follow-up radiograph after one year, even if teeth are asymptomatic, although ideal follow-up remains controversial. Follow-up clinical assessment is important and the findings should be recorded. The healing processes may take up to four years. Teeth that remain symptomatic or had

large areas of pre-treatment pathology may require more frequent radiographs.[15]

4.5.1.4 Radiographs and orthodontics (management of the developing dentition)
If a routine dental examination indicates that an orthodontic opinion may be appropriate then radiographs, for orthodontic purposes, should not be taken at this stage. The appropriate radiographs should be part of a full orthodontic assessment and prescribed by the clinician carrying out the assessment.[19] However, any relevant radiographs that have been taken should be forwarded, with the clinical information, when a referral is made.[17]

For orthodontic purposes, radiographic examination in general dental practice may be appropriate to investigate abnormal delay in permanent tooth eruption. When individual teeth are involved, intra-oral periapical radiographs are most appropriate. The inability to palpate the upper canines in the buccal sulcus from 10 years of age onwards may be an indication for such radiographs.[20]

4.5.2 Study models

Study models provide valuable information not readily obtained clinically. They are essential in the analysis and planning of many forms of treatment including monitoring of toothwear, and helpful when teeth are to be replaced in a partially dentate patient and when the occlusion is to be changed. They are also essential in assessment for orthodontic treatment. Study models should be mounted on an articulator. See chapter 2.5 for consideration of the storage of study models.

4.5.3 Vitality tests

These may be taken to assist in making a diagnosis. There are several methods of vitality testing, and the method and outcome should be noted, whether positive or negative.

4.5.4 Test for cracked cusps

There are various methods of checking for cracked cusps in teeth, including transillumination, magnification, tenderness to percussion, and various biting devices. The type of test and the outcome should be recorded, including positive and negative for particular cusps.

4.6 RECORDING OF INFORMATION

4.6.1 Recording of examination information

Findings of extra-oral and intra-oral clinical examinations should be recorded. The method of recording may be standardised using diagrammatic charts to allow rapid and simple comparison in the future.

An evaluation of the periodontal status should be noted. A BPE may be adequate, however, if indicated, further details should be charted, including location, measurement of pockets, gingival bleeding, mobile teeth, furcation involvement, suppuration, trauma and any disease process present.

Any existing radiographs should be reviewed, and the need for further radiographs and any other special tests should be recorded, together with their results.[9]

Lastly, there should be a short summary of observations and comments pointing towards the recording of a definitive and differential diagnosis.

4.6.2 Recording of treatment plan

Treatment options given to, or discussed with, the patient should be noted. The amount of information recorded may vary according to patient and treatment need. Practitioners will have their routine for discussing treatment options with each patient, and at a basic level, in many cases, a brief note will indicate that there has been a relevant discussion of risks and benefits (including all those which the patient

would consider material);[22,23] this being part of the process of information given to a patient to enable them to make a valid decision on what treatment to have.

In complex cases, more specific detail about the risks and benefits should be recorded. Although this is time-consuming, the notes should represent a reasonable summary of the discussion and make reference to all of the key issues discussed. It is recommended that in cases of complex restorative treatment or provision of implants, the records, possibly by way of retaining copies of correspondence with the patient, demonstrate more fully the options discussed, along with their risks and benefits. In order to demonstrate that valid consent has been obtained it is necessary to be able to show that the patient has had a detailed discussion about the proposed treatment, its material risks and benefits including all of the alternatives, and has understood the conversation. This discussion needs to be recorded in the notes. It is suggested for complex treatments written consent should be obtained. It is a legal requirement to have written consent for treatment under sedation or general anaesthesia, and this must be obtained. It may also be helpful to record a patient's reason for selection and/or rejection of a particular option of treatment. Once the process of examination, discussion and agreement of treatment plan has been completed, a written treatment plan and estimate should be prepared. The patient should sign this and it should be retained by the practice, and a copy given to the patient.The treatment plan should set out in a logical sequence the proposed method for dealing with the patient's dental problems, and describe the anticipated outcomes of treatment. It should also be noted that definitive treatment may be influenced by the success of the initial phases of treatment. The treatment plan should provide an estimate of costs for each item of treatment, and indicate clearly if treatment is to be carried out under NHS regulations, or on a private basis.

The following scenario shows what can happen if treatment is not properly recorded, and it can be difficult to defend an allegation that all information was provided to the patient to allow them to make their choice of treatment.

SCENARIO

POOR RECORDING OF TREATMENT PLAN AND RELATED CONSENT

A patient attended for examination and it was agreed to provide immediate dentures. The patient seemed pleased at the early stages of treatment, during which impressions, bite, and try-in had been completed.

The patient returned for extractions and fitting of the dentures; all the remaining teeth were removed. When the dentist started to fit the dentures, he realised that he had a complete upper denture, but the partial lower denture contained only the posterior teeth.

To confuse the situation further, the patient said she had understood that some retained upper roots and only the lower back teeth were to be removed. She emphasised that she thought the lower front teeth 'were OK'. Conversely, the dentist maintained that all teeth were to have been removed, and that the technician had not carried out instructions correctly.

To try and resolve matters, the records were examined. Sadly there were some serious shortcomings:

- No treatment plan was recorded other than 'immediate dentures'.
- The laboratory prescription did not state the dentures to be provided, nor the teeth to be extracted.
- It was not possible to establish why the technician had considered some lower posterior teeth were to be removed, but anterior teeth were to remain.
- The dentist had no evidence or recollection of his initial meeting with the patient other than that he had understood complete clearance had been agreed.
- It was impossible to determine the treatment plan.

On receipt of a claim, the dentist's indemnity company reviewed matters, and in view of the poor record-keeping, made a prompt payment to the patient, as she had suffered the needless loss of several teeth.

It is astonishing that the patient had been unaware that her lower anterior teeth were being extracted! Perhaps this demonstrates the trust of the patient in the dentist to act correctly.

SUMMARY

The records should clearly record diagnosis, treatment options and the treatment agreed with the patient. A treatment plan should have been given to the patient confirming costs. There should be evidence of clear communication with the patient in agreeing the treatment plan. Where laboratory work is involved, the prescription should be retained as part of the record and should clearly show the instructions to the technician. In this case it should have included details of the prostheses to be provided along with a note of teeth to be extracted.

4.7 PROGRESSIVE NOTES

The clinical record is a dynamic document that will record the progress of an individual course of treatment, as well as any subsequent course(s) of treatment. These progressive notes must include (but not limited to):

- Date of treatment.
- Type of treatment, noting each tooth or anatomical feature involved. It may be helpful to provide a reason for the treatment if this is not obvious from the diagnosis or treatment plan.
- Note of local anaesthetic given. This should include the generic name and concentration of the agent, and estimate of dose. The site should be recorded if not obvious from the treatment provided. It is not necessary to include the batch

number of local anaesthetic as this can be traced if necessary through the practice invoice or stock control system.[21]

- Any further discussion with the patient about the item(s) of treatment, including any changes to the agreed treatment plan.
- Medication dispensed or prescribed, including details of the dosages.
- Where controlled drugs are prescribed and dispensed, the records in the practice (the log) and the patient record should comply with the regulations.
- In endodontics, a note of the irrigant materials should be made.
- Any adverse reactions or problems encountered.
- Post-operative care advice and/or warnings given.
- Written report of radiographs taken during a visit.
- Signed by clinician (printed if necessary) and note the assistant.

FULL EXAMINATION – SUMMARY OF RECOMMENDATIONS

KEY:	A – Aspirational	B – Basic	C – Conditional

Personal Information	**Details checked/ updated**	**B**
Medical History	**New form completed or updated**	**B**
	Dated and signed by patient and clinician	**A**
Extra-oral Examination	**Face, head**	**B**
	Neck	**B**
	TMJ	**B**
	Rest of body	**C**
Intra-oral Soft Tissue Examination	**Soft tissues**	**B**

Intra-oral Hard Tissues	
Charting of teeth present	**B**
Existing restorations	**C**
BPE	**B**
Previous endodontic treatment	**C**
Caries	**C**
Defective restorations	**C**
Mobility	**C**
Prostheses	**C**
Occlusion	**B**
Occlusal abnormalities	**C**
Toothwear	**C**
Radiographs	**C**
Periapical condition	**B**

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5 RECALL VISIT

This is the return for examination of a patient who was dentally fit or had received all the the treatment they were prepared to accept after their previous examination.. The recall interval should have been determined at the end of the previous course of treatment, and should be recorded.

5.1 QUALITY OF EVIDENCE ON RECALL INTERVALS

The level of the evidence available on recall intervals in a majority of published studies is mainly the opinion of a respected individual or body. Some papers are observational. There are very few scientifically rigorous studies that bear directly on this topic. In any case, many of the papers found were published in the 1970s and 1980s, and may not take into account subsequent changes in oral disease patterns.

The papers approached the topic under two broad headings: firstly, frequency of attendance for dental examination in terms of best use of available resources/ workforce and, secondly, in terms of screening, especially for dental caries. This issue is contentious and views are polarised. The first approach is valid for those planning and commissioning services where it is argued that more extended intervals should be used, which might produce cost savings with little overall impact on oral health. The second approach is more relevant to the monitoring of oral health and the provision of appropriate care by promoting a preventive approach to disease management and to secure continuity of care. Reviews have shown there is little evidence to support or refute the practice of encouraging patients to attend for six-monthly dental check-ups.[1–5] The guidance provided in this book puts the patient first, and practitioners should bear this in mind when discussing the recall interval with the patient.

5.2 FREQUENCY OF RECALL EXAMINATIONS

5.2.1 Adults

The recommended length of time between dental examinations has been an area of some contention for many years. The dental practitioner may face accusations of overtreatment at one extreme, and supervised neglect at the other. At the time of writing, the scientific basis for the evaluation of examination frequency is not robust enough to be used alone, without and some subjective judgements being employed by the clinician. However, the following should be taken into consideration when deciding on the appropriate recommendation for a patient:

- Predisposition to disease. **A**
- Disease experience. **A**
- Deterioration or control of disease since the last examination. **A**
- Past dental history – especially important for complex dentistry, where early detection of failure can be very important. **C**
- Ability to maintain an oral hygiene regimen and sensible dietary habits. **C**
- Risk factors including oral cancer, from other disease processes such as smoking, alcohol consumption, parafunction, relevant medical conditions/medication, and paan chewing (betel nut). **C**
- Patient expectations. **A**
- Lifestyle changes (such as leaving home, going to university or retirement), which carry the possibility of dietary changes or medications which can affect oral health. **C**
- Orthodontic treatment which may be an increased risk factor. **C**

The process of deciding a reasonable interval between dental examinations is multifactorial. The above list is not exhaustive, and provides only an indication of some of the factors, which must be taken into account. The practitioner should undertake a needs assessment exercise for each individual patient, discuss the findings, agree the recall interval with each patient, and record the outcome. It may be helpful to use a 'Decision Support Grid' (appendix 6) to establish the recall interval.

RECOMMENDATION

Practitioners must make a clinical decision on the suitable recall interval for each individual patient.

5.2.2. Children

There is also considerable debate, with little factual basis, regarding the benefits of a specified recall period for children. There is such variation in the circumstances pertaining to an individual child that social, rather than medical, conventions probably have a greater importance in setting the recall interval. Six months is a convenient interval and provides continuity of care. Child patients for whom underlying conditions require additional demands, or local disease (including caries) is progressing rapidly, will need to be seen at intervals far shorter than this, at the clinician's discretion.

Milestones in dental development (e.g. expected eruption of particular primary and permanent teeth, detection of displaced permanent canine teeth) should trigger recall of children under regular care. There is merit in the concept of specific 'age milestones' at three, six, nine and 12 years.

Particular attention should be paid to the eruptive sequence of teeth, especially with regard to symmetry or where an individual tooth is more than six months delayed, and the outcome recorded.

Where a child shows obvious signs of active oral disease or its predisposing factors – a high level of individual or family decay experience, poor oral hygiene, enamel demineralisation, high sugar intake – reviews at not greater than four-month intervals are required (shorter intervals as necessary) until the factors are controlled.

5.2.3 Patients with special needs

Special needs patients should be seen on review or recall at intervals directly related to the severity of their underlying impairment and the oral findings. It may be prudent to take advice from a special care dentistry specialist regarding the appropriate recall regime for individual patients.

5.3 CLINICAL EXAMINATION

Wherever possible, a review patient should be seen by the same clinician, not only to increase patient confidence but also to aid comparison with the previous examination.

Adequate time should be allowed for the examination, to re-establish rapport, update administrative and clinical findings, and reinforce preventative instruction where required. This may be carried out by a suitably trained DCP, and the clinician informed of the outcome. A note should be made confirming any changes or no change to records, which should be available to allow comparison with previous findings.

The items in the pre-exam (see chapter 3), except the medical history, should also be checked and any change noted. The patient does not need to complete another form, provided the details of the original are checked verbally.

The medical history should be confirmed with the patient. A new form can be completed, dated, and signed by the patient and by the clinician, as in chapter 3. (In computerized records initialling may not be possible – see chapter 8). Alternatively, the previous form can be updated by the patient, checked on behalf of a clinician by a suitably trained DCP who should verbally update the clinician of changes, including that there has been 'no change', and confirm this action by initialling the record. The clinician should discuss changes with the patient. The form should be dated and initialled by the patient (if possible) and clinician.

A history of any problems the patient might have experienced since the last examination should be noted.

5.3.1 Extra-oral examination

An extra-oral examination should be carried out again (as described in chapter 4 and appendix 7a). If information is unchanged, a simple note to this effect is all that is required.

The appearance of the face, head and neck should be assessed, noting any abnormalities such as swelling, asymmetry or abnormal colouration. The extra-oral examination is completed by palpation of the neck and TMJ (see appendix 7a). The practitioner should have a structured procedure for carrying out the exam, thus helping to ensure no areas are missed. The examination should be recorded as having been carried out, and the presence or absence of abnormality noted. It is adequate to confirm no abnormality found by the use of an abbreviation (see appendix 1). Practitioners should always be alert to the signs of non-accidental injury, especially in children and vulnerable adults, and appropriate action taken or advice sought, and documented, if required.

5.3.2 Intra-oral examination

5.3.2.1 Soft-tissue examination

This examination is the same as described in chapter 4. If information is unchanged, a simple note to this effect is all that is required.

A comprehensive and structured screening of the soft tissues of the mouth should be carried out as part of a routine dental check-up (see appendix 7b). Any lesions should be recorded, noting their size, site, shape, colour and texture. Appendix 8b includes a sample mouth map. If available, intra-oral photographs should be taken of any unusual features to provide visual documentation, and as a baseline for future comparison. Many conditions present as soft tissue lesions and if unsure as to their

cause the practitioner is recommended to refer the patient for specialist advice.

5.3.2.2 Hard tissue – tooth examination

As a full charting (described in 4.4.2) will be available, only any changes require to be noted. These may arise if the patient has attended another dentist in the interim. It is important to check the chart has been updated with treatment carried out from the previous course of treatment, from any emergency visits since then, or from treatment received elsewhere.

The items to be examined are noted below, and fuller description is contained in chapter 4.

A recall examination should confirm the following:

- Teeth present and absent. **B**
- The presence, degree of severity, and surface location of caries. **B**
- The periodontal status and any changes from the previous examination. **B**
- Previous treatment activity relating to the teeth. **C** (This should include the location of restorations and the material used, i.e. a note of the history of restorations to each tooth).
- Any tooth mobility (See Appendix 16). The practitioner should ascertain the reason for the mobility, and whether or not it is increasing. **C**
- The condition of endodontically-treated teeth. **C** (This should include a note of symptoms. It is assumed that if no note is present they are symptom-free).
- Any malocclusion. The relationship and alignment of the dental arches can change throughout life. This is particularly relevant to the periodontal patient. **C**
- The presence of non-carious toothwear. This should be compared with previous status. **C**
- There should be a systematic re-evaluation of absent, malpositioned, submerged, unerupted, supernumerary and retained deciduous, or impacted teeth. **C**

5.4 DIAGNOSIS

The diagnosis of the patient's presenting condition, including caries risk, should be recorded.

5.5 TREATMENT PLAN

Following examination, any treatment options, their risks and benefits should be discussed with the patient, including the option of no treatment. A written treatment plan should be constructed, agreed with the patient, and placed in the notes, with a copy given to the patient (see appendix 4). This plan should set out in a logical sequence the proposed method for dealing with the patient's dental problems and priorities. Where a patient fee is due, this should be recorded for each item of treatment, and included in the agreed treatment plan. A note should be made of the reasons for selection or rejection of alternative treatment options.

In order to demonstrate valid consent has been obtained, it is necessary to be able to show there has been a detailed discussion about the proposed treatment options, their risks and benefits including all of the alternative treatment and the option of no treatment, and that the patient has understood the conversation. A resume of this discussion should be recorded in the notes (see appendix 13, consent). It is suggested that for complex treatment or where specific risks are involved, or other regulations stipulate, such as in oral surgery, then written consent should be obtained. It is a legal requirement to have written consent for treatment under sedation or general anaesthesia and this must be obtained

5.6 FUTURE RECALL INTERVAL

The patient should be informed that future recall examination and monitoring is based on a risk assessment, which takes into account frequency of radiographs, oral cancer screening and more, as described earlier. The records should note any change to the previously recorded recall interval.

5.7 CHILDREN

The 'pre-exam' and examination should be carried out (as described earlier).
In addition, the occlusion and eruption of teeth should be monitored, and the caries risk should be recorded as described in this chapter, and in chapter 4.

RECALL VISIT – SUMMARY OF RECOMMENDATIONS

KEY: A – Aspirational B – Basic C – Conditional X – Check

Personal Information	
Name	X
Address	X
Date of birth	X
Phone numbers	X
Contact method	X
Child – parental contact	X
Patient dependent on someone	X
Email	X
Emergency contact	X
General Medical Practitioner	X
Relevant Specialist Practitioner	X
NHS identification number	X
Occupation	X
Signature for verification	X
Details checked/updated	X

Medical History	
New form completed or updated	B
Dated and signed by patient and clinician	A

Socio-behavioural History	
Smoking	X
Alcohol consumption	X
Dietary information	C
Contact sports	X
Musical instruments	X

Previous Dental History	
Chewing unrestricted	X
Oral hygiene routine	C

Factors Affecting Appointment	
Timing	
Mobility	X
Carer to be present	X
Reason(s) for attendance	B
Payment method	B

Extra-oral Examination	
Face, head	B
Neck	B
TMJ	B
Rest of body	C

Intra-oral Soft Tissue Examination	
Soft tissues	B

Intra-oral Hard Tissues periapical condition	
Charting of teeth present	B
Existing restorations	X
BPE	B
Previous endodontic treatment	C
Caries	B
Defective restorations	B
Mobility	C
Prostheses	C
Occlusion	C
Occlusal abnormalities	C
Toothwear	C
Radiographs	C

Recall Examination	
Predisposition to disease	A
Disease experience	A
Deterioration or control of disease	A
Dental history	C
Risk factors	C
Patient expectations	A
Lifestyle changes	C
Orthodontic treatment	C
Absent, malpositioned, submerged, unerupted, supernumerary and retained deciduous, or impacted teeth	C

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6 RECORD-KEEPING AND CLINICAL EXAMINATIONS IN SPECIAL SITUATIONS

Examination and record-taking for patients attending for emergency/unplanned visits should focus on the identification of the cause, and appropriate management of the presenting complaint. A medical history must be taken, and updates must be recorded, and signed as described previously. Adequate notes must be made. and appropriate follow-up care should be arranged. If a full examination is required, the patient should be advised and this should be noted.

6.1 EMERGENCY PATIENT

The emergency examination and related treatment should focus on the identification of the cause of the patient's complaint, and appropriate management, with a view to resolution of symptoms. Broadly there are two categories when this situation arises, and they will be dealt with separately later (in 6.3 and 6.4), although there is much in common with each exam. The categories are:

- Dental emergencies, such as toothache, swelling, abscess, broken tooth, loss of crown, etc.
- Trauma, such as assault, sports injury, road traffic accident, falling, etc.

The records should make clear that this is an emergency appointment.

6.2 GENERAL CONSIDERATIONS – PRE-EXAM

6.2.1 Relevant information

In all cases, the relevant information (described in chapter 3) should be obtained. As the appointment should be focussed on the categories described in 6.1, only relevant information is necessary. These should include:

- Personal information
- Medical history
- Relevant socio-behavioural history.

The medical history must be taken, or updated, dated and signed by patient and dentist.

6.2.2 Dental visits elsewhere

If a patient attended a different practice or hospital prior to presentation, details should be recorded. Any information such as radiographs, should be sought as appropriate, although it is appreciated they may not be available at this visit.

In all cases, the reason for the patient's attendance should be established and noted; it is often helpful to quote the patient's own words in the records.

The scenario below shows what can happen if information is not properly recorded.

SCENARIO

EMERGENCY APPOINTMENTS

A patient attended frequently, always as an emergency; he had problems with swellings at various sites in his mouth. On each occasion the dentist saw him promptly, examined the problem and prescribed antibiotics. The patient was always invited to return for a full oral examination, but failed to do so.

In due course the patient attended another dentist, who, as part of the visit carried out an examination; this included radiographs. The patient was advised that he had various problems which required attention, and that he should arrange an appointment for treatment. The patient somehow felt more confident with this new dentist, and returned for treatment; this included some extractions, root treatments, crowns, and numerous fillings. He asked the new dentist why the previous dentist had not recommended treatment or carried it out. Sadly, the new dentist was critical of the former dentist for not advising the patient of his problems, and for not providing treatment. The patient subsequently took up his concerns with the former dentist via a solicitor.

The indemnity organisation looked at the records of both dentists. With the first dentist, there had been irregular prescribing of various antibiotics, and the reason for prescription was not always evident; sometimes there was recording of a swelling, or abscess, but there was no diagnosis. However, despite this, it was clear that the emergency treatment was satisfactory in itself; the patient agreed that symptoms had resolved to the extent that he never returned for follow-up or definitive care, despite being advised to do so, and only returned as an emergency patient when the symptoms recurred.

The second dentist had full records, and it was clear from the radiographs that there were several possible causes for the patient's frequent emergency attendances. These included radiographic evidence of apical pathology indicating a tooth that required either root treatment or extraction, retained roots requiring removal, and failing crown work.

There were some weaknesses in the records of the first dentist, as noted above, and an expert opinion indicated that he should have written better

notes, recorded the diagnosis, and carried out more definitive care than simply prescribing antibiotics. For example, there should have been a note of discussion with the patient about root treatment or extraction of several teeth, and that treatment (i.e. first stage of root treatment or extraction), with the patient's consent, should have been carried out rather than prescribing antibiotics. If the patient refused definitive care, then that should have been recorded; it was felt that the patient had not been properly advised. Moreover, the notes should have recorded that the patient was to make further appointments for fuller examination and discussion; this had not been done and it was felt that the dentist was in a weak position. However, the record cards did state that the patient had either cancelled or failed to attend on numerous occasions, each being shortly after the emergency visit; this was enough to demonstrate that the patient had been advised to make a further appointment, presumably for review or examination, although it would have been much more positive if this had been specifically recorded in the records. The expert subsequently stated that the patient had a large contributory part to play in his situation, as he did not return for care despite repeatedly being advised.

The indemnity organisation weighed up the situation and, on a commercial basis, made a small offer to the patient without admission of liability, to conclude the complaint. Following legal advice, the patient realised that he also was not in a strong position and accepted the offer. It was possible that the patient could have argued that the condition of a particular tooth worsened due to the lack of definitive care at the emergency visit; there being no evidence of alternative treatments having been offered. However, as he played a major contributory part in the demise of his teeth, there was no guarantee that he would have received a significant amount of compensation.

SUMMARY

The dentist should have a good record of the emergency appointment. Often a patient is fitted into a busy appointment book, and the dentist may have limited time to carry out treatment. This is not an acceptable excuse for failing to write a reasonable note of the appointment.

However, appropriate definitive care should be offered. Antibiotics should only be prescribed when appropriate and necessary. The reasons for prescribing should be noted, along with the specific antibiotic and dose, and the patient should also be given advice about taking antibiotics, including completion of the course of treatment, what to do if there is any adverse reaction, etc. This may be contained in an advice leaflet for the patient, and the notes should record that this has been given. If the patient is advised to return, this should be recorded clearly in the record entry.

6.3 DENTAL EMERGENCIES

6.3.1 History of complaint

Where the patient reports experience of pain, the detail recorded should include:

- The site of initial pain and where that pain radiates to. **B**
- The type, e.g. dull ache, sharp, stabbing, throbbing, etc. **B**
- The duration. **B**
- Whether it is intermittent or continuous and, if intermittent, at what intervals. **B**
- Whether it is spontaneous. **C**
- Any factors that increase or reduce the pain, including the response of symptoms to analgesics. **C**
- Any factors that trigger the pain. **C**
- Any related habits, e.g. clenching, grinding. **C**
- Whether sleep is disturbed. **B**

- Whether the patient has had previous symptoms or treatment in the area of the pain? **C**

6.3.2 Examination – dental emergencies

6.3.2.1 Extra-oral examination

This should follow the procedure outlined in chapter 4 where relevant. The content of this part of the exam should be relevant to the patient's symptoms, and it is not necessary to complete all the items listed therein.

6.3.2.2 Intra-oral examination

Soft tissue screening and BPE should be considered if appropriate. If these are not carried out, and the patient is not a regular dental attender, they should be advised to attend for examination – this being noted in the records.

There is no agreement in the literature about carrying out soft tissue screening as a matter of routine. It should, however, be carried out and recorded if the symptoms indicate, such as the presence of a soft tissue lesion. In many cases, the patient will be a regular attender, and soft tissue screening will have been carried out at their routine examination. For patients who are not regular attenders, the clinician may decide to carry out screening or may alternatively advise the patient to attend for a full exam, which would include screening. If carried out, it should be as described in chapter 4 and appendices 7 and 8, and the outcome recorded.

It is not necessary to carry out BPE unless the patient's symptoms indicate this is appropriate, such as a localised periodontal condition. However, for the reasons in the above paragraph, the patient should be advised to return for appropriate exam, and this will include BPE.

The relevant problem area should be examined and findings noted. It is beyond the scope of this book to deal with every eventuality, and the examination should focus on the cause of the patient's symptoms. This could be from a lost filling or crown, fractured tooth, swelling, abscess, soft tissue lesion, denture problem, fractured orthodontic appliance, etc. The findings should be noted and follow a chain of investigation from the patient's symptoms to diagnosis.

6.3.2.3 Special tests

It may be necessary to carry out tests, such as palpation of tissues or areas of swelling. A note should be made about the site and size of any swelling present as well as type, such as firm or fluctuant.

Relevant teeth may require to be percussed and a note should be made of the findings, including those not tender to percussion.

Radiographs may be exposed, and further detail is available in FGDP(UK)'s *Selection Criteria for Dental Radiography*.[1] The report should be noted. If the patient has attended elsewhere prior to the emergency appointment, a decision will be required about taking further radiographs for necessary immediate information, or obtaining the radiographs from the previous practitioner; this may depend on severity of symptoms and need for immediate diagnosis and treatment.

Other tests are referred to in chapter 4.

6.3.4 Diagnosis

In most instances, a diagnosis can be made and this should be noted. Appropriate treatment can then be initiated. In some instances, the diagnosis may not be clear, and a differential diagnosis should be listed, with the most likely diagnosis first.

6.3.5 Treatment

The clinician should discuss the treatment options with the patient along with their risks and benefits, including the option of no treatment. A treatment plan should be agreed, and will generally be limited to resolving the emergency issues. Although ideally a written plan should be given to the patient, and signed, as outlined previously (chapter 4), it is recognised this is not always practical. It is adequate for there to be chairside discussion recorded in the notes and the relevant written plan appended subsequently.

If appropriate, the patient should be advised to return for further care, and this should be recorded. This may include future treatment activity, such as follow-up care, completion of treatment, or to return for examination.

If the patient is a regular patient at another practice, or may attend elsewhere for follow-up care, it may be necessary to provide the patient with a letter describing the appointment, treatment, prescription details, radiographs, or forward this information to the clinician carrying out future care.

6.4 DENTAL TRAUMA

6.4.1 History of complaint

Depending on circumstances, a patient may have attended elsewhere prior to presentation at the surgery and details should be recorded. For example, if the patient has attended an Accident and Emergency department as a result of a road traffic accident, or an assault, they will still require an appropriate dental assessment (see 6.2.2). However, as the initial attendance may be at the practice, the dentist should be aware of all possibilities for injury after trauma, and take steps to investigate these where appropriate, or refer for further care.

If there has been loss of consciousness, the patient should be advised to attend an Accident and Emergency department unless this has already occurred. The patient should be advised to seek medical advice should symptoms recur , such as dizziness,

neck pain, amnesia, headache or any other signs of head injury.

Unless you witnessed the incident, then the only details that should be included are those determined from the clinical examination on the date the patient attended, however, it is appropriate to record the patient's recollection of events, making it clear it is their view. Having established the nature of the incident, further details of the history should be recorded. These include:

- Time, location, cause of injury.
- Any loss of consciousness.
- Type of injury – e.g. bone fracture, avulsion of teeth including a measurement of the root of the avulsed tooth (see 6.5), dental hard tissue damage, such as concussion/subluxation/extrusion/intrusion/lateral luxation.
- Difficulty with occlusion or mastication, drinking, swallowing.
- Extra-oral injuries, such as bruising, laceration, swelling, discolouration, and location on body, eg. face, head, arms, torso, etc.
- Any areas of numbness or paraesthesia.
- Patient's tetanus status if reimplantation is considered, or if there are open lacerations of skin or mucosa

Additionally, the items referred to at 6.3.1 should be considered as appropriate, and noted. A comment indicating negative findings is often helpful.

In many cases legal action can ensue following trauma, so it is essential to record accurate details of any findings as it is often difficult to remember those years after an event. A simple diagram to illustrate injuries is useful. Clinical photographs of trauma with appropriate consent are an excellent method of recording both soft and hard tissue injuries.

6.4.2 Examining dental trauma

6.4.2.1 Extra-oral examination

The extent of this part of the exam will be determined by the nature of trauma and the patient's symptoms. A full note should be made of findings, and it is helpful to note if these are negative, thus confirming the area has been assessed. In addition to the detail described in chapter 4, section 4.3, the bony areas of the head and neck should be palpated, looking for tenderness, steps, or abnormalities. The occlusion should be examined and the patient asked if there are any differences from prior to the trauma, in addition to comments at 6.4.1. If fractures are suspected, the patient should be referred to a maxillofacial unit for care.

There may be additional dental injuries causing the patient's symptoms, and the situation should be assessed as to the extent of care that may be provided chairside, if any, at this stage. The patient may require to attend for dental care after reduction of fractures, and should be advised accordingly, this being noted.

Extra-oral examination findings to be recorded after trauma include:

- Face, head. **B**
- Neck. **B**
- TMJ. **B**
- Rest of body (chaperone should be present). **C**
- Bony injuries. **C**
- Paraesthesia. **C**

6.4.2.2 Intra-oral examination

The same procedure as noted in 6.3.2.2 to 6.3.5 should be followed. It may be difficult to assess some areas fully due to tenderness, swelling, or trismus, and if so, this should be noted. The patient may be required to return for further assessment and again this should be recorded.

Intra-oral examination findings to be recorded after trauma include:

- Soft tissues. **C**
- Charting of teeth present. **C**
- BPE if relevent to immediate treatment. **C**
- Caries. **C**
- Defective restorations. **C**
- Mobility. **C**
- Occlusion. **C**
- Occlusal abnormalities. **C**
- Focus of symptoms. **B**
- Fractured teeth. **C**
- Paraesthesia. **C**

6.4.3 Special tests

See 6.3.2.3. It may be difficult to carry out some tests, depending on symptoms, and a note should be made of this, along with any consideration of alternatives.

6.4.4 Diagnosis

This should be noted. It may be multifactorial, and note should be taken of all diagnosis. There may be multiple teeth involved, and although the initial exam may focus on alleviation of symptoms, the findings will be relevant when the patient returns for further assessment. See 6.5 regarding avulsed teeth.

6.4.5 Treatment

The patient should be informed of findings, diagnosis, and treatment options. It is important to remember that this appointment is focused on identifying the cause of the patient's symptoms and prioritising emergency treatment. If the cause of symptoms is multifactorial, then appropriate treatment should be carried out after agreement with the patient.

Although ideally a written plan for the emergency treatment should be given to the patient, and signed, as discussed previously (chapter 4), it is recognised this is not always practical. It is adequate for there to be chairside discussion recorded in the notes and the relevant form completed after treatment.

If future treatment is required, the patient must be advised to return for further assessment and this should be noted. This could include follow-up, completion of treatment commenced, return for full examination, or that the patient has been advised to attend his regular dental practitioner.

It is not the purpose of this book to detail treatment options, however it is important to note that regular follow-up to injured or damaged teeth may be necessary. Again, the patient should be informed, and this noted in the records. For regular patients of a practice, such follow-up can be incorporated into routine recalled attendance. For patients from another practice, the dentist should consider contacting that practice.

6.5 AVULSED TEETH

If a tooth has been avulsed, a note should be made of:

- When, where, and how the injury happened.
- How long the tooth has been out of the mouth.
- The storage medium in which the tooth has been transported. The preferred storage media, in order, are: fresh cold milk, or normal saline.
- An assessment made as to whether contamination has occurred. This helps in the assessment of the amount of drying and its subsequent sequelae, i.e. loss of vitality of the periodontal membrane.
- Measurement of the root of the avulsed tooth.

6.6 CHILDREN

A child may attend without a parent and be accompanied by a responsible person such as a schoolteacher or other adult. However, this may pose difficulties with obtaining information such as the medical history, or in obtaining consent. The person with parental responsibility should be contacted if possible; if not, a note should be made. The child may be able to provide relevant information and give consent for treatment dependent on competence.[5] It is not the purpose of this book to describe child consent in detail and further advice should be sought from an indemnity organisation or insurer.

If non-accidental injury is suspected, appropriate action should be taken or advice sought.[2,3]

Essential emergency treatment should not be withheld if parents cannot be contacted, and there are no other concerns.

6.7 OUT-OF-HOURS CARE OUTSIDE THE SURGERY

When providing out-of-hours care, the practitioner may not have access to patient records. It is therefore essential that the contact is recorded, together with any advice given; this should be entered in the records as soon as is practically possible. Any analgesic advice should conform to national guidelines such as those contained in the *British National Formulary (BNF)* and noted in the recorded entry.[4]

SPECIAL SITUATIONS – SUMMARY OF RECOMMENDATIONS

KEY: A – Aspirational B – Basic C – Conditional

	Emergency Dental	Emergency Trauma
Personal Information		
Name	B	B
Address	B	B
Date of birth	B	B
Phone numbers	B	B
Contact method	A	B
Child – parental contact	B	B
Patient dependent on someone	A	C
Email	A	A
Emergency contact	B	B
General Medical Practitioner	B	B
Relevant Specialist Practitioner	A	C
NHS identification number	C	C
Occupation	C	C
Signature for verification	A	A
Details checked/updated	B	B
Medical History		
New form completed or updated	B	B
Dated and signed by patient and clinician	B	B

	Emergency Dental	Emergency Trauma
Socio-behavioural History		
Smoking	C	C
Alcohol consumption	C	C
Eating habits	A	A
Dietary information	A	A
Contact sports	C	C
Musical instruments	C	C
Previous Dental History		
Chewing unrestricted	C	C
Restorative procedures	C	C
Orthodontic care	C	C
Endodontic care	C	C
Oral surgery procedures	C	C
Oral hygiene routine	C	C
Anxiety	C	C
Factors Affecting Appointment		
Timing	A	A
Mobility	A	A
Carer to be present	C	C
Travel considerations	A	A

KEY: **A – Aspirational** **B – Basic** **C – Conditional**

	Emergency Dental	Emergency Trauma
Personal Information		
Reason(s) for attendance	B	B
Payment method	B	B
Extra-oral Examination		
Face, head	B	B
Neck	B	B
TMJ	C	B
Rest of body	C	C
Bony injuries		C
Intra-oral Soft Tissue Examination		
Soft tissues	A	C
Intra-oral Hard Tissues		
Charting of teeth present	C	C
BPE	C	C
Caries	C	C
Defective restorations	C	C
Mobility	C	C
Occlusion	C	C
Occlusal abnormalities	C	C
Focus of symptoms	B	B
Radiographs	C	C

	Emergency Dental	Emergency Trauma
Dental Emergencies		
Site of pain/radiation	B	
Type of pain	B	
Duration of pain	B	
Intermittent/continuous	B	
Spontaneous?	C	
Factors affecting pain levels	C	
Pain triggers	C	
Related habits	C	
Sleep patterns	B	
Previous symptoms/treatment	C	
Dental Trauma		
Time, location, cause		B
Loss of consciousness		B
Type of injury		B
Resultant difficulties		C
Extra-oral injuries		C
Numbness/paraesthesia		C
Tetanus status		C
Tooth fragments suitable for reattachment		C

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7 REFERRAL TO OTHER DENTISTS AND RECEIVING PATIENTS FOR CARE

7.1 REFERRAL FOR CARE

When accepting a patient, a dentist assumes a duty of care which includes the obligation to refer the patient for further professional advice or treatment if it transpires that the task in hand is beyond the dentist's own skills. The GDC Standards document states: 'You should refer patients on if the treatment required is outside your scope or competence'.[1]

Referral, including options and reasons, should be discussed with the patient. The outcome should be recorded, and if referral is agreed it should be confirmed with the patient that this includes consent to provide relevant information for the referral. It should be discussed and noted as to whether the referral is on an NHS or private basis. A copy of the letter of referral should be retained as part of the correspondence, however it is not necessary to record that the patient gave consent as this is part of the process of referral.

7.1.1 When to refer

A dentist should refer any patient if, in the dentist's own opinion, the treatment is outside of their training or competence and another clinician would more appropriately carry out the treatment required. This may be for any number of reasons. Referral for a second opinion may be at the patient's request or the dentist's suggestion. Referral may be for opinion and advice alone, or for a complete treatment episode. In primary dental care it is expected that the referred patient will be returning to the referring dentist for continuing care.

7.1.2 Urgent referral

Where patients are identified as having a premalignant condition or suspected oral cancer, they should be referred at the earliest opportunity for specialist advice. Dentists should be aware of their local mechanism to fast-track patients when symptoms or suspicions dictate. Given the seriousness of the possible diagnosis, steps should be taken to ensure confirmation that the appointment has been arranged and kept. Patients should also be given appropriate support.

7.2 SPECIFIC REFERRAL CONSIDERATIONS

7.2.1 Periodontal referral

Patients with complex periodontal conditions should be considered for referral. The British Society of Periodontology defines three levels of treatment complexity and suggests that complexity 2 cases are often treated in general dental practice, whereas complexity 3 cases are mostly referred.[2]

Complexity 1: BPE score of 1-3 in any sextant.

Complexity 2: BPE score of 4 in any sextant.

- Surgery involving the periodontal tissues.

Complexity 3: BPE score of 4 in any sextant and including one or more of the following factors.

- Concurrent medical factor directly affecting the periodontal tissues, (e.g. diabetes, medication, etc.
- Complicating root morphologies/anatomical factors.
- Non-response to previous optimally carried out treatment.
- Diagnosis of aggressive periodontitis (patients under 35 years of age with advanced bone loss)

Further details can be found in the British Society of Periodontology's document, Referral policy and parameters of care, which can be found in appendix 9b.

7.2.2 Orthodontic referral

There is little advantage in referring unwilling or uninterested patients for orthodontic opinions, except perhaps for advice on extractions and pre-general anaesthetic treatment planning when appropriate. Where a limited treatment plan is thought advisable owing to the background, this should be made clear in the referral letter. Patients should generally not be given orthodontic treatment if their oral hygiene is inadequate and their teeth are not stable e.g. due to caries or periodontal condition.

The Index of Orthodontic Treatment Need (IOTN) is currently used in the NHS to decide whether NHS treatment is necessary. It is therefore important to have an understanding of the IOTN when referring patients for orthodontic treatment. There is rarely any value in referring cases of IOTN grade 1 or 2 under NHS arrangements, however, a patient may wish for referral on a private basis. IOTN grade 3 is borderline, and patients' perceptions are of greater importance in this group. In this case it may be worth informing the patient that NHS treatment may not be available, and that the decision will be made by the orthodontist. Most IOTN grade 4 and 5 cases are likely to need referral. Appendix 12 describes the index.

7.2.3 Endodontic referral

There are situations when the endodontic treatment required is beyond the scope of the general dental practitioner. These may include the removal of silver points or complex molar endodontic cases. However, practitioners should assess their individual capabilities and refer appropriately.

7.2.4 Implantology referral

The scope of the referral should be made clear at the onset. This might be for an opinion, surgical management, or surgical and prosthetic management. All parties

should be clear about the responsibility for maintenance care, monitoring and possible re-referral.[3] Implant treatment is rarely available on the NHS (except in secondary or tertiary care for priority groups), therefore it should be made clear to the patient that implant referral is on a private basis.

7.2.5 Oral surgery referral

Patients are often referred for removal of impacted teeth, difficult extractions, and other oral surgery procedures. The patient may wish to be sedated or receive general anaesthetic. The referring dentist should record initial discussion with the patient, including advising of appropriate risks. Radiographs should be forwarded if appropriate.

7.2.6 Other referrals

Patients often require consideration of referral to various other specialities. Examples include referral for maxilla-facial surgery, such as osteotomy; referral to an oral medicine department for soft or hard tissue lesions; referral to a paedodontist for specialist child dental care. Other non-dental referrals may be considered, such as to a cardiologist for an opinion about the need for antibiotic prophylaxis in patients with severe coronary conditions, or to a patient's general medical practitioner for treatment of a non-dental problem discovered at the examination. In each situation, the principles outlined above in this chapter should be followed.

7.3 HOW TO REFER

7.3.1 The referral letter

The referral letter should contain adequate and accurate administrative and clinical information. This includes:

- The patient's name, address (including the postcode), date of birth and gender. A contact telephone number or email address is helpful.
- A summary of the patient's relevant medical and dental history (including

radiographic history). Disclosure of information in the letter must be with the patient's consent.

- A clear indication of the condition initiating the referral, a note of options discussed, and the patient's preferences with respect to treatment.
- If treatment is not requested and the referring dentist is asking for advice or a second opinion, this must be clearly stated in the letter.
- An indication as to the level of urgency of the condition. If cancer is suspected, write 'cancer is suspected'.
- A statement as to whether the patient is being referred under private contract or NHS, to help avoid misunderstandings.
- The referring dentist's name, correspondence address, and contact telephone number must be clearly stated.
- The referral letter should be dated and a copy retained in the patient's notes.
- To minimise further invasive procedures, any relevant test results, radiographs and photographs should be included with the referral letter.
- Any special needs of the patient, e.g. assistance with access, the presence of a personal carer, or the best time of day for an appointment in light of social or medical problems.
- Any physical impairment such as loss of hearing or eyesight, wheelchair use, need for domiciliary care or bariatric equipment.

7.4 THE RECEIVING DENTIST

7.4.1 Receiving a patient on referral

The clinician accepting the patient on referral should carry out an appropriate examination (based on the content of chapter 4). This should be relevant to the treatment for which the patient has been referred. It would not be necessary to repeat the charting unless this was relevant to the treatment. A full medical history should be recorded, as described in chapter 3. However, the referring dentist may forward a copy of the patient's medical history and this should be updated as described in chapter 5.

The receiving dentist should discuss treatment options, risks, benefits, and ensure that the proposed treatment is fully understood. They should not undertake treatment that they consider inappropriate. The receiving dentist should liaise with the referring dentist if there are any proposed amendments to the treatment for which the patient had been referred, or if the need for any treatment is identified that is separate from the reason for referral. The receiving dentist should send a copy of the initial assessment, report and treatment plan to the referring dentist to assist in the continuity of care for the patient.

7.4.2 On completion of referral treatment

On completion of the treatment, the receiving dentist should send a written report to the referring dentist confirming that the treatment has been completed and what follow-up consultations, if any, are required. Any complications associated with the treatment should also be disclosed, along with any obvious concerns that the patient has as a result of the treatment. All radiographs sent with the original referral letter should be returned to the referring dentist with the report. If the receiving dentist will be providing follow-up, they may wish to retain radiographs, and this should be noted in the letter to the referrer. There should be a log in the records to show the whereabouts of the radiographs, prevent loss. It is important that arrangements are made to ensure appropriate follow-up, including availability of any relevant radiographs.

7.4.3 Self-referred patients

Patients who attend having self-referred, should be treated as a new patient and appropriate examinations should be carried out as described in chapters 3 and 4.

The receiving dentist may wish, with the patient's consent, to consult with the patient's regular clinician. This may, for example, prevent the taking of unnecessary radiographs.

If treatment is limited to a single area of practice, e.g. orthodontics, confirming the contact details for the GDP would be important to ensure that if any need for treatment is identified, it can be dealt with promptly. It also ensures that the patient does not make the assumption that the referral dentist is responsible for their general dental care and continues attending regular examination appointments.

RECEIVING A REFERRAL – SUMMARY OF RECOMMENDATIONS

KEY: A – Aspirational B – Basic C – Conditional

Personal Information	
Name	B
Address	B
Date of birth	B
Phone numbers	B
Contact method	B
Child – parental contact	B
Patient dependent on someone	C
Email	C
Emergency contact	B
General Medical Practitioner	B
Relevant Specialist Practitioner	C
NHS identification number	C
Occupation	A
Signature for verification	A

Medical History	
New form completed or updated	B
Dated and signed by patient and clinician	B

Socio-behavioural History	
Smoking	C
Alcohol consumption	C
Eating habits	C
Dietary information	C
Contact sports	C
Musical instruments	C

Previous Dental History	
Chewing unrestricted	C
Restorative procedures	C
Orthodontic care	C
Endodontic care	C
Oral surgery procedures	C
Oral hygiene routine	C
Anxiety	C

Factors Affecting Appointment	
Timing	A
Mobility	A
Carer to be present	C
Travel considerations	A

KEY:	A – Aspirational	B – Basic	C – Conditional

Reason(s) for attendance	B
Payment method	B
Extra-oral Examination	
Face, head	C
Neck	C
TMJ	C
Rest of body	C
Bony injuries	C
Intra-oral Soft Tissue Examination	
Soft tissues	C

Intra-oral Hard Tissues	
Charting of teeth present	A
Existing restorations	A
BPE	C
Previous endodontic treatment	C
Caries	C
Defective restorations	C
Mobility	C
Prostheses	C
Occlusion	C
Occlusal abnormalities	C
Toothwear	C
Deal with referral	B
Radiographs	C

References

1. General Dental Council. Standard 6.3.3. *Standards for the Dental Team*. London: General Dental Council; 2013.
2. The British Society of Periodontology. *Referral Policy and Parameters of Care*. The British Society of Periodontology, 2011. Available at: www.bsperio.org.uk/publications/downloads/28_143801_parameters_of_care.pdf [Accessed 17 December 2015].
3. Association of Dental Implantology. *A Dentist's Guide to Implantology*. London: Association of Dental Implantology; 2012.

8 ELECTRONIC RECORDS

Electronic records are now widely used in medical and dental practices, and there is the increasing possibility to move towards a 'paperless' practice. While generally they can do the same as paper records, there is the capability of pulling together an integrated patient record and practice management system with a wide range of facilities, all in one place. This can include patients' clinical records, diagnostic imaging, patient reminders, treatment plans, along with management systems, such as appointments, accounts, correspondence, and laboratory prescriptions.

Many software programs available allow remote access to files, as well as structured templates to suit the individual clinician. Electronic records offer many advantages, including legible notes, but also come with some disadvantages.

The principles of the entries in electronic records are identical to those referred to earlier in this book.

From the list in chapter 2, the following variations apply to electronic records:

- Ensure all entries are dated, timed and the clinician and assistant are identified.
- Any errors should be identified by a later correcting entry, which refers to the error.
- When a printout is required, ensure pages are numbered and identifiable by name and identifier such as the address or date of birth of the patient.

When printing out electronic records, all data that can be reasonably printed out should be done. Printing of selective data can cause problems in assessing the care undertaken. An example is the printing out of 'void entries' where amendments had to be made to records. The software must allow the printing in full of all items of the dental record as detailed in chapter 2.

The clinician should be familiar with the system used, and be able to locate and understand the information that has been entered.

8.1 SECURITY

Any electronic system must be secure, regularly backed-up, and allow access only to those who require the information to perform their duties. Each user must have a unique password. For maximum security, passwords should contain mixed-case letters and include numbers or symbols and should be changed regularly. Passwords should not be written down and kept under keyboards or on desks or surfaces where the public may be able to access them. There may be differing level of access, such as clinician, receptionist, manager, owner, etc. Administrative functions can be reserved only for a specific person, thereby helping reduce the risk of accidental alterations of the system settings that may result in data corruption. For data stored on a central server, similar security measures should be employed. Firewall and antivirus software should be employed for computers or servers (including external servers) connected to the internet, and consideration should be given to encrypting data that is transmitted between the practice and the server. Practices are advised to seek external specialist advice as required.

A full audit trail facility must be present to prevent the overwriting, erasure or corruption of data. The system should be backed up daily, and a copy retained at separate premises, and protected from fire, flood, and theft.

In an area where anyone other than the patient could see the screen, the computer should be sited so the screen is not easily seen by patients. There should be screen closure after a short period of inactivity to ensure that someone inappropriate does not look at the screen if the monitor is unattended after activation.

It is not within the scope of this book to describe electronic record systems and software fully, and clinicians should ensure that any system they use allows them to meet their legal obligations and statutory requirements.

Other aspects of the system requirements will be referred to under the relevant topics below.

8.1.1 Identifying who made an entry

It should be possible to identify who has made entries in the records, including the date and time. A clinician should ensure that any entries are confirmed as correct and 'signed off' prior to being locked into the system as it is difficult to modify entries subsequently should any error have occurred. See chapter 2, section 2.2.

8.2 CONTENTS OF ELECTRONIC RECORDS

As noted earlier, electronic records can retain a lot of data about patients: clinical, as well as what can be described as 'management'. The list of clinical items is described in chapter 2, at 2.1. To this can be added items that would not always be included in a handwritten record, such as a patient's appointments, history of cancellation, payments for treatment, capitation scheme payments, etc. This guidance will refer to the components related to clinical examination and record-keeping.

8.3 HISTORY TAKING

8.3.1 Pre-examination

The information detailed in chapter 3 should be gathered. This may be inputted directly onto the computer by a suitably trained assistant. If a form is completed and signed by the patient, it can be scanned into the computer.

8.3.2 Medical history

This should be obtained as outlined at 3.3. The principle of this information being verified by the patient remains, and the clinician should be able to demonstrate

that they have reviewed the details provided by the patient. This can be done in several ways, and include the following methods:

- The patient and clinician can provide electronic signatures (not every system will have this available). Steps should be taken to ensure that these cannot be altered, and provide an accurate representation of a patient's signature which can be checked by the patient at the time of signing.
- The patient can complete a form as in 3.3, which will include the date, signature of patient and dentist, and this can be scanned into the system. At subsequent courses of treatment, this form can be printed, given to the patient, and changes to medical history noted, if any. The form can then be dated and signed as before and scanned into the system.
- An entry can be written in the notes to confirm the clinician has noted the details and, where necessary, clarified with the patient.
- The electronic system should allow the clinician to demonstrate that the medical history has been recorded, verified and clarified with the patient. The system should hold an audit trail confirming entries have been made on the relevant page at the appropriate date.

8.3.3 Socio-behavioural history

The entries in the electronic system are as outlined in section 3.4.

8.3.4 Previous dental history

The entries in the electronic system are as outlined in section 3.5.

8.4 FULL EXAMINATION

The patient examination is carried out in the manner described in chapters 3 and 4. The details should be entered in the system and the clinician should be able to locate the information readily. Some systems provide a template for recording findings, and it is for the clinician to decide if such detail is required. In some cases an 'autofill' may be used and the clinician should ensure that the information is relevant and accurate.

The contents of an 'autofill' may include details about soft tissue examination, oral hygiene and tooth brushing. Some aspects are detailed below as their style of entry may differ from a handwritten note.

8.4.1 Extra-oral examination

The sites referred to in section 4.3 should be examined and the findings, if any, noted. It should be recorded if no abnormality was found. A clinician may wish to use a template to record findings, including negative findings.

8.4.2 Intra-oral examination

A clinician may wish to use a template to record findings, including negative findings, in detail, such as different sites of the oral mucosa. Some systems allow for a diagram of any lesion to be inserted. Consideration should be given to including a photograph of any lesion with appropriate consent. The examination must be recorded as being carried out, and the presence or absence of abnormality noted.

8.5 HARD TISSUE – TOOTH EXAMINATION

The information in chapter 4, section 4.4.2 and subsequent sections, where relevant, should be recorded. There are various types of charts on which to record this information. They will allow recording of items including charting of teeth, current restorations, caries, and mobility. Some programmes allow recording of toothwear, however, one of the problems of electronic charting is that a diagrammatic or stylised representation is shown in a standard shape and form rather than allowing the facility to create a precise representation of the actual situation. This may require an explanation in the text if the situation is not clear, such as clarification of how much of a tooth surface may be decayed or missing. This is important for future monitoring of lesions. The nature of any prostheses may require to be inserted in the text.

It may not be possible to include endodontically treated teeth in the chart and it is recognised that it is not necessary to expose a radiograph only for this information.

8.6 PERIODONTAL CONSIDERATIONS

See section 4.4.3.1. The recording of a BPE is important and can be difficult to locate on some programmes. It is equally difficult to reproduce when records are printed. The clinician should note how to ensure this data can be recorded and reproduced.

8.7 RADIOGRAPHS

There are many systems for digital radiography and the reader is referred to FGDP(UK)'s publication, *Selection Criteria for Dental Radiography*.[1] As radiographs can be electronically modified, it is important that the system should note the original radiograph, including date and time, along with a marker icon for any enhanced or modified radiograph.

8.8 TREATMENT PLAN

See section 4.6.2. After the treatment plan has been established, it should be noted in the system. Prior to this, there should have been discussion of options, risks and benefits, including the option of no treatment. This is part of the process of obtaining valid consent as described previously. The treatment plan should be given to the patient and a signed copy retained. See section 8.3.2 for methods of confirming signature.

It is important that this plan can be reproduced. In some systems this is not easy to establish. The reason for this is that the plan is on a chart, which is automatically modified once treatment has been entered as complete. Clinicians should ensure that they are able to reproduce an original treatment plan of any previous course of treatment.

8.9 RECALL EXAMINATION

This is carried out as described in chapter 5. Any update of pre-examination information should be recorded, and if an assistant enters these details, the clinician should confirm he is aware of any amendments.

8.9.1 Medical history

This should be checked and any change noted. In some systems this is done verbally, and it is important that the audit trail can confirm the check has been carried out. The system should NOT delete the previous medical history as this may require to be reproduced later if investigation of any complaint arises.

8.9.2 Extra-oral and intra-oral examinations

The extra-oral and intra-oral examinations should be carried out as described in chapter 5 and the information recorded as outlined in sections 8.3-8.8.

8.10 EMERGENCY APPOINTMENTS

The principles in chapter 6 should be followed, noting the considerations referred to therein. It is important to record the detail of any soft tissue lesion, as described in 4.4.1.

8.11 REFERRAL TO OTHER CLINICIANS

Electronic records make it easier to have templates prepared and utilised for various clinical situations, particularly referrals. The principles in chapter 7 should be followed. The letter and subsequent correspondence from other clinicians can be retained on the system and easily located.

8.12 DISADVANTAGES

Care should be taken to ensure that there are no contradictory or meaningless entries. This can inadvertently occur when templates or autofills are used. The writer should ensure the accuracy and relevance of any entry. The treatment carried out may, for good reason, have varied from the more commonly carried out treatment to which the template refers, and instead of amending the template, the clinician has recorded the actual treatment carried out, for example a different material for a temporary crown. This makes it difficult to recall detail several years after the event and can devalue the integrity of the records.

If there is a failure of the system, it is difficult to carry out the intended treatment for a patient without notes. Care should be taken, particularly to reassess the medical history and treatment plan, if proceeding in this situation.

8.13 RETENTION OF RECORDS

The Data Protection Act states that records should be 'not kept longer than is necessary'.[3] The Department of Health guidance suggests this is no longer than 30 years.[4] However, with electronic record systems this may be difficult due to obsolescence of hardware and systems. As with paper records, arrangements should be made to retain records for a minimum of 11 years from when the patient last attended the practice, or age 25 for children (whichever is longer). When disposing of a computer, it is necessary to ensure information has been deleted from the hard drive and advice should be sought about safe and compliant data destruction.[2] It may be necessary to physically destroy the computer's hard drive in order to ensure that no patient data may be recovered using specialist software.

Practices that are closing must inform patients of the date on which the practice will cease trading, and inform patients of how they may request their records or ensure their records are transferred to another practice.

8.14 ENCRYPTION OF RECORDS FOR TRANSFER

When transmitting or transferring patient records electronically, all practical steps should be taken to ensure that only the intended recipient can access the data.

Patient records, whether transmitted by email or saved onto a portable storage device such as a memory stick, should as a minimum be password protected. The password(s) must be communicated to the intended recipient separately and in a secure manner.

End-to-end encryption offers a greater degree of security than password protection. However, it is only a viable option if both the sender and recipient use the same encryption software. In some circumstances, such as referral to other healthcare bodies/practitioners, this may be possible and its use would be preferable.

Practices are advised to seek expert advice on the most appropriate means of ensuring the security of transmitted data for their particular IT infrastructure configuration.

The practice should have a written policy governing the security of all electronic communications, and the protection of data therein.

References

1. Faculty of General Dental Practice (UK). Selection Criteria for Dental Radiography, 3rd edition. London: Faculty of General Dental Practice (UK); 2013.
2. https://www.microsoft.com/security/online-privacy/safely-dispose-computers-and-devices.aspx
3. Data Protection Act 1998. London: HMSO; 1998. www.legislation.gov.uk/ukpga/1998/29/pdfs/ukpga_19980029_en.pdf
4. Department of Health. Records Management: NHS Code of Practice Part 2, Annex D1. London. DH. 2009. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/200139/Records_Management_-_NHS_Code_of_Practice_Part_2_second_edition.pdf

A1 SELECTED DEFINITIONS

GLOSSARY OF TERMS USED IN THIS PUBLICATION

Basic periodontal examination (BPE)
A periodontal screening technique in which all teeth are examined. See appendix 9.

Clinical practice guideline
A systematically developed statement designed to assist the practitioner and patient to make decisions about appropriate healthcare for specific clinical circumstances.

Clinician
Anyone registered with the General Dental Council (or equivalent) and permitted to practise as a dentist, clinical dental technician, dental hygienist, dental nurse, dental technician, dental therapist, or orthodontic therapist.

Contemporaneous
Records are considered to be contemporaneous when the clinician's memory of a patient interaction is sufficiently clear to allow for an accurate writing up of notes made at the time.

Encryption
Encryption is the protection of data so that only an intended recipient can access it. At the simplest level, password protection of files provides a degree of security, and is an acceptable method of encryption when sending files to patients. Passwords should be communicated separately to the patient, be unique, and must not be structured in a predictable format.

Evidence-based

Evidence-based medicine/dentistry is the conscientious, explicit and judicious use of the best evidence currently available in making decisions about the care of individual patients.

Indemnity organisation

The provider of your professional indemnity cover. Commonly this would be either a not-for-profit mutual, or an insurer. Most will provide advice and guidance that will assist you in avoiding circumstances that can lead to a claim.

Recall visit

The planned return of a patient who, when last seen, was in good oral health.[1]

Review visit

An attendance at a further appointment within an existing course of treatment.[1]

Risk factor

A factor that increases the probability of a given disease developing in a given individual.

Selected abbreviations

Some examples of commonly used abbreviations are noted below. Many other abbreviations are in use, and practices should ensure that all clinicians in the practice use a common list of abbreviations for all records. This will help avoid misunderstanding in their use.

BPE	Basic Periodontal Examination
C/O	Complaining of
E/O	Extra-oral
F/O	Filling out

FTA	Failed to attend
HPC	History of present complaint
I/O	Intra-oral
LA	Local anaesthetic
L/F	Lost filling
NAD	No abnormality detected
N/V	next visit
pa	peri-apical (lower case)
PDH	Past Dental History
PEH	Post extraction haemorrhage
PMH	Past Medical History
RSD	Root surface debridement
rt	retained root (lower case)
RT	Root treatment (upper case)
S/T	Soft tissue
TMJ	Temporo-mandibular joint
TTP	Tender to percussion

References

1. Faculty of Dental Surgery. National Clinical Guidelines. London: The Royal College of Surgeons of England; 1997.

A2 UNDERSTANDING THE GUIDELINES

As the volume of evidence available for systematic review in this area was found to be low, these guidelines rely heavily on expert opinion and reported clinical experience of respected authorities.

It is important to recognise that the evidence base in this area is weak but in spite of this, good clinical practice can benefit from following these recommendations. In future, as more research is reported in this area, it should be possible to make recommendations based on higher quality evidence.

Further details can be obtained from Scottish Intercollegiate Guidelines Network's *SIGN 50: A guideline developer's handbook*, 2014.

A3a SAMPLE MEDICAL HISTORY FORM

For use by Practice

Title Surname First name

Date of Birth DD | MM | YY Sex MALE | FEMALE

Address

Tel. number: Home Work

Mobile

Occupation

Your doctor: Name

Address

How long since you last visited a dentist?

To help us treat you safely it is important that we ask you the following questions about your general health. Please answer all questions with a 'yes' or 'no' and if necessary add any additional details. All information provided will be kept strictly confidential.

Are you...	No	Yes	Details
attending or receiving treatment from any doctor?			
taking any medicines or tablets from your doctor?			
taking medication for osteoporosis?			
taking, or have you taken, any steroids in the last two years?			
allergic to any medicines, foods or materials?			
pregnant or likely to be pregnant?			

Have you...	No	Yes	Details
ever had jaundice, liver or kidney disease, or hepatitis?			
ever had rheumatic fever or been told that you have a heart murmur?			
ever been told that you have a heart problem or had a heart attack?			
ever had infective endocarditis, or a heart valve replaced or any form of heart surgery? High or low blood pressure?			
had any blood tests recently?			
ever had a bad reaction to a local or general anaesthetic?			
ever had a stroke?			
ever had a major operation or recently received hospital treatment?			
ever had your blood refused by the Blood Transfusion Service?			
ever been diagnosed or suspected as having variant Creutzfeldt-Jakob disease (vCJD) or being HIV positive?			
Do you...			
have a pacemaker?			
suffer from bronchitis or asthma?			
bruise easily or have you ever bled excessively?			
have fainting attacks, giddiness or epilepsy?			
have diabetes?			
carry a warning card?			
smoke, and if yes, how many a day?			
drink alcohol? If yes, how many units a week?			
Are there any other aspects of your health that you feel we should know about?	List of medicines and tablets		

Patient signature: _____ Date: _____

Dentist signature: _____ Date: _____

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A3b CONFIDENTIAL MEDICAL HISTORY FORM

We ask you for information about your general health to help us treat you safely. Please write your contact details below, answer the health questions inside and then sign the form on the back page. We will use this form at later visits to discuss any change in your general health. All information will be kept strictly confidential by the people caring for you.

Surname

First name/s Title

Sex MALE | FEMALE Date of birth DD | MM | YY

Address

Tel: Home Mobile

Email

Occupation

In the event of an emergency please contact:

Name

Telephone number

Doctor's name

Address

Telephone number

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Are you currently...	Yes	No	Give details
receiving treatment from a doctor, hospital or clinic?			
taking any prescribed medicines (e.g. tablets, ointments, injections or inhalers, including contraceptives and hormone replacement therapy)?			
carrying a medical warning card?			
pregnant or possibly pregnant?			

Have you ever suffered from...	Yes	No	Give details
allergies to any medicines (e.g. penicillin) substances (eg. latex/rubber) or foods?			
bronchitis, asthma or other chest condition?			
fainting attacks, giddiness, blackouts, epilepsy?			
heart problems, angina, blood pressure problems or stroke?			
diabetes (or does anyone in your family)?			
bone or joint disease?			
bruising or persistent bleeding following injury, tooth extraction or surgery?			
liver disease (e.g. jaundice, hepatitis) or kidney disease?			
any infectious diseases (including HIV and hepatitis?)			
a condition that led to your blood being refused by the Blood Transfusion Service?			

Did you, as a child or since, have...	Yes	No	Give details
a bad reaction to general or local anaesthetic?			
treatment that required you to be in hospital?			
brain surgery?			
heart surgery?			

Alcohol		
How many units of alcohol do you drink per week? (A unit is half a pint of lager, a single measure of spirits or a single glass of wine/aperitif.)		units per week

Tobacco use	Yes	No	Ever	Times per day
Do you smoke any tobacco products now (or did you in the past)?				
Do you chew tobacco, paan, use gutkha or supari now (or did you inthe past)?				

Please give any other details which your dentist might need to know about, such as self-prescribed medicines (e.g. Aspirin).

COMPLETED BY (PLEASE TICK) ☐ Self ☐ Parent ☐ Guardian

Patient's signature _____ Date _____

Dentist's signature _____ Date _____

MEDICAL HISTORY UPDATE

Please check that the health information on this form is still correct (including information on smoking and drinking). If not, amend as necessary or note any changes below.

Date	Any change?	List any changes below	Patient's initials

A3c MEDICAL HISTORY FORM

Surname | Mr/Mrs/Miss/Other

Forenames | Date of birth D D | M M | Y Y

Address (home) | Business or term time address

Phone no. | Mobile no.

MEDICAL HISTORY

Do you have, or have ever had, any of the following?
Please circle correct answer and list details below

a) Heart trouble/heart murmur	yes/no
b) Chest trouble, Brochitis, or Asthma	yes/no
c) Rheumatic fever	yes/no
d) Jaundice or Hepatitis	yes/no
e) Diabetes or Epilepsy	yes/no
f) Allergies	yes/no
g) Transplants or Implants (valve or joint replacements)	yes/no
h) Steroid medication	yes/no
If you cut yourself do you bleed excessively?	yes/no
Is there anything else you wish to discuss in confidence?	yes/no
Have you ever been seriously ill or hospitalised?	yes/no
Are you taking any medication? If so, please list below.	yes/no

NAME AND ADDRESS OF YOUR DOCTOR

Do you wish to be accepted as a private patient? yes/no

Are you interested in a pay monthly maintenance scheme? yes/no

Do you wish to be accepted as an NHS patient? yes/no

If you are exempt from NHS payment, please tick correct category:

Income Support ☐ Job Seekers' Allowance ☐

Working Family Tax Credit ☐ Disabled Person's Tax Credit ☐

Name of benefit receiver is

Under 18 ☐ Aged 18 and in full-time education ☐

Expectant mother ☐ Due birth date D D | M M | Y Y

Nursing mother with child under 1 year ☐

Child's date of birth D D | M M | Y Y

In receipt of HC2 certificate ☐ Certificate number

Expiry date D D | M M | Y Y

HC3 certificate ☐ I pay £

Certificate number Expiry date D D | M M | Y Y

Signature

Patient/Parent/Guardian
(delete as applicable)

Expiry date D D | M M | Y Y

FOR PRACTICE USE ONLY

Date									
Initials									

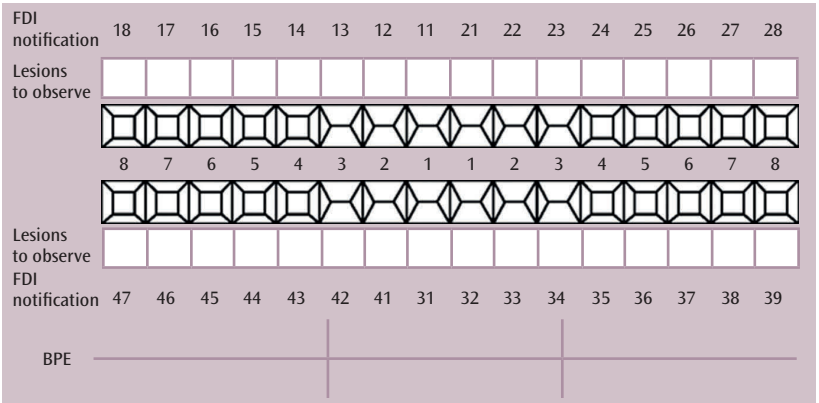
A3d HEALTH / MEDICAL CONDITIONS OF RELEVANCE TO DENTAL PRACTICE

- Current medication.
- Heart disease, heart murmur or any other heart problem.
- High or low blood pressure.
- Abnormal or excessive bleeding.
- History of bruising.
- History of an allergic reaction to any medication, foods/drinks, pollen (hayfever) or other material.
- History of jaundice or other liver disorder, including hepatitis.
- History of diabetes.
- Positive blood tests for hepatitis or any other bloodborne disease.
- History of possible exposure to bloodborne viruses.
- History of glaucoma or any other eye problems.
- History of epilepsy or any kind of fit.
- Pregnancy or possible pregnancy.
- History of radiation therapy.
- History of rheumatic fever.
- History of bronchitis, asthma or any kind of chest problem.
- History of dizziness, blackouts or fainting.
- History of digestive problems.
- History of organ transplant, implant or artificial joint.
- Details of self-prescribed medicines and herbal remedies.
- Betel nut or tobacco chewing.
- History of adverse reaction to dental materials.
- History of ill-effects following dental treatment.
- History of mental illness.
- History of dura matter grafts before 1992.

- Possession of any warning card (e.g. steroids) issued by a medical practitioner.
- Creutzfeldt-Jakob disease within the family.
- Treatment with human growth hormone or history.
- History of any hospitalisation.
- Any other serious illness.

A4a

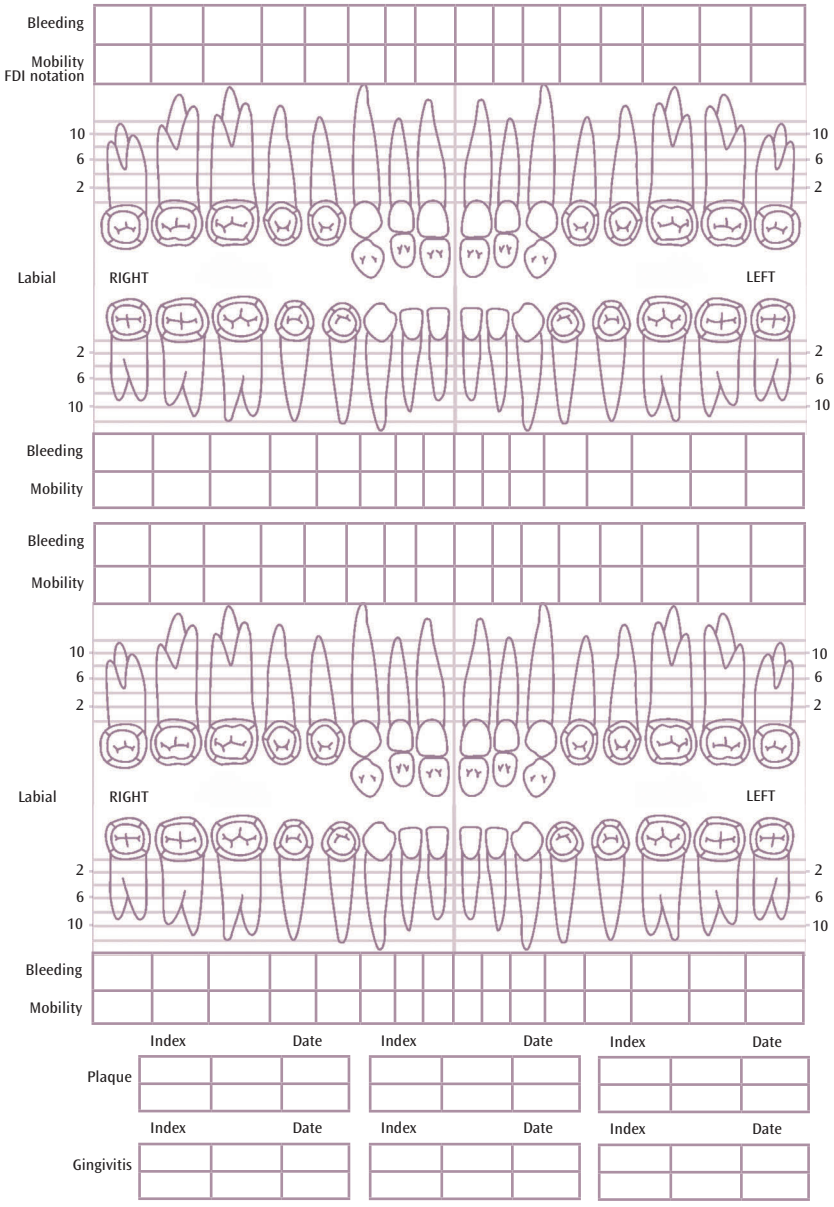
EXAMPLE OF A NEW PATIENT RECORD



Radiographs	Films exposed	
	Report	
History of any difficulties		
Extra-oral examination	Lips	
	Neck	
	TMJ	
	Facial asymmetry	
Intra-oral examination	Lips	
	Buccal mucosa	
	Vestibule	
	Floor of mouth	
	Tongue	
	Palate	
	Fauces	
	Edentulous ridges (if relevant)	
	Occlusion considerations	
Toothwear	Presence	
	Position	
	Characteristic	

A4b

EXAMPLE OF PERIODONTAL RECORD



A5 CARIES RISK ASSESSMENT GUIDE

RISK CATEGORY	RADIOGRAPHIC GUIDELINES	Social History	Medical History	
HIGH CARIES RISK	Posterior bitewing radiographs at six-month intervals *until no new or active lesions are apparent and the individual has entered another risk category.[18] *Bitewings should not be taken more frequently and it is imperative to reassess caries risk in order to justify using this interval again.	• Socially deprived. • High presence of caries in siblings.[1] • Low knowledge of dental disease.[1] • Irregular attender.[2] • Ready availability of snacks.[3] • Low dental aspirations.[1]	• Medically compromised.[4] • Handicapped. • Xerostomia.[5] • Long-term. • Cariogenic medicine.[6]	
MODERATE CARIES RISK	Annual posterior bitewings unless risk status alters.			
LOW CARIES RISK	Posterior bitewings at approximately: 12-18 month intervals in primary dentition. Two-year intervals in permanent dentition. More extended radiographic recall intervals may be employed if there is explicit evidence of continuing low caries risk.	• Socially advantaged. • Low caries siblings. • Dentally aware. • Regular attender. • Work does not allow regular snacks. • High dental aspirations.	• No medical problems. • No physical problems. • Normal salivary flow. • No long-term medication.	

Caries Risk Factors					
	Dietary Habits	**Use of Fluoride**	**Plaque Control**	**Saliva**	**Clinical Evidence**
	• Frequent sugar intake.[6,7]	• Drinking unfluoridated water.[8] • No fluoride supplements.[8] • Non-fluoride toothpaste.[8]	• Infrequent, ineffective cleaning.[9,10] • Poor manual control.[9,10]	• Low flow rate.[5] • Low buffering capacity.[5] • High *S mutans* and *lactobacillus* counts.[11,1]	• New lesions, premature extractions, anterior caries or restorations, multiple restorations.[11,12] • No fissure sealants.[13] • Fixed appliance. • Orthodontics.[14,15] • Partial dentures.[16,17]
	INDIVIDUALS WHO DO NOT CLEARLY FIT INTO HIGH OR LOW CARIES RISK CATEGORIES ARE CONSIDERED TO BE AT MODERATE CARIES RISK				
	• Infrequent sugar intake.	• Drinking fluoridated water. • Fluoride suplements used. • Fluoride toothpaste used.	• Frequent, effective cleaning. • Good manual control.	• Normal flow rate. • High buffering capacity. • Low *S mutans* and *lactobacillus* counts.	• No new lesions. • Nil extractions for caries. • Sound anterior teeth. • No or few restorations. • Restorations inserted years ago. • Fissure-sealed. • No appliance.

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A6 DECISION SUPPORT GRID FOR RECALL PERIOD

Select the appropriate recall interval to maintain optimal oral health by considering the risk of new or developing pathology and other threats to the maintenance of the patient's wellbeing.

			✓		✓		✓
Risk/threat factors	*See:*	**Risk level High**		**Risk level Medium**		**Risk level Low**	
Tooth tissue							
Caries	Appx 5						
Tooth wear	4.4.2						
Periodontal tissue	4.4.3.1						
Soft tissue	4.4.1						
Past dental experience	3.5						
Medical conditions	3.3						
Socio-behavioural history	3.4						
Effectiveness of self-care	3.4, 4.4, Appx 1						
Patient's expectations/ wants	3.6, 4.2						
Other considerations							
Care system requirement							
Orthodontic assessment	4.4.6 Appx 12						
Recall interval		Short		Intermediate		Extended	

Notes on use

- The recall period for each patient should be determined by considering a variety of factors relating to the need for dental care.
- Assess the risk level for each topic, insert your reasoning and tick the relevant box.
- The recall period should be determined according to the highest level ticked.
- This form could be given to patients to explain your decision and help them to understand their dental care in greater detail.

Illustrations

An irregularly attending 65-year-old smoker who has poor oral hygiene, a heavily restored mouth and is about to undergo radiotherapy would be very high risk for medical conditions, high risk for caries, periodontal disease and home dental hygiene routine but scores 'low' for patient expectation.

Conclusion: very high risk; therefore a short recall interval.

A highly-motivated 24-year-old with no previous restorations, excellent oral hygiene and diet is low risk for all treatment factors, but may fall into the high demand category.

Conclusion: low risk; therefore an extended recall interval is indicated. However, you may negotiate a shorter recall interval to reflect the patient's needs and expectations.

Note. Various other forms are commercially available for this purpose, or the clinician can design their own based on the above principles.

A7a EXTRA-ORAL EXAMINATION

EXTRA-ORAL EXAMINATION

External facial signs
- Skin colour and abnormalities.
- Symmetry.
- Swelling.
- Moles and skin blemishes.
- Trauma
  - localised bruising, swelling, lacerations
  - site of other injuries
  - note if patient seen elsewhere.

Lips and commissures
- Change in colour or appearance.
- Bi-digital palpation of the body of lips.

LYMPH NODES

Submental and submandibular.
- Positioned behind or facing patient.
- Palpate with first and second finger, with both hands beneath chin and to the side of the mandible.

Deep cervical
- Patient's head should be looking forward.
- Place hand along sternocleidomastoid muscle.
- Palpate with thumb and first finger deeply into tissues beside muscle.
- Repeat on other side.

Superficial cervical
- Turn patient's head to one side.
- Palpate from chin to shoulder down sternocleidomastoid muscle.
- Repeat on other side.

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A7b INTRA-ORAL EXAMINATION

INTRA-ORAL EXAMINATION

Labial, buccal and sulcus mucosa
- Examine one side then the other with the mouth half open.
- Observe colour and texture.
- Check patency of salivary gland orifices.
- Dry mucosa and observe flow from parotid duct.
- Palpate body of parotid bi-digitally.

Floor of mouth and salivary glands
- Ask patient to raise tip of tongue to roof of mouth.
- Examine floor and salivary glands using bimanual palpation.
- Place one finger in mouth and place one finger of other hand outside; palpate the salivary glands and observe flow from ducts.

Tongue
- Note tongue at rest and protruded.
- Note colour, texture, papillae, symmetry and mobility.
- Examine body of tongue with thumb and first finger.
- Examine ventral and lateral borders of tongue.
- Grasp body of tongue with gauze and move it to one side, while retracting cheek.
- Repeat on other side.
- Examine posterior third of tongue with mouth mirror and, if possible, with digital palpation.

Palatal mucosa
- Examine hard and soft palate.
- Depress tongue.
- Patient says 'Ah', examine:

a) Mucosa (palpate).
b) Tonsils.
c) Pillars of fauces.
d) Uvula and oropharynx.

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A8a ORAL CANCER: HOW TO CARRY OUT A SOFT TISSUE EXAMINATION IN PRACTICE

SOFT TISSUE EXAMINATION CHECKLIST

An effective soft tissue examination (STE) should be carried out on all patients. For an examination to be effective it should be systematic. It can be carried out in the supine position or with the patient sitting up.

It should include, but not be confined to, the following actions:

✓	**Do you:**
☐	1. Explain the procedure to the patient.
☐	2. Record any swelling or ulceration, noting: • Site • Size • Shape • Attachment • Consistency • Sensitivity • Colour • Temperature.
☐	3. Record any pain, noting: • Site • Onset • Duration • Radiation • Severity • Characteristics • Timing • Precipitating factors • Relieving factors.

✓ **Do you:**

- [ ] 4. Record other symptoms.
- [ ] 5. Note relevant medical history.
- [ ] 6. Note patient opinion as to the cause.
- [ ] 7. Encourage six-monthly checks for patients in high-risk categories.
- [ ] 8. Refer to hospital if premalignant lesion or any oral lesion of unknown aetiology is present, e.g. Leukoplakia, Submucous fibrosis, Erythroplakia.
- [ ] 9. Record and date any pathology. A dated STE form is extremely useful, and encourages a consistent protocol.

  Particularly note:
  - Ulceration
  - Induration
  - Fungation
  - Fixation
  - Pain with no cause
  - Dysphagia

- [ ] 10. Initiate appropriate management (e.g. referral).

Practical tips

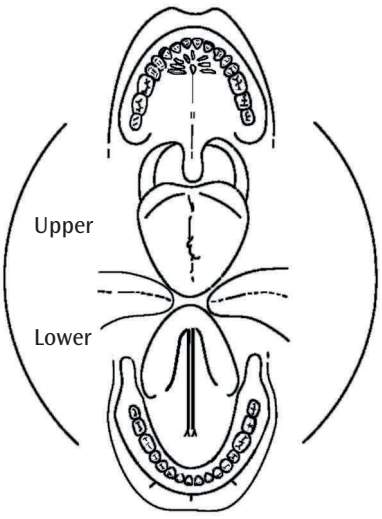
Advice to patients on how to reduce risks:
- Cut down tobacco consumption.
- Cut down alcohol consumption.
- Avoid exposure to sunlight – use lip salve with sun protection factor.

Please note the following important points:
- The prognosis is poor when diagnosis is late.
- Over 90% of oral cancers are squamous cell carcinomas.
- The floor of the mouth and tongue are high-risk areas.
- The elderly are at greater risk.
- Men are at greater risk than women.
- Some ethnic group customs may increase the risk, e.g. in Sri Lanka and India high incidence of oral cancer is due to the chewing and smoking of betel.

A8b EXAMPLE OF SOFT TISSUE LESION MONITORING CHART

Name		Title	
Date of Birth		Date	

Draw approximate size, shape and position of lesion to be monitored
(place yellow sticker on front of record card sleeve)



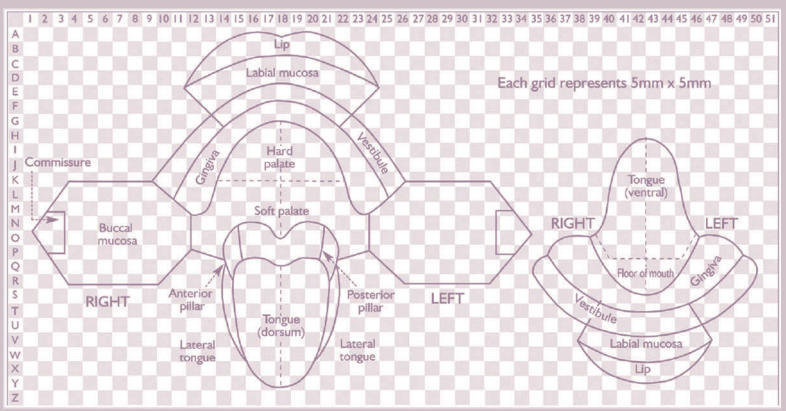
Key
O = Ulcer
X = Submucosal lesion
Refer: yes/no

Date

1	Date	Change	Initials
2	Date	Change	Initials
3	Date	Change	Initials
4	Date	Change	Initials
5	Date	Change	Initials

A8c SOFT TISSUE EXAMINATION

Record the extent of any pathology on the mouth map and describe it below



Description and date:

Appendix 8c continued

Surname/First name(s)								
Date of examination								
Mucosa	labial							
	buccal							
	palatal							
	gingival							
	alveolar							
Tongue	dorsal							
	ventral							
	lateral							
Floor of mouth								
Edentulous areas								
Pharynx	tonsils							
	pillar of fauces							
Salivary glands	parotid							
	sublingual							
	submandibular							
Neck	lymph nodes							

A9a BASIC PERIODONTAL EXAMINATION

Careful assessment of the periodontal tissues is an essential component of patient management. The Basic Periodontal Examination (BPE) is a simple and rapid screening tool that is used to indicate the level of further examination needed and provide basic guidance on treatment needed. These BPE guidelines are not prescriptive but represent a minimum standard of care for initial periodontal assessment. BPE should be used for screening only and should not be used for diagnosis.

The clinician should use their skill, knowledge and judgment when interpreting BPE scores, taking into account factors that may be unique to each patient. Deviation from these guidelines may be appropriate in individual cases, for example where there is a lack of patient engagement. General guidance on the implications of BPE scores is indicated in the table overleaf. The BPE scores should be considered together with other factors when making decisions about referral (as outlined in the BSP document 'Referral Policy and Parameters of Care').

Guidelines for the use of BPE in younger patients can be found in the BSP document 'Guidelines for periodontal screening and management of children and adolescents under 18 years of age.'

How to record the BPE

1. The dentition is divided into six sextants and the highest score for each sextant is recorded:

upper right (17 to 14)	upper anterior (13 to 23)	upper left (24 to 27)
lower right (47 to 44)	lower anterior (43 to 33)	lower left (34 to 37)

2. All teeth in each sextant are examined (with the exception of third molars unless first and/or second molars are missing).

3. For a sextant to qualify for recording, it must contain at least two teeth.

4. A World Health Organisation (WHO) BPE probe is used. This has a 'ball end' 0.5mm in diameter and a black band from 3.5mm to 5.5mm. Light probing force should be used (20-25 grams).

5. The probe should be 'walked around' the teeth in each sextant. All sites should be examined to ensure that the highest score in the sextant is recorded before moving on to the next sextant. If a code 4 is identified in a sextant, continue to examine all sites in the sextant. This will help to gain a fuller understanding of the periodontal condition and will make sure that furcation involvements are not missed.

Scoring codes

0	Pockets <3.5mm, no calculus/overhangs, no bleeding on probing (black band entirely visible).
1	Pockets <3.5mm, no calculus/overhangs, bleeding on probing (black band entirely visible).
2	Pockets <3.5mm, supra or subgingival calculus/overhangs (black band entirely visible).
3	Probing depth 3.5 5.5mm (black band partially visible, indicating pocket of 4-5mm).
4	Probing depth >5.5mm (black band disappears, indicating a pocket of 6mm or more).
*	Furcation involvement.

An example BPE score grid might look like this:

4	3	3*
-	2	4*

Both the number and the * should be recorded if a furcation is detected.
E.g. the score for a sextant could be 3* (indicating a probing depth 3.5-5.5mm plus a furcation involvement in the sextant).

How to use BPE

- All new patients should have the BPE recorded.
- For patients with codes 0, 1 or 2, the BPE should be recorded at every routine examination.
- For patients with BPE codes of 3 or 4, more detailed periodontal charting is required.
- Code 3: initial therapy including self-care advice (oral hygiene instruction and risk factor control) then, post-initial therapy, record a 6-point pocket chart in that sextant only.
- Code 4: if there is a Code 4 in any sextant then record a 6-point pocket chart throughout the entire dentition.
- BPE cannot be used to monitor the response to periodontal therapy because it does not provide information about how sites within a sextant change after treatment. To assess the response to treatment, a 6-point pocket chart should be recorded pre- and post-treatment.
- For patients who have undergone initial therapy for periodontitis, and who are now in the maintenance phase of care, then full probing depths throughout the entire dentition should be recorded at least annually.

In addition, it is recommended that:

- BPE should not be used around implants (4 or 6-point pocket charting should be used).
- Radiographs should be taken for all Code 3 and Code 4 sextants. The type of radiograph used is a matter of clinical judgment but crestal bone levels should be visible. The periapical view is regarded as the gold standard.

- When a 6-point pocket chart is indicated it is only necessary to record sites of 4mm and above (although 6 sites per tooth should be measured).
- Bleeding on probing should always be recorded in conjunction with a 6-point pocket chart.

Guidance on interpretation of BPE scores

0	No need for periodontal treatment
1	Oral hygiene instruction (OHI).
2	As for Code 1, plus removal of plaque retentive factors, including all supra and subgingival calculus.
3	As for Code 2, and RSD if required.
4	OHI, RSD. Assess the need for more complex treatment; referral to a specialist may be indicated.
*	Treat according to BPE Code (0-4). Assess the need for more complex treatment; referral to a specialist may be indicated

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A9b REFERRAL POLICY AND PARAMETERS OF CARE

This document sets out guidelines to define a framework for the provision of periodontal care by members of the dental team, and to provide guidelines for appropriate referral of patients in need of periodontal treatment in a secondary care setting. It is based on an earlier version of this policy from 2002 and has been substantially updated in 2011.

Referral of patients with periodontal problems to either specialist practitioners or hospital consultants depends on several factors including:

1. The severity of disease and complexity of treatment required.
2. The patient's desire to see a specialist or undergo specialist treatment.
3. The GDP's knowledge, experience and training to treat patients with a range of periodontal problems.
4. The presence of other complicating factors such as a patient's medical history or other comorbidity.

The referral policy here is based on a simple assessment of case complexity using the BPE and is intended as a guideline for clinical practice. Further background information is available, including detail of BPE-based periodontal screening and related periodontal assessments, in the associated BSP policy document – 'The Basic Periodontal Examination.' (Appendix 9a).

PARAMETERS OF CARE

- It is the responsibility of the dentist to monitor/screen patients regularly for the presence of periodontal diseases, including the use of relevant radiographs, to make a diagnosis and institute a treatment plan with defined therapeutic goals. On occasions, a GDP may wish to refer a patient for a specialist opinion at an early stage to assist with diagnosis and treatment planning.
- All periodontal assessments should be recorded in patients' clinical records. Where treatment has been previously provided, outcome assessments should similarly be recorded.
- The findings of every periodontal examination must be presented to the patient. Treatment options and consequences of no treatment should be explained.
- Even where referral for further treatment is considered, initial therapy including oral hygiene instruction and supra and subgingival scaling should normally be carried out in the primary care setting by the GDP or dental hygienist.
- Control of other modifiable risk factors where indicated, particularly smoking, should also be instigated by the GDP; if necessary, by referral to smoking cessation services.
- In certain cases, for example because of the health of the patient, non-compliance, or the severity of the disease, treatment to simply prevent the progression of disease may be appropriate. In these cases initial therapy may become the end point.
- The GDP should organise suitable maintenance care at appropriate time intervals for treated patients, if possible with dental hygienist/dental therapist input. This is the case irrespective of whether the active treatment was provided in a primary or secondary care setting.

Periodontal Treatment Assessment Based upon the Basic Periodontal Examination (BPE) Criteria :	
• BPE Score 1-3 in any sextant	= Complexity 1
• BPE Score of 4 in any sextant • Surgery involving the periodontal tissues	= Complexity 2
• Patients with BPE scores of 4 in at least one sextant, and one or more of the following factors: – Concurrent medical factor directly affecting the periodontal tissues, (eg diabetes, medication, etc); – Complicating root morphologies/anatomical factors; – Non-response to previous optimally carried out treatment • Diagnosis of aggressive periodontitis as assessed either by severity of disease for age or based on rapid rate of periodontal breakdown; • Patients requiring surgical procedures involving tissue augmentation or regeneration, including surgical management of mucogingival problems; • Patients requiring surgery involving bone removal (eg crown lengthening); • Patients requiring surgery associated with osseointegrated implants.	= Complexity 3
The presence of a relevant modifying factor increases the complexity by 1 increment, and is not cumulative:	
Modifying Factors that are Relevant to Periodontal Treatment • Co-ordinated medical or dental multi-disciplinary care • Medical history that significantly affects clinical management (see below) • Regular tobacco smoking • Special needs for the acceptance or provision of dental treatment. • Concurrent mucogingival disease (e.g. erosive lichen planus)	
Medical History that Significantly Affects Clinical Management • Patients with a history of head/neck radiotherapy or intravenous bisphosphonate therapy. • Patients who are significantly immunocompromised or immunosuppressed. • Patients with a significant bleeding dyscrasia/disorder. Patients with a potential drug interaction.	

As a guideline for referral policy using Periodontal Treatment Assessment criteria, Complexity 1 cases should generally be treated in general dental practice, Complexity 2 cases may either be treated by the GDP or referred; Complexity 3 cases should mostly be referred. It is worth noting that sometimes even simple periodontal treatment may have to be delivered by specialists as part of a more complex integrated treatment strategy. Equally, patients falling into the Complexity 3 category may not necessarily require care from a specialist. Initial nonsurgical treatment of cases should generally be carried out in general practice.

The index of treatment needs for periodontal treatment assessment is based on the most widely used practitioner oriented Basic Periodontal Examination (BPE) as devised by the British Society of Periodontology (see Appendix 9A). It sets complexity codes in a simplistic manner with the addition of a list of modifying factors that are relevant to periodontal treatment and an outline of medical histories that significantly affect clinical management. It is strictly a complexity assessment and does not address either the motivational aspects of treatment or the prioritisation of treatment. Nevertheless it is a very useful tool not only for providing guidelines of complexity but also for indicating according to complexity where treatment may be carried out. As with all treatment involving treatment teams, the long term success of these care pathways depend on good communication between the clinicians involved to ensure consistency of treatment objectives and appropriate long term follow up.

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A9c PERIODONTAL SCREENING FOR THOSE UNDER 18

Dental practitioners have a key role to play in the early recognition and diagnosis of gingival and periodontal diseases.

Following the British Society of Periodontology (BSP) Policy Statement in 2001 relating to the screening and management of periodontal problems in adults seen in primary dental care and the update to the Basic Periodontal Examination (BPE) in 2011 (www.bsperio.org.uk), the need for a document pertaining to the child and adolescent population has been recognized (Clerehugh 2008). These Guidelines have been formulated to set out the recommendations of the BSP and the British Society of Paediatric Dentistry (BSPD) for the periodontal screening and management of children and adolescents under 18 years of age in the primary dental care setting.

The aims of these Guidelines are:

1. To outline a method of screening children and adolescents for periodontal diseases during the routine clinical dental examination.
2. To provide guidance on when it is appropriate to treat in practice or refer to specialist services.

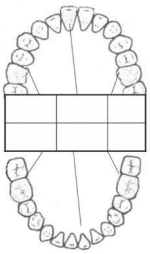
Periodontal screening for children and adolescents assesses six index teeth (UR6, UR1, UL6, LL6, LL1 and LR6) using a simplified BPE to avoid the problem of false pockets (Ainamo et al 1984). The WHO 621 style probe with a 0.5mm ball end, black band at 3.5 to 5.5mm, and additional markings at 8.5mm and 11.5mm is used. BPE codes 0-2 are used in the 7 to 11-year-olds while the full range of codes 0, 1, 2, 3, 4 and * can be used in the 12 to 17 year-olds (Figures 1 and 2).

Cases that may warrant referral for specialist care are shown in Table 1.

Figure 1. Simplified BPE codes for under 18 years

0	Healthy
1	Bleeding after gentle probing
2	Calculus or plaque retention factor
3	Shallow pocket 4mm or 5mm
4	Deep pocket 6mm or more
5	*Furcation

Figure 2. Examination of index teeth



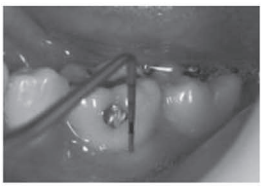


Table 1. When to refer to a specialist

Diagnosis of aggressive periodontitis
Incipient chronic periodontitis not responding to treatment
Systemic medical condition associated with periodontal destruction
Medical history that significantly affects periodontal treatment or requiring multi-disciplinary care
Genetic conditions predisposing to periodontal destruction
Root morphology adversely affecting prognosis
Non-plaque-induced conditions requiring complex or specialist care
Cases requiring diagnosis/management of rare/complex clinical pathology
Drug-induced gingival overgrowth
Cases requiring evaluation for periodontal surgery

adapted with the kind permission of the British Society of Periodontology and the British Society for Paediatric Dentistry

A10 NEW PATIENT ATTITUDE QUESTIONNAIRE

HOW CAN WE HELP YOU?

Name | Title

Date of birth | Date | Number

To help us plan the best possible care for you, both now and in the future, it will greatly assist us if we know a little about your previous dental experiences and your hopes and aims for the future.

Please answer the following questions

How do you feel about your teeth/appearance?

What is your main concern for your teeth?

How do you feel about going to the dentist?

Is there anything you would like us to know about your previous dental experiences?

What are your hopes and aims for your mouth?

How would you describe your diet? Poor Average Good Excellent

Do you take sugar in beverages? Yes No

How often do you clean your teeth?

How long do you take to clean your teeth?

Do you smoke? Yes ☐ No ☐

If yes, how many per day?

How many units of alcohol would you normally consume?

Per day? Per week?

Is there anything else you would like us to know about dentistry and you?

adapted with the kind permission of Denplan

A11 MODIFIED DENTAL ANXIETY SCALE

Can you tell us how anxious, if at all, you get when visiting the dentist?
Please indicate by inserting an 'X' in the appropriate box

1. If you went to your dentist for TREATMENT TOMORROW, how would you feel?				
Not anxious ☐	Slightly anxious ☐	Fairly anxious ☐	Very anxious ☐	Extremely anxious ☐
2. If you were sitting in the WAITING ROOM (waiting for treatment), how would you feel?				
Not anxious ☐	Slightly anxious ☐	Fairly anxious ☐	Very anxious ☐	Extremely anxious ☐
3. If you were about to have a TOOTH DRILLED, how would you feel?				
Not anxious ☐	Slightly anxious ☐	Fairly anxious ☐	Very anxious ☐	Extremely anxious ☐
4. If you were about to have your TEETH SCALED AND POLISHED, how would you feel?				
Not anxious ☐	Slightly anxious ☐	Fairly anxious ☐	Very anxious ☐	Extremely anxious ☐
5. If you were about to have a LOCAL ANAESTHETIC INJECTION in your gum, above an upper back tooth, how would you feel?				
Not anxious ☐	Slightly anxious ☐	Fairly anxious ☐	Very anxious ☐	Extremely anxious ☐

Instructions for scoring (remove this section below before copying for use with patients)

The Modified Dental Anxiety Scale. Each item scored as follows:

Not anxious = 1
Slightly anxious = 2
Fairly anxious = 3
Very anxious = 4
Extremely anxious = 5

Total score is a sum of all five items, range 5 to 25: Cut off is 19 or above which indicates a highly dentally anxious patient, possibly dentally phobic.

A12 INDEX OF ORTHODONTIC TREATMENT NEED

THE DENTAL HEALTH COMPONENT

Below is a simplified form of the Index of Orthodontic Treatment Need (IOTN). The patient's most severe orthodontic feature should be identified, and the patient should then be categorised according to this trait, and after considering their aesthetic component score.

Grade 5 (Very Great)

5.1 Cleft palate, with or without a cleft lip.

5.2 Increased overjet greater than 9mm.

5.3 Reverse overjet greater than 3.5mm with reported masticatory and/or speech difficulties.

5.4 Impeded eruption of teeth (with the exception of third molars) due to crowding, displacement, the presence of supernumerary teeth, retained deciduous teeth and/or any pathological cause.

5.5 Extensive hypodontia with restorative implications (more than one tooth missing in any quadrant) requiring pre-restorative orthodontics.

Grade 4 (Great)

4.1 Increased overjet greater than 6mm but less than, or equal to, 9mm.

4.2 Reverse overjet greater than 3.5mm with no masticatory or speech difficulties.

4.3 Reverse overjet greater than 1mm but less than 3.5mm with recorded masticatory and speech difficulties.

4.4 Anterior or posterior crossbite with greater than 2mm discrepancy between the retruded contact position and intercuspal position.

4.5 Posterior lingual crossbite with no functional occlusal contact in one or both buccal segments.
4.6 Severe displacements of teeth greater than 4mm.
4.7 Extreme lateral or anterior open bite greater than 4mm.
4.8 Increased and complete overbite with gingival or palatal trauma.
4.9 Less extensive hypodontia requiring pre-restorative orthodontics or orthodontic space closure to obviate the need for a prosthesis.

Grade 3 (Moderate)

3.1 Increased overjet greater than 3.5mm but less than, or equal to, 6mm with incompetent lips.
3.2 Reverse overjet greater than 1mm but less than, or equal to, 3.5mm.
3.3 Increased and complete overbite without gingival or palatal trauma.
3.4 Anterior or posterior crossbite greater than 1mm but less than, or equal to, 2mm discrepancy between the retruded contact position and intercuspal position.
3.5 Lateral or anterior open bite greater than 2mm but less than, or equal to, 4mm.
3.6 Displacement of teeth greater than 2mm but less than, or equal to, 4mm.

Grade 2 (Little)

2.1 Increased overjet greater than, or equal to, 6mm with competent lips.
2.2 Increased overbite greater than, or equal to, 3.5mm without gingival contact.
2.3 Anterior or posterior open bite greater than 1mm but less than, or equal to, 2mm.
2.4 Anterior or posterior crossbite with less than, or equal to, 1mm discrepancy between the retruded contact position and intercuspal position.
2.5 Displacement of teeth greater than 1mm but less than, or equal to, 2mm.
2.6 Reverse overjet greater than 0mm but less than, or equal to, 1mm.

2.7 Prenormal or postnormal occlusions with no other anomalies. Includes up to half a unit discrepancy.

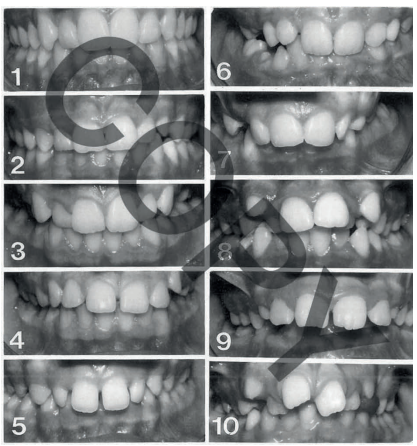
Grade 1 (None)

1.1 Other occlusions including displacements less than 1mm.

THE AESTHETIC COMPONENT

The aesthetic component of the IOTN consists of a series of photographs (the SCAN scale), graded from 1 (most orthodontically aesthetic) to 10 (least orthodontically aesthetic). The scale was drawn up by a lay panel, and is simple for patients and practitioners to use and understand.[1]

The grading indicates the need for orthodontic treatment, as follows:
Grade 1-4: little or no treatment required.
Grade 5-7: moderate or borderline treatment required.
Grade 8-10: treatment required.



The SCAN scale was first published in 1987 by the European Orthodontic Society for rating dental attractiveness.[1]

References

1. SEvans R, and Shaw WC. Preliminary evaluation of an illustrated scale for rating dental attractiveness. Eur J Orthod. 1987;9:314-318.

A13 CONSENT TO DENTAL TREATMENT

The basic requirements for obtaining valid consent are:

- The patient must be given sufficient information from which to form a balanced judgement. This means that the patient should be given reasonable and appropriate treatment options, along with their risks and benefits. This includes the option of having no treatment.
- The patient must have sufficient mental capacity to understand what he or she is consenting.
- The consent must be freely given, and can be withdrawn at any time.

Types of consent

Consent can be implied or expressed. A safe approach is to consider that implied consent is only sufficient for dental examinations, and that all other dental procedures, including the taking of radiographs, require expressed consent.

Expressed consent involves, as a minimum, an explanation of the proposed treatment, and for the patient to signify agreement in some positive fashion. It can be either verbal or written, and the overwhelming majority of dental treatment is appropriately provided on the basis of expressed verbal consent.

Written consent, using some type of consent form, is rarely required or appropriate, although written consent should be obtained for any treatment under general anaesthesia or under any form of sedation.[1,2] It is recommended for courses of complex restorative treatment or provision of implants. Whether verbal or written consent has been obtained, the treatment plan

and the substance of the discussions with the patient should be recorded in the clinical notes. In particular, explanations concerning treatment options and prognosis should be recorded, as well as warnings regarding potential complications. Written treatment plans and fee estimates, signed by the patient, with a copy retained in the records, can also be useful in refuting an allegation that the patient (NHS or private) did not understand the nature of their acceptance, the treatment prescribed, or the fees involved.

Standards of consent

In the UK there is no legal doctrine of informed consent. The basic test applied in England and Wales is still the so-called 'Bolam test'[3] of the reasonable dentist acting in accordance with a responsible body of opinion within the profession; in Scotland practitioners are assessed against the standard of a 'professional man of ordinary skill... acting with ordinary care'.[4] However, UK courts have moved closer to the situation which exists in other jurisdictions, such as the USA and Australia. The recent ruling of Montogmery v Lanarkshire Health Board,[5,6] brings the law into line with the ethical requirements imposed by the regulatory bodies, including the GDC. The judges in this case said that the extent of information given to a patient about the risks of a proposed treatment is not to be determined by the clinician or what other clinicians in the same situation would do. Rather the test is what the particular patient sitting in front of the clinician wants to know. For consent, the dentist should inform the patient of everything they wish to know, as well as anything the dentist thinks they might need to know.

In addition to the basic requirements noted above, the following explanations should be given to patients in order to obtain valid consent:

- The treatment proposed and how it will be carried out.

- Why the treatment is necessary and what might happen if the treatment is not carried out.
- The material risks which may be involved in undergoing the treatment.
- The alternative forms of treatment that are available, and the associated benefits and material risks.
- Cost, if applicable.

Who can give consent?

In the UK the age of consent (or, in Scotland, the age of legal capacity) is 16 years, while the age of majority is 18 years. However, in the UK we also recognise the principle of so-called 'Gillick competence',[7] whereby children under 16 years of age can give valid consent themselves, subject to their capacity to understand the issues surrounding treatment, and to make balanced decisions.

The treatment of children, and adults without capacity, presents unique problems because of the involvement of a third party, namely the parent, guardian or carer. The provisions of the Children Act 1989[8] and the concept of 'parental responsibility' further complicate the position.

Only the patient can truly consent, whether the patient is a minor or an adult. The critical question is thus the patient's capacity or competency to give their consent, and this will vary according to age, maturity, the complexity of the proposed procedure, and the degree of any mental handicap. It is prudent to seek to involve the parents/guardians of children and the carers of adults without capacity, but one obtains from them agreement or assent, not true consent. If the patient cannot consent, for whatever reason, the practitioner is essentially faced with providing treatment without consent, but preferably with the agreement of the parent, guardian, carer, or nearest relative. In such circumstances it may be important to be able to justify the need for treatment,

and the treatment plan, with good clinical records, including radiographs and photographs where appropriate. In some instances a second opinion from another dentist should be sought, with a view to obtaining endorsement of the treatment plan. In all instances, the patient's best interests are paramount.

Mental Capacity Act 2005[9] and Adults with Incapacity (Scotland) Act 2000[9]
The concept of patient consent relies on the assumption that all patients are able to make rational decisions on their own behalf. However, all practitioners should be aware that there are circumstances in which a patient may be unable to give full and meaningful consent by reason of conditions such as dementia, learning disabilities, or other mental health problems. These circumstances are laid out in the Mental Capacity Act 2005 (for England and Wales) and the Adults with Incapacity (Scotland) Act 2000.

The Act is based on five main principles, as follows:

- Patients must be assumed to have the capacity to make their own decisions unless it is established otherwise.
- All practicable steps must be taken to help a person to make a decision before he can be treated as being unable to do so.
- A person is not to be treated as unable to make a decision merely because he makes an unwise decision.
- A decision made on behalf of a person who lacks capacity must be made in his best interests.
- A decision made on behalf of a person who lacks capacity should restrict their rights and freedoms as little as possible.[9]

Further ramifications and exceptions are detailed in the Acts.[9,10] A full discussion of capacity to consent is outside the scope of this book, and readers should consult legal texts or seek advice from their indemnity society for more information.

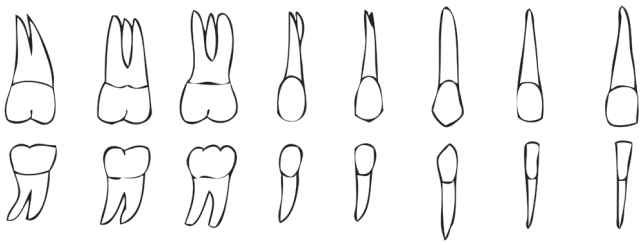
CONCLUSION

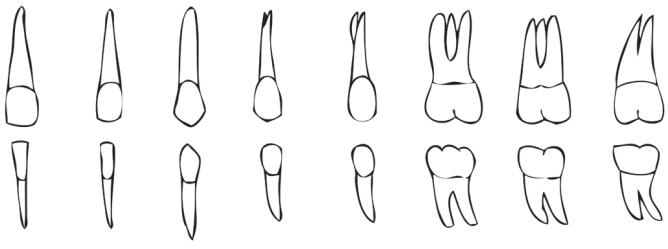
Members of the dental team should treat the obtaining of consent as being of fundamental importance, and of equal importance to the treatment itself. All team members must ensure that they are familiar with the guidelines published by the General Dental Council,[11] and that they keep abreast of any changes in policy. By doing so they should avoid a significant proportion of complaints, as well as enjoying greater levels of patient satisfaction. Consent to treatment is an evolving area, and it is therefore important to keep up to date with developments, particularly on the standard of consent required by the courts. Consent is a complex process, and different laws and regulations apply at different ages in different countries in the UK. Practitioners must be aware of the laws that apply in their own country.[2] Further advice should be obtained from your indemnity organisation.

References

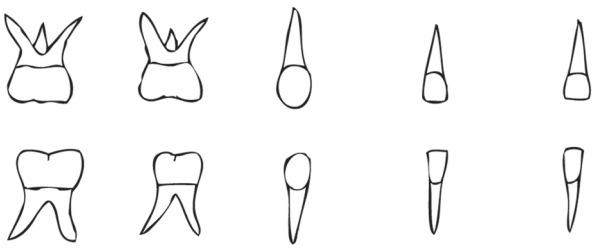
1. Department of Health. A Conscious Decision: A review of the use of general anaesthesia and conscious sedation in primary dental care. London: DH; 2000.
2. Standards for Conscious Sedation in the Provision of Dental Care. Report of Intercollegiate Advisory Committee for Sedation in Dentistry, 2015, The dental faculties of the Royal Colleges of Surgeons and the Royal College of Anaesthetists
3. Bolam v Friern Hospital Management Committee [1957] 1 WLR 583.
4. Hunter v Hanley [1955] SC 200.
5. Montgomery v Lanarkshire Health Board, Scotland, 2015, UKSC 104
6. D'Cruz L, Kaney H. Consent – a new era begins. Br Dent J. 2015;219:57-9.
7. Gillick v West Norfolk and Wisbech Area Health Authority [1985] 3 All ER 402.
8. The Children Act 1989. London: HMSO; 1989.
9. Mental Capacity Act 2005, s1. London: HMSO; 2005.
10. Adults with Incapacity (Scotland) Act 2000.
11. General Dental Council. Standards for the Dental Team 2013.

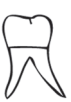
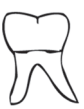
A14a TOOTH NOTATION SYSTEMS: ADULT

FDJ	18	17	16	15	14	13	12	11
PALMER	8	7	6	5	4	3	2	1
BDJ	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1
Anatomical description	R upper third molar	R upper second molar	R upper first molar	R upper second premolar	R upper first pre-molar	R upper canine	R upper lateral incisor	R upper central incisor
Pictogram								
	R lower third molar	R lower sec-ond molar	R lower first molar	R lower sec-ond premolar	R lower first premolar	R lower canine	R lower lateral incisor	R lower cen-tral incisor
	LR8	LR 7	LR6	LR5	LR4	LR3	LR2	LR1
	8	7	6	5	4	3	2	1
	48	47	46	45	44	43	42	41

21	22	23	24	25	26	27	28	
1	2	3	4	5	6	7	8	
UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8	
L upper central incisor	L upper lateral incisor	L upper canine	L upper first premolar	L upper second premolar	L upper first molar	L upper second molar	L upper third molar	
								Pictogram
L lower central incisor	L lower lateral incisor	L lower canine	L lower first premolar	L lower second premolar	L lower first molar	L lower second molar	L lower third molar	Anatomical description
LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	BDJ
1	2	3	4	5	6	7	8	Palmer
31	32	33	34	35	36	37	38	FDJ

A14b TOOTH NOTATION SYSTEMS: CHILD

FDJ	55	54	53	52	51
PALMER	E	D	C	B	A
BDJ	URE	URD	URC	URB	URA
Anatomical description	R upper deciduous second molar	R upper deciduous first molar	R upper deciduous canine	R upper deciduous lateral incisor	R upper deciduous central incisor
Pictogram					
	R upper deciduous second premolar	R lower deciduous first premolar	R lower deciduous canine	R lower deciduous lateral incisor	R lower deciduous central incisor
	LRE	LR D	LRC	LRB	LRA
	E	D	C	B	A
	85	84	83	82	81

61	62	63	64	65	
A	B	C	D	E	
ULA	ULB	ULC	ULD	ULE	
L upper deciduous central incisor	L uupper decidu-ous lateral incisor	L upper deciduous canine	L uupper deciduous first molar	L upper deciduous second molar	
					
					Pictogram
L lower deciduous cen-tral incisor	L lower deciduous lateral incisor	L lower deciduous canine	L lower deciduous first premolar	L lower deciduous second premolar	Anatomical description
LLA	LLB	LLC	LLD	LLE	BDJ
A	B	C	D	E	Palmer
71	72	73	74	75	FDJ

A15 RECOMMENDATIONS FOR AUDIT AND RESEARCH

POSSIBLE TOPICS FOR AUDIT

In order to ensure that national guidelines are tailored for local use and are taken up, it is important that local guidelines be developed from them.[1] One of the most effective ways of achieving and understanding this implementation process is by systematic auditing of key aspects of the guideline recommendations.

Suggestions for topics suitable for local audit and development include:

- Classification of patients according to risk status for:
  a) Caries
  b) Periodontal breakdown
  c) Oral mucosal health
  d) Likelihood of endodontic failure.
- Minimum data set recorded for all dental examinations.
- Currency of medical histories.
- Currency and completeness of dental histories.
- Quality of written reports on radiographs.
- Quality and comprehensiveness of treatment plans.

SUGGESTED TOPICS FOR RESEARCH

The process employed during the preparation of these good practice guidelines has demonstrated that there are very significant gaps in our knowledge in this area. These gaps will have to be researched if we are to be able to ensure that practices in the field of clinical examination and record-keeping can be shown to be clinically effective and appropriate.

Based on the searches for evidence undertaken by these guidelines' development group, areas for future research should include:

- Patients' views and aspirations as to how comprehensive a clinical examination should be.
- Patients' views and aspirations as to how frequently clinical examination should be undertaken.
- Optimal use (with appropriate confidentiality safeguards) of information technology in recording, tracking and sharing routine and specialist information derived from clinical practice.
- Objective data on diagnostic yield of routine examination methods for common dental diseases.
- Objective data on diagnostic yield of new examination methods for common dental diseases.
- Assessing the potential and likely impact of clinical decision aids in dental treatment planning and assessment of individual patient risk and prognosis for a range of dental diseases and conditions.
- Assessing the long-term clinical and economic consequences of suboptimal treatment planning of dental care.
- Assessing the impact (positive and negative) of asymptomatic dental review examinations undertaken at differing intervals.
- The role and effect of intermittent clinical examinations in the lifelong provision of oral healthcare. Ideally dental care should be a continuous lifelong process rather than sporadic treatment episodes. Only with such an approach is it possible to predict and prevent disease through monitoring, and as a consequence create the opportunity to meet patients' growing expectations of teeth for life.
- Reasons for restoration and replacement, and findings on replacement.

References

1. Scottish Intercollegiate Guidelines Network. SIGN 50: A guideline developer's handbook. Edinburgh: SIGN; 2011. Available at: www.sign.ac.uk/pdf/sign50.pdf

A16 SUMMARY OF RECOMMENDATIONS

KEY: **A – Aspirational** **B – Basic** **C – Conditional**

	Pre-exam	Exam	Recall	Emergency Dental	Emergency Trauma	Receiving Referral
Personal Information						
Name	B		X	B	B	B
Address	B		X	B	B	B
Date of birth	B		X	B	B	B
Phone numbers	B		X	B	B	B
Contact method	A		X	A	B	B
Child – parental contact	C		X	B	B	B
Patient dependent on someone	C		X	A	C	C
Email	C		X	A	A	A
Emergency contact	B		X	B	B	B
General Medical Practitioner	B		X	B	B	B
Relevant Specialist Practitioner	B		X	A	C	C
NHS Identification Number	C		X	C	C	C
Occupation	B		X	C	C	A
Signature for verification	B		X	A	A	A
Details checked/updated	B	B	X	B	B	B
Medical History						
New form completed or updated	B	B	B	B	B	B
Dated and signed by patient and clinician	A	A	A	A	A	A

KEY: **A – Aspirational** **B – Basic** **C – Conditional**

	Pre-exam	Exam	Recall	Emergency Dental	Emergency Trauma	Receiving Referral
Socio-behavioural History						
Smoking	B		X	C	C	C
Alcohol consumption	B		X	C	C	C
Eating habits	A			A	A	C
Dietary information	C		C	A	A	C
Contact sports played	C		X	C	C	C
Musical instruments	C		X	C	C	C
Recreational drug use	A					
Previous Dental History						
Chewing unrestricted	B		X	C	C	C
Restorative procedures	B			C	C	C
Orthodontic care	C			C	C	C
Endodontic care	C			C	C	C
Oral surgery procedures	C			C	C	C
Oral hygiene routine	B		C	C	C	C
Anxiety	B			C	C	C
Good/bad past experiences	C					
Aesthetic concerns	C					
Changes noticed by patient	C					
Factors Affecting Appointment						
Timing	A			A	A	A
Mobility	C		X	A	A	A
Carer to be present	C		X	C	C	C
Travel considerations	A			A	A	A

KEY: A – Aspirational B – Basic C – Conditional	Pre-exam	Exam	Recall	Emergency Dental	Emergency Trauma	Receiving Referral
Reason(s) for attendance	B		B	B	B	B
Payment method	B		B	B	B	B
Extra-oral Examination						
Face, head		B	B	B	B	C
Neck		B	B	B	B	C
TMJ		B	B	C	B	C
Rest of body		C	C	C	C	C
Bony injuries					C	C
Intra-oral Soft Tissue Examination						
Soft tissues		B	B	A	C	C
Intra-oral Hard Tissue						
Charting of teeth present		B	B		C	A
Existing restorations		B	X			A
BPE		B	B	C	C	C
Previous Endodontic treatment		C	C			C
Caries		C	B	C	C	C
Defective restorations		C	B	C	C	C
Mobility		C	C	C	C	C
Prostheses		C	C			C
Occlusion		B	C	C	C	C
Occlusal abnormalities		C	C	C	C	C
Toothwear		C	C			C
Focus of symptoms				B	B	
Deal with referral						B
Radiographs		C	C	C	C	C
Periapical condition		B				

KEY:	A – Aspirational	B – Basic	C – Conditional

	Pre-exam	Exam	Recall	Emergency Dental	Emergency Trauma	Receiving Referral
Recall Examination						
Predisposition to disease			A			
Disease experience			A			
Deterioration or control of disease			A			
Past dental history			C			
Risk factors			C			
Patient expectations			A			
Lifestyle changes			C			
Orthodontic treatment			C			
Absent, malpositioned, submerged, unerupted, supernumerary and retained deciduous, or impacted teeth			C			
Dental Emergencies						
Site of pain / radiation				B		
Type of pain				B		
Duration of pain				B		
Intermittent or continuous				B		
Spontaneous?				C		
Factors affecting pain levels				C		
Pain triggers				C		
Related habits				C		
Sleep patterns				B		
Previous symptoms or treatment				C		

KEY:	A – Aspirational	B – Basic	C – Conditional

	Pre-exam	Exam	Recall	Emergency Dental	Emergency Trauma	Receiving Referral
Dental trauma						
Time, location, cause					B	
Loss of consciousness					B	
Type of injury					B	
Resultant difficulties					C	
Extra-oral injuries					C	
Numbness/paraesthesia					C	
Tetanus status					C	
Tooth fragments suitable for reattachment					C	

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Other documents available to view online include:

Standards in Dentistry
The comprehensive manual includes tables of clinical outcomes, based on the FGDP(UK)'s previous publication Self-Assessment Manual and Standards (SAMS), covering 17 treatment areas in both primary and secondary care dentistry.

Selection Criteria For Dental Radiography
One of the leading texts on indications for radiographic investigation, covering the use of radiographs for the developing dentition, endodontic assessment, caries diagnosis, periodontal assessment, and implantology.

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