Dental Contract Reform Pilots
Notes to support Care Pathway Approach
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Care pathways: the underpinning dental public health philosophy</td>
<td>4</td>
</tr>
<tr>
<td>Assessing Oral Health</td>
<td>6</td>
</tr>
<tr>
<td>Disease Prevention and Management</td>
<td>12</td>
</tr>
<tr>
<td>Continuity of Care and Routine Management</td>
<td>14</td>
</tr>
<tr>
<td>Advanced Care</td>
<td>15</td>
</tr>
<tr>
<td>APPENDIX A: Advanced Care Pathways</td>
<td>17</td>
</tr>
<tr>
<td>APPENDIX B: Documentation supporting the oral health assessment</td>
<td>33</td>
</tr>
</tbody>
</table>
Introduction

This document is designed to underpin the clinical training workshops and support the dental team in the adoption of a care pathway approach. This includes the use of a standardised assessment of oral health, risk screening and evidence informed prevention and delivery of care. The model has been developed by building on work undertaken with pilots developed by primary care trusts in practices in Salford and Oldham, Bradford and Airedale.

Recent national surveys show that two thirds of adults and two thirds of children at five and 12 years old are now free of visible tooth decay. It is important that patients receive a dental service that helps them maintain good oral health, and which focuses on improving the oral health of the whole population, not one that is focused on treatment only.

The pathway and its associated computer software help dentists to systematically record needs, assess risks and provide evidence based prevention and advice. At the same time, dentists are able to exercise their professional judgement in working with patients to decide what care will best promote good oral health, whilst being accountable for the quality of the services they provide.

This document is marked as a pre-publication copy as it is being shared specifically with the dental contract reform pilots in advance of any future publication.

Barry Cockcroft

Chief Dental Officer for England
Care pathways: the underpinning dental public health philosophy

To achieve improvement in oral health and dental services requires that we do things differently – the pilot programme aims to stimulate and test change.

Improving population oral health requires the resources and energy of the primary dental care team in addition to any population dental public health programmes planned. Primary dental care services have been delivering (and have been measured on) items of treatment for too long, despite changes to population oral health trends. Dental care has largely been provided in bursts of activity known as courses of treatment, and are delivered with the intention and philosophy of rendering a patient ‘dentally fit’ by fixing and repairing the teeth and removing plaque and calculus. Working in this way does not fully engage patients in taking responsibility for maintaining and improving their own oral health. It can result in clinical teams treating the teeth (and gums) in isolation to the lifestyle, risks and behaviours of patients and is against the natural course of chronic diseases such as decay and periodontal disease.

The logical use of evidence of clinical effectiveness, leading to the development of clinical outcomes and integration of clinical audit into commissioning, is the use of a care pathway as tested in other healthcare areas. Care pathways, in the true form, map out two trajectories: the sequencing and timing of a practitioners’ care and the journey that patients will experience. Adopting a care pathway approach means dental teams and patients going on a continuous journey together. Both the patient and the dental team must contribute to necessary actions and changes. The impact is measured by improved outcomes rather than just processes.

Primary dental care is often largely tooth focussed and, while teams contribute to improved oral health, effective prevention and advice is not always delivered systematically, nor are resources and care always directed according to need. It is important that dental teams have an opportunity to get upstream to take appropriate primary preventive action and give evidence informed advice to predict and prevent dental diseases. Some patients may need a care pathway to be delivered several times before they respond. Many have challenging lifestyles and do not value oral health. Some only want a rapid access to pain relief. However a proportion of them can and do respond to a repeated offer for a full assessment and continuing care.

Evidence informed preventive care pathways that are needs/risk led support dental clinical teams to make effective interventions and create informed patients who better understand what they need to do. The pilot programme incorporates Delivering Better Oral Health (DBOH) evidence informed preventive interventions. The model of care supports dental treatment and preventive interventions and
advice being delivered according to identified need and by the most appropriate team member. For the practice, participating in the pilot is likely to stimulate or improve:

- Ready access for patients to urgent and routine / continuing care
- Assessment of risk and need to support care pathway delivery to allow understanding of practice population needs
- Improvements in oral health by systematically applying evidence informed preventive care pathways and including a self care emphasis
- Utilisation of skill mix

For example, a person deemed to have, and to be maintaining, good oral health may be placed on an extended recall interval, which for an adult may be up to 2 years. In contrast, someone who has active disease may find their treatment is initially confined to pain control, disease stabilisation and oral health improvement and they will be seen more frequently for proactive prevention. Advanced treatments such as bridges and crowns would not normally be provided until oral health has been stabilised and could therefore maintain advanced restorations.

Some clinicians are concerned that the use of care pathways requires a standard delivery of care that limits their professional autonomy. Care pathways are not intended to be immutable documents setting out treatment regimes. Dentists will be prompted to provide evidence informed preventive care and advice but will still need to agree and deliver plans for dental treatment provision. A preventive care pathway can be likened to a musical score which clinicians use to guide their practice. Variation remains an expected feature of clinical treatment practice. Important learning can derive from clinical variation and can become part of structured conversations between clinicians in the practice as well as between clinicians and commissioners.

Colette Bridgman
Consultant in Dental Public Health, Manchester PCT
Assessing Oral Health

What is an oral health assessment?

A key aim of the care pathway approach is to facilitate the move from a restorative approach to patient care to a preventive and long term approach that is risk based and meets the specific needs of individual patients. It also aims to encourage the involvement of patients in managing their own oral health.

A patient’s journey begins with a standardised assessment of their oral health at the point of entry into NHS primary care dentistry. An oral health assessment is a comprehensive need and risk assessment and involves the collection of 4 sets of information:

- Demographics
- Medical history
- Social history/lifestyle
- Clinical assessment

An oral health assessment is the entry point to a pathway of care. Diagram 1.1 illustrates the full care model.

Diagram 1.1: Full care model
The overall purpose of an oral health assessment is to capture the oral health status and individual risk factors of the patient. These are used to formulate a care plan incorporating advice, actions and treatment that is appropriate to need.

Through assessing levels of existing disease and identifying modifying factors which contribute to current or future problems, clinicians can identify the patient’s future risk from disease. This helps identify the patient’s preventive and treatment needs. Risk screening should be performed at the initial patient assessment stage as well as at each oral health review.

**What is included in an oral health assessment?**

Much of the information that drives an oral health assessment is already collected by clinicians in daily practice. The software designed to support the pilots requires the following information to be collected:

- A medical history
- A lifestyle and behaviour history
- Presenting complaints
- Patient perceptions and expectations
- Dental attendance pattern
- A complete dental charting
- A record of existing restorations.
- A record of the number of teeth with carious lesions
- A record of basic periodontal exam (BPE), plaque levels and bleeding
- A record of the health of soft tissue
- An analysis of the patient’s risk from future disease

The software has mandated certain data items that are required to operate the risk screening tool.

**When should I perform an oral health assessment?**

There are three types of oral health assessment:

- When a patient is first seen in your practice – *this is an oral health assessment*
- When the patient attends for review – *this is an oral health review* (refresh of an oral health assessment)
- When a patient attends for urgent assessment – *this is an urgent care assessment*
Why is there a separate urgent care assessment?

Some patients may not wish to enter into a continuing care relationship and therefore solely seek resolution of symptoms. A less detailed assessment is proposed for these patients and is supported by the software system. However, every patient should be encouraged to return for a full oral health assessment and enter into continuing care.

What is the purpose of the risk screening tool?

This stage of the assessment is to diagnose disease and assess the patient’s individual risk of developing oral disease in the future. There are wide variations between patients in their susceptibility to disease, the likelihood and the speed of their disease progression. Diagram 1.2 illustrates the role of risk screening in the care pathway.

*Diagram 1.2: the role of risk screening in the care pathway.*

The risk screening assesses levels of existing disease and modifying factors that could contribute to current or future problems. Some modifying factors can be influenced and modified through changes in patient behaviour.

Therefore, to provide care that meets the oral health needs of each patient, it is important to produce patient specific information. This will help in assessing each patient’s individual risk of developing both common and less common oral diseases and conditions. The personal care plan includes appropriate preventive
advice and treatment options to improve the patient’s oral health and reduce the patient’s risk level.

**What are the benefits of risk screening?**

Communicating the red/amber/green (RAG) status to patients helps them to understand their oral health status and encourages them to take ownership and responsibility for their own oral health. The screening process also provides an informed basis for discussions about future care and helps the practitioner describe what the possible outcomes might be.

The benefits of risk screening are not only for the patient. The process can support the dental team in delivering quality assured, evidence based, personally focussed dental care. At a practice level, it can support the dental team in understanding the needs of individual patients and their practice populations.

**What is the risk screening process?**

During an oral health assessment, clinical factors and patient factors are aggregated with modifying factors to inform risk stratification in the software. Diagram 1.3 illustrates how the factors are aggregated for the caries domain.

*Diagram 1.3: Aggregation of risk factors for caries*
The clinician supported by the software follows the steps below to perform the risk stratification:

**Step 1** Selecting clinical and patient factors which are relevant to risk

**Step 2** Scoring the clinical and patient factors

A traffic-light system is applied to assign a RAG score (risk status of red, amber or green) to the clinical factors selected in step 1, in each of the four domains

The patient factors selected in step 1 are also scored to determine how they may alter the risk associated with each clinical factor (e.g. medical/lifestyle/behaviour assessments)

**Step 3** The software then aggregates the clinical disease status into four domains:

- Caries
- Periodontal health/disease
- Non-carious tooth surface loss (erosion, attrition & abrasion)
- Soft tissue health/disease

**Step 4** Allocating a risk status for each domain

Patients are then allocated a personalised risk status for each of the four domains by combining the clinical and patient factors in each domain

The patient’s risk status for each domain is determined as follows:

- **RED RISK**
  
  Red Risk status is allocated if there is a red clinical factor

- **AMBER RISK**
  
  Amber risk status is allocated if there is an amber clinical factor, or if there is a co-existing patient factor which increases risk e.g. a patient with no caries would still be classed amber if there was poor plaque control

- **GREEN RISK**
  
  Green risk status is allocated to those with green clinical factors and no patient factors which increase risk.

**Can clinicians override the proposed RAG status and actions?**

A clinician has the discretion to override the risk status generated. The software will prompt the clinician to enter a reason for overriding the risk status. This information will assist in the evaluation of the oral health assessment.
In order to ascertain the full information for the clinical components set out above, further investigations and examinations (e.g. radiographs) may be needed and clinical judgements will need to be made. The standardised assessments should not limit professional autonomy and do not cover all the diagnostic tests that a clinician may need in full diagnosis and treatment planning.
Disease Prevention and Management

Introduction

Disease prevention is a key component of the pathway. Through the risk screening of patients, the dental teams will be able to assign appropriate pathways. This will allow a personalised approach to preventive care.

Following an OHA, patients will be assigned to a care pathway appropriate to their needs. The designated care pathway will include:

- Advice and oral health promotion
- A recommended self care plan
- A plan of professional preventive interventions
- A plan of treatment intervention
- Referral to other services where necessary
- Appropriate interim care management intervals
- Primary dental care patient review

Delivering Better Oral Health details the evidence based, good practice advice and interventions that the patient and clinician should follow for each risk category within each domain. A copy of Delivering Better Oral Health is available online:


The preventive aspect of the pathway describes the patient’s and the professional’s role in personalising and implementing preventive care. Intensive preventive care may be required for some patients to stabilise and control active disease before more complex restorative care can commence.

Does this mean a change in the care I give my patient and therefore a change in our relationship?

It is envisaged that practices will deliver preventive pathways of care that incorporate evidence based preventive interventions and appropriate treatment.

The need and risk status of the patient enables the clinician to tailor the care provided for the patient, adhering to specific evidence based clinical care protocols. Detailed actions and responsibilities centred on prevention have developed for both clinician and patient. These are specific to each of the four domains.
This approach engenders transparency and encourages the development of a partnership between the patient and the clinician. Patients will be informed of their risk status and their care regime that they are advised to follow for oral health improvement and/or maintenance.

Patients will need to be encouraged to take responsibility to change those patient factors within their control that increase their risk from future disease.

Through following preventive care pathways patients can expect an improvement in their oral health and a corresponding decrease in their risk of oral disease with the ultimate benefit of keeping their teeth healthy for longer, avoiding discomfort and retaining function. The articulation of this benefit will be critical in achieving patient compliance.

**How will clinicians be supported in delivering advice to patients?**

The self care plan provides a structured basis for delivering advice to patients. The plan aims to increase a patient’s understanding of their oral health and assist in communicating what they can do to maintain and protect their oral health.

The treatment plan aims to ensure patients are fully informed about their oral health disease process. It should state the available treatment options and describe what they can expect as their care progresses.

A good experience and relationship with a dentist is supported by a number of factors, the most important of which for the patient is feeling able to trust their practitioner and to be in control of their care. It is therefore important for the patient to have the time to ask questions and also to have protected time to receive advice. To make an informed decision, it is critical that a patient understands not just the treatment options available to them but also the expected outcome.
Continuity of Care and Routine Management

Introduction
The information collected at an oral health assessment and the risk screening generates appropriate preventive care management to assist clinicians in treatment planning and review. This also includes recommendations for interim care periods and oral health review period (this is expressed as recall interval).

What is an oral health review?
An oral health review is a refresh of the oral health assessment and acts to review the patient’s current care pathway. The review is scheduled according to the patient’s need and risk e.g. six months or one year for children, and 9, 12, 18 or 24 months for adults. The recall Interval is the time between an oral health assessment and the first oral health review, or between two oral health reviews (NICE Dental Recall guidelines 2004)

What is interim care and monitoring (ICM)?
A continuing care relationship includes returning to the practice for interim care and monitoring appointments. These appointments include patient specific interventions such as oral health promotion, patient compliance, fluoride varnish applications, removal of calculus and prophylaxis.
Depending on the need being addressed, interim care and monitoring may or may not include a patient examination, assessment of their oral health and an element of new treatment planning.
Advanced Care

Introduction

The pathway provides a structure to support decisions on when advanced care should be delivered i.e. when the maximum benefit in terms of outcome can be achieved for the patient. It does not change the what treatments the NHS offers. All treatments currently available on the NHS are available under the clinical pathway.

A description of advanced care is:

“Advanced care services are resource intensive treatments, which include indirect restorations, metal based partial dentures and advanced endodontic and periodontal treatments. It is good clinical practice to only provide these treatments when the maximum benefit in terms of outcome can be achieved for the patient. Evidence suggests that if they are provided in the presence of active disease i.e. periodontal disease and/or dental caries the outcome is much reduced.

“The care pathways provided for advanced care treatments are a structure to support clinicians in making the appropriate decisions for the benefit of their patients. The structure of them is very similar and highlights the important factors clinicians should take into account before you consider offering the patient advanced care services. Factors to be considered include general patient factors, the patient’s oral environment and, more importantly, whether the treatment is clinically feasible and of benefit to the patient directly.

“These pathways are of course not absolutes, as the pathway can be overridden at any point where it is in the patient’s best interest to do so. However, it is anticipated that the number of occasions where an override is required should be minimal as the pathways reflect good clinical practice which should be the norm.”

Paul Brunton

Professor of Restorative Dentistry, Leeds Dental Institute

Advanced care pathways

A working group made up of experienced clinicians and including representatives of the British Society for Restorative Dentistry and the British Society of Periodontology (membership is listed in Appendix A) has been working on developing pathways within advanced care. Four are close to publication and shared with the pilots at their current final draft stage. These four cover:

- advanced periodontal therapy
• root canal therapy
• indirect restorations
• metal based partial dentures

Complexity assessments have been developed for each pathway using existing evidence bases and best practice guidelines and state levels of practitioner competency in primary care for the delivery of advanced care:

• Care provided within the competencies of a general dental practitioner (GDP)
• Care which can be provided by a GDP with additional competencies as evidenced by formal training or the equivalent thereof (which may be demonstrated through a portfolio of evidence of experience in the discipline)
• Care which requires the competency of a specialist

A standard approach has been adopted. Full details of each of these advanced care services and the entry criteria to the service, as well as the complexity assessment, can be found in Appendix A

When should clinicians provide advanced care?

Clinical findings and patient factors form the entry criteria that need to be satisfied before the provision of advanced care services. For example, patients in the red category may have limited restorative work until active disease is stabilised and treatment will be focussed initially on stabilising active caries and periodontal disease.

Can clinicians override the entry criteria?

Clinicians will retain clinical discretion. A clinician has the discretion to override the entry criteria and provide advanced care even when the pathway suggests otherwise. The software will prompt the clinician to enter a reason for overriding the risk status. This information will assist in the evaluation of the four pathways.

Future pathways

Four pathways have so far been developed for advanced care. Further pathways will be developed over time.
APPENDIX A: Advanced Care Pathways

The following pathways have been agreed for use in the dental contract reform pilots and are collaborative documents based on the best available evidence and the views of the relevant societies. The pathways for endodontics, indirect restorations and metal based partial dentures have been agreed with the British Society for Restorative Dentistry.

The periodontal disease pathway is currently being discussed with the British Society of Periodontology.

The pathways were developed by a working group made up of experienced clinicians and including representatives of the British Society for Restorative Dentistry and the British Society of Periodontology. Membership of the Advanced Care Group includes:

Paul Brunton  Professor of Restorative Dentistry, Leeds Dental Institute
Eric Rooney   Consultant in Dental Public Health
Stephen Tidman Dental Laboratories Association
Serbijit Kaur  Department of Health
Brett Sinson  General Dental Practitioners Council
Fiona Erne    Westminster Primary Care Trust
Raj Rattan    General Dental Practitioner
Jenny Godson  Consultant in Dental Public Health
John Milne    British Dental Association
Barry Cockcroft Chief Dental Officer for England
Philip Martin General Dental Practitioner Advisor
Matthew Garrett Specialist Trainee
Mital Patel   General Dental Practitioner
Seema Sharma  General Dental Practitioner
Martin Skipper British Dental Association
Rachel Noble  British Dental Association

The pathways are intended to be supportive to patients, dentists and to NHS commissioners. They outline the importance of a healthy and sustainable oral health status as a prerequisite to undertaking advanced care. Once a stable oral health environment has been established, where disease is controlled and risk of future disease is low, the pathways highlight the key stages of specialty procedures including the standards which should be expected in their delivery.
Pathway to support clinical decision making in the delivery of endodontics

Endodontics

Endodontics form an important part of the primary care dentists approach to dentistry and include, but are not limited to:

• differential diagnosis and treatment of oro-facial pain of pulpal and periradicular origin;
• prevention of pulp disease and vital pulp therapy;
• pulp extirpation and root canal treatment;
• root canal treatment in cases of apical periodontitis;
• root canal retreatment in case of post-treatment apical periodontitis;
• surgical endodontics;
• bleaching of endodontically treated teeth;
• treatment procedures related to coronal restoration by means of
  o a core and/or a post involving the root canal space and/or;
  o endodontically related measures in connection with crown-lengthening and forced eruption procedures
• treatment of traumatized teeth.

As part of dentistry’s main goal to maintain a healthy, natural dentition for the public, the aim of endodontic treatment is to preserve functional teeth without prejudice to the patient’s health.

Factors to be considered when discussing the appropriateness of Endodontics.

The decision to provide endodontics for patients should be based on some general principles and a consideration of three important factors.

General Principles

Endodontics should only be undertaken in those situations where this will clearly contribute to the oral health of the patient.

In all situations the clinical advantages and long-term benefits of endodontics should justify such treatment and outweigh any detrimental effects.

Endodontic treatment should be conditional on an understanding of the aetiology and successful preventive management of the cause(s) of the tooth’s immediate clinical problem.
General patient factors
Firstly, the clinician should ensure that the cooperation, motivation, aspirations and general health of the patient are consistent with the provision of endodontics.

The patient’s oral environment
Secondly, the clinician should ensure that an oral health assessment/review has been carried out and that the information collected and the risks identified are reviewed before entering this phase of treatment.

It is not generally in the patient’s best interest to plan and deliver endodontics in the absence of a stable oral environment when the risk of further disease is high. There is evidence that this results in compromised outcomes for the patient and contributes to early clinical failure.

Clinicians should feel confident in progressing with endodontics where the patients risk status as identified in the OHA/R is green in all domains.

A high risk of caries, or periodontal disease as indicated by a red status in the oral health assessment would normally preclude the provision of endodontics. There will be occasions where a strategic tooth will require endodontics despite the red status for caries and or periodontal disease and this would be permissible provided the treatment can be clinically justified.

In all other situations the information gathered and reviewed in the oral health assessment should be used to reach a view about whether it is in the patient’s best interests to provide endodontic treatment.

Clinically feasible and beneficial
Finally the detailed clinical aspects of the proposed endodontics should be considered.

To ensure that the proposed endodontics will be beneficial to the patient, the clinician should satisfy themselves that the tooth to be restored has strategic value and that the treatment will maintain or improve dental function.

To ensure the quality of the endodontic treatment, the clinician should satisfy themselves that it will be possible to isolate the operational field by the use of rubber dam and that it will be possible to get straight line access for the preparation. Inability to place rubber dam is a contraindication to providing endodontic therapy.

Provision of endodontics should be part of a wider care plan for patients and may be linked to other aspects of treatment.

Reaching a view on offering the patient endodontic treatment
In discussing the appropriateness of endodontic treatments with patients and in reaching a decision about whether to proceed, a systematic approach to the above factors is illustrated in the following diagram.
Diagram 1.4: Endodontics - Decision making cascade

- Are the general principles for endodontics satisfied?
  - yes
  - Are the general patient factors supportive?
    - yes
    - Are the relevant oral health risks controlled?
      - yes
      - Is the proposed endodontic procedure feasible and beneficial?
        - yes
        - Offer specialty procedure
Complex Root Canal Therapy

Risk Screening and entry criteria to be determined

- Teeth that can be restored and made functional
- Teeth with good prognosis
- Patients' co-operation does not preclude endodontic therapy
- The patient's medical history does not preclude endodontic therapy

Level 1
- Single/multiple root canals with curvature <15 degrees to root axis that are considered negotiable from radiographic or clinical evidence through their entire length. No root canal obstruction or damaged access
- Incision and damage

Level 2
- Single/multiple root canals with curvature >15 but <40 degrees to root axis that are considered negotiable from radiographic or clinical evidence through their entire length
- Teeth with incomplete root development
- Slight limitation of mouth opening
- Retreatment (revisions of endodontic therapy where previous treatment didn't involve complicated factors e.g., fractured instruments in the canal)

Work to be carried out by GDP

Level 3
- Single/multiple root canals with curvature >40 degrees
- Single/multiple root canals that are NOT considered negotiable from radiographic or clinical evidence through their entire length
- Teeth with incomplete root development
- Significant/severe limitation of mouth opening
- Teeth with difficult root morphology
- Teeth with iatrogenic damage or pathological resorption
- Complicated retreatments (e.g., failed endodontics; surgical treatments; fractured instruments in the canal)

Work to be referred to Specialist Services

Work to be carried out by a GDP who has additional competencies
Pathway to support clinical decision making in the delivery of indirect restorations

Indirect Restorations

Indirect restorations form an important part of the primary care dentists approach to restorative dentistry and include crowns, bridges, inlays, onlays and veneers.

Single unit indirect restorations are used

- To restore the form, function and appearance of teeth which are badly broken down, worn or fractured to the extent that simpler forms of restorations are contraindicated or have been found to fail in clinical service.
- To improve occlusal stability
- To improve the form and appearance of significantly discoloured teeth which cannot be managed by more conservative procedures.
- To reduce the risk of fractures occurring in extensively restored teeth including endodontically treated posterior teeth.
- To alter the shape, size and inclination of teeth for functional purposes where direct restorations are not appropriate.

In addition, bridges are used

- To replace one or more teeth of functional importance.
- To prevent tooth movement and improve occlusal stability.

In summary indirect restorations are indicated to restore form, function, to relieve pain and to secure occlusal stability. All indirect restorations have an aesthetic component which is integral to their success. Indirect restorations placed electively, purely for cosmetic reasons, are therefore excluded by definition from this guidance.

Factors to be considered when discussing the appropriateness of indirect restorations with patients.

The decision to provide indirect restorations for patients should be based on some general principles and a consideration of three important factors.

General Principles

Indirect restorations should only be undertaken in those situations where they will clearly contribute to the oral health of the patient.

In all situations the clinical advantages and long-term benefits of indirect restorations should justify such treatment and outweigh any detrimental effects.

When indirect restorations need to be replaced, the assessment process should be completed as described in this document. It is important that any factors which
may have contributed to the need to replace the restoration are considered and either corrected or stabilised.

**General Patient factors**

Firstly, the clinician should ensure that the cooperation, motivation, aspirations and general health of the patient are consistent with the provision of indirect restorations.

**The patient’s oral environment**

Secondly, the clinician should ensure that an oral health assessment has been carried out and that the information collected and the risks identified are reviewed before entering this phase of treatment.

It is not generally in the patient’s best interests to plan and deliver indirect restorations in the absence of a stable oral environment where disease is not controlled and when the risk of further disease is high. There is evidence that this results in compromised outcomes for the patient and contributes to early clinical failure.

Clinicians should feel confident in progressing with indirect restorations where the patient’s risk status as identified in the oral health assessment is green in all domains.

A high risk of caries, or periodontal disease as indicated by a red status in the oral health assessment would preclude the provision of indirect restorations.

In all other situations the information gathered and reviewed in the oral health assessment should be used to reach a view about whether it is in the patient’s best interests to provide an indirect restoration.

**Clinically feasible and beneficial**

Finally the detailed clinical aspects of the proposed indirect restoration should be considered.

To ensure that the proposed restoration will be beneficial to the patient, the clinician should satisfy themselves that the tooth to be restored has strategic value and that the restoration will maintain or improve dental function.

In the case of bridges, the clinician should ensure the availability of sufficient abutments of appropriate quality and prognosis.

Provision of indirect restorations should be part of a wider care plan for patients and may be linked to other aspects of treatment.

**Reaching a view on offering the patient indirect restorations**

In discussing the appropriateness of indirect restorations with patients and in reaching a decision about whether to proceed, a systematic approach to the above factors is illustrated in Diagram 1.5.
Diagram 1.5: Indirect restorations – decision making cascade

1. Are the general principles for indirect restorations satisfied?
   - Yes

2. Are the general patient factors supportive?
   - Yes

3. Are the relevant oral health risks controlled?
   - Yes

4. Is the proposed restoration clinically feasible and beneficial?
   - Yes

Offer indirect restoration
Indirect Restorations (Veneers, Inlays, Onlays, Crowns* & Bridges)

Risk Screening and entry criteria to be determined

- Teeth that can be restored and made functional
- Teeth with good prognosis
- Patient's co-operation does not preclude indirect restorations
- The patient's Medical History does not preclude crown and/or bridge work

Level 1
- Restorations not involved in anterior guidance, where there are adequate sound or restored teeth to predictably maintain the existing occlusion (conformative approach)
- No more than 3 units of crown or bridge work

Work to be carried out by GDP

Level 2
- Restorations that contribute to anterior guidance where there are insufficient sound or restored teeth to predictably maintain the existing occlusion (conformative approach)
- Extracoronal restoration of any one posterior sextant (all teeth), not involved in anterior guidance where a terminal unit is involved
- More than 3 units of crown or bridge work
- Slight limitation of mouth opening

Work to be carried out by a GDP who has additional competencies

Level 3
- Extracoronal restoration of the complete anterior guidance including pontic units
- Extracoronal restoration of opposing sextants (all teeth)
- Restoration that are supported by osseointegrated implants
- Significant re-organisation of occlusion
- Evidence of significant parafunction
- Significant/severe limitation of mouth opening

Work to be referred to Specialist Services

(* - crowns which are produced in a lab)
Pathway to support clinical decision making in the delivery of metal based partial dentures

**Metal based partial dentures**
Metal based partial dentures, which are regarded as the preferred option in a stable oral environment, replace missing teeth and soft tissues with a non-permanent prosthesis that can be removed.

Metal based partial dentures are used
- To restore the form, function and appearance of missing teeth
- To improve occlusal function

**Factors to be considered when discussing the appropriateness of metal based partial dentures with patients.**
The decision to provide metal-based partial dentures for patients should be based on some general principles and a consideration of three important factors.

**General Principles**
Metal based partial dentures should only be undertaken in those situations where they will clearly contribute to the function and oral health of the patient.

In all situations the clinical advantages and long-term benefits of metal based partial dentures should justify such treatment and outweigh any detrimental effects.

When metal based partial dentures need to be replaced, the assessment process should be completed as described in this document. It is important that any factors which may have contributed to the need to replace the prosthesis are considered and either corrected or stabilised.

**General Patient factors**
Firstly, the clinician should ensure that the cooperation, motivation, aspirations and general health of the patient are consistent with the provision of metal based partial dentures.

**The patient’s oral environment**
Secondly, the clinician should ensure that an oral health assessment has been carried out and that the information collected and the risks identified are reviewed before entering this phase of treatment.

It is not generally in the patient’s best interest to plan and deliver metal based partial dentures in the absence of a stable oral environment where disease is not controlled and when the risk of further disease is high. There is evidence that this
results in compromised outcomes for the patient and contributes to early clinical failure.

Clinicians should feel confident in progressing with metal based partial dentures where the patients risk status as identified in the oral health assessment is green in all domains.

A high risk of caries, or periodontal disease as indicated by a red status in the oral health assessment would preclude the provision of metal based partial dentures absolutely.

In all other situations the information gathered and reviewed in the oral health assessment should be used to reach a view about whether it is in the patient’s best interests to provide metal based partial dentures.

**Clinically feasible and beneficial**

Finally the detailed clinical aspects of the proposed metal based partial dentures should be considered.

In the case of metal based partial dentures the clinician should ensure the availability of sufficient abutments of appropriate quality and prognosis.

Provision of metal based partial dentures should be part of a wider care plan for patients and may be linked to other aspects of treatment.

**Reaching a view on offering the patient indirect restorations**

In discussing the appropriateness of metal based partial dentures with patients and in reaching a decision about whether to proceed, a systematic approach to the above factors is illustrated in Diagram 1.6

*Diagram 1.6: Metal based partial dentures – decision making cascade*
Metal based partial dentures

Risk Screening and entry criteria to be determined

Level 1
- Prostheses with banded saddles replacing posterior teeth
- Prostheses replacing anterior teeth where there are adequate sound or restored teeth to provide anterior guidance

Level 2
- Free end saddle prostheses which are dependent on differential support
- Prostheses with problems involving the path of insertion and/or available undercuts where some modification is involved
- Prostheses which contribute to anterior guidance
- Slight limitation of mouth opening

Level 3
- Prostheses where abutment teeth require extra coronal restoration to improve stability and retention
- The use of sectional prostheses
- Prostheses involving osseo integrated implant support
- Presence of oro-facial defects requiring obturation/restoration
- Significant/severe limitation of mouth opening

Work to be carried out by GDP

Work to be carried out by a GDP who has additional competencies

Work to be referred to Specialist Services
Pathway to support clinical decision making in the delivery of advanced periodontal care

This should be read in conjunction with the complexity assessment for advanced periodontal care.

**Periodontal Care**

The effects of periodontitis and other periodontal diseases generally cannot be reversed. Following diagnosis, treatment is aimed at achieving periodontal health, which will stabilise the condition. Following re-establishment of health stability is maintained through individualised supportive care programs.

**Advanced Periodontal Care**

Advanced periodontal care is considered to be periodontal care delivered when initial non-surgical therapy, has not been effective and where patient compliance is satisfactory.

All patients requiring periodontal care of this type will start with a course of non-surgical therapy. Whilst in the majority of cases this will result in a stable periodontal condition, it will also assess patient compliance, co-operation and their biological response to therapy should advanced care be indicated.

**Factors to be considered when discussing the appropriateness of advanced periodontal care**

The decision to provide advanced periodontal care for patients should be based on some general principles and a consideration of three important factors.

**General Principles**

Advanced periodontal care should only be undertaken in those situations where it will clearly contribute to the oral and/or general health of the patient.

When advanced periodontal care is being considered, the assessment process should be completed as described in this document. It is important that any factors which may have contributed to the need for advanced periodontal care are considered and either corrected or stabilised.

In all situations, the clinical advantages and long-term benefits of advanced periodontal care should justify such treatment and outweigh any detrimental effects.

**General patient factors**

Firstly, the clinician should ensure that the cooperation, motivation, aspirations, general health and risk profile of the patient are consistent with the provision of advanced periodontal care. Most importantly, the oral hygiene and levels of plaque control achieved and maintained by the patient must be considered. Advanced periodontal care should not be considered or provided in the presence of poor oral hygiene or where the patient’s motivation and compliance with plaque control measures is less than ideal.
In addition, a patient’s diabetic control over time and smoking habits will also impact on periodontal care outcomes.

The patient’s oral environment

Secondly, the clinician should ensure that following an oral health assessment, the patient has completed an initial periodontal care pathway, and that the risk factors for periodontal disease are controlled as far as possible.

Advanced periodontal care is generally required when, despite patient and practitioner’s best efforts to control and stabilise disease through risk factor management, improved home care and thorough debridement, disease remains uncontrolled and the likelihood of disease progression is high. There is evidence that if the former have not been addressed/achieved then outcomes of advanced care can be compromised for the patient. It is not generally in the patient’s best interests to plan and deliver advanced periodontal care in the absence of a stable oral environment.

Clinicians should feel confident in progressing with advanced periodontal care where the patients risk status as identified in the oral health assessment has been considered in all other domains and where the patient has demonstrated their level of co-operation with attending appointments and an appropriate level of home care.

It is important that sufficient healing time is allowed following the active phase of initial treatment before the patient’s initial response to therapy is reviewed. The response to non-surgical periodontal treatment should generally be assessed after 12 weeks. Sites that have not responded may benefit from further non-surgical therapy prior to consideration for advanced care.

In all other situations, the information gathered and reviewed in the oral health assessment should be used to form a decision about whether it is in the patient’s best interests to provide advanced periodontal care.

Clinically feasible and beneficial

Finally, the detailed clinical aspects of the proposed advanced periodontal care should be considered. This should be part of a comprehensive treatment plan.

To ensure that the proposed treatment will be beneficial to the patient, the clinicians should satisfy themselves that the teeth to be treated have strategic value and that the treatment will maintain or improve dental function and oral health.

Provision of advanced periodontal care should be part of a wider care plan for patients and may be linked to other aspects of treatment.

Reaching a view on offering the patient advanced periodontal care

In discussing the appropriateness of advanced periodontal care with patients and in reaching a decision about whether to proceed, a systematic approach to the above factors is illustrated in the Diagram 1.7.
Diagram 1.7: Advanced periodontal care – decision making cascade
Advanced Periodontal Therapy

Risk Screening and entry criteria to be determined

- Local and general modifiable risk factors are controlled
- Patients' co-operation does not preclude advanced periodontal therapy
- Patient's Medical History does not preclude advanced periodontal therapy

**Level 1**
- Perio therapy will have already been provided within the routine care pathway and are not therefore considered to be advanced care services.

**Level 2**
- Poor response to initial periodontal therapy
- Surgical intervention
- Slight limitation of mouth opening

**Level 3**
- Surgical procedures associated with osseointegrated implants
- Surgical procedures involving periodontal tissue augmentation and/or bone removal (e.g. Crown lengthening surgery)
- BPE score of 4 in any sextant and including one or more of the following factors:
  1. Patients under the age of 35 smoking 10+ cigarettes daily
  2. A concurrent medical factor that is directly affecting the periodontal tissues (e.g. stress-related illness)
  3. Root morphology that adversely affects prognosis
  4. Rapid periodontal breakdown >2mm attachment loss in any one year
- Significant/severe limitation of mouth opening

Work to be carried out by GDP

Work to be carried out by a GDP who has additional competencies

Work to be referred to Specialist Services
Guide to recording caries during piloting

It is important that caries codes for each surface of each tooth are recorded accurately because:

- Caries levels are an essential factor in establishing
  - the correct level of patient need
  - the correct care preventive care advice and clinical care
  - the correct care pathway
  - the most suitable timing for interim care and review

- This information is used to calculate quality outcome payments by comparing findings at each oral health assessment

- You, the clinician, want to have as clear a picture as possible about caries activity in each patient.

For visual diagnosis teeth should be clean, dry and well-illuminated. A probe should only be used to provide confirmation of a break in enamel.

Surfaces should not be given a caries code if there is no evidence of caries. Surfaces with stained fissures where the discolouration is restricted to the depth of the fissure should also be regarded as sound. Worn, fractured or hypoplastic areas do not count as being carious.

If a surface has superficial caries that lies wholly within the enamel then ‘early’ caries should be coded.

Established caries should be coded only where there is evidence of active caries reaching into dentine. This is shown by a break in the enamel, and/or a shadow, and/or an opacity, any of which extend into dentine when viewed with care. Extensive caries into the pulp is included into this level.

Surfaces that have one or more carious lesions in enamel or dentine that are all arrested should be coded as ‘arrested’. Such lesions are very dark, with hardened carious dentine which may or may not be shiny.

The IT systems set all tooth surfaces as being sound as a default. This leaves the clinician free to add in the various codes as they examine each surface. The worst condition for each surface should be coded, the hierarchy being:

<table>
<thead>
<tr>
<th>Hierarchy</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worst</td>
<td>Established caries</td>
</tr>
<tr>
<td></td>
<td>Enamel caries</td>
</tr>
<tr>
<td></td>
<td>Arrested caries</td>
</tr>
<tr>
<td>Best</td>
<td>Sound surface</td>
</tr>
<tr>
<td>Prevention</td>
<td>Treatment principles</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Advise and encourage the optimal use of fluorides and restriction of dietary sugars. Apply fluoride varnish for children.</td>
<td>Maintain and prevent deterioration</td>
</tr>
<tr>
<td>Advise and encourage the optimal use of fluorides and restriction of dietary sugars. Apply fluoride varnish.</td>
<td>Maintain and prevent deterioration</td>
</tr>
<tr>
<td>Consider patient as ‘at risk’ or ‘giving concern’. Advise and encourage the optimal use of fluorides – prescribe higher fluoride toothpaste and/or daily fluoride rinse. Investigate diet and advise about restriction of dietary sugars. Investigate medication and advise sugar-free versions. Apply fluoride varnish to all initiating sites at least twice yearly. Reduce recall interval and radiography interval.</td>
<td>Monitor, increase exposure to fluoride, reduce exposure to dietary sugars.</td>
</tr>
<tr>
<td>Surgical excision of carious lesion, protection of pulp, restoration. Increase exposure to fluoride, reduce exposure to dietary sugars. Increase surveillance.</td>
<td>Extraction and consider replacement or treatment of pulp and restoration of crown. Increase exposure to fluoride, reduce exposure to dietary sugars. Increase surveillance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Worst caries level on tooth – visual exam only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tooth free of caries</td>
</tr>
<tr>
<td>Arrested caries only into enamel or dentine</td>
</tr>
<tr>
<td>Early caries – into enamel</td>
</tr>
<tr>
<td>Established caries into dentine</td>
</tr>
<tr>
<td>Established caries – into pulp</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description from visual appearance only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal appearance of tooth surface with regard to translucency, discoloration and continuity of enamel. Fine lines of staining with no other changes of tooth structure.</td>
</tr>
<tr>
<td>Lesions which are wholly black or dark brown</td>
</tr>
<tr>
<td>White opacity or small area of cavitation confined to enamel</td>
</tr>
<tr>
<td>Lesion appears as a break in enamel and/or a shadow (grey, blue, brown, orange or yellow) and/or an opacity, any of which extend into dentine</td>
</tr>
<tr>
<td>Extensive lesion with a break in enamel and/or a shadow (grey, brown, orange or yellow) and/or an opacity, any of which extend into the pulp</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Images</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Epidemiological equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visually sound</td>
</tr>
<tr>
<td>D1 and 2</td>
</tr>
<tr>
<td>D2</td>
</tr>
<tr>
<td>D1 and 2</td>
</tr>
<tr>
<td>D3</td>
</tr>
<tr>
<td>D4</td>
</tr>
</tbody>
</table>
Periodontal care pathway: evaluating a novel, consistent way to deliver better periodontal health

This is our opportunity to test and evaluate a process of standardising periodontal care for our patients within the NHS.

Periodontal health is a key constituent of oral health. Now more evidence is emerging on its link and potential impact on overall health. Periodontal tissues respond to treatment and can heal. Management of periodontal diseases is a genuine shared effort by patients and the dental team. Standardising the way in which we care for periodontal tissues is a way of concentrating our efforts on outcome of intervention and evaluating whether the process is effective. Here is our chance.

Periodontal tissues undergo rapid and extensive cell turnover as part of their daily wear and tear. They contain precursor cells with immense repair capacity. Management of periodontal diseases is primarily based on tipping the balance more towards healing than inflammation.

This is also the interface between oral and systemic health and disease. From impact of smoking and medications, to manifestation of systemic conditions, and future research establishing the nature of links between periodontitis and other systemic conditions such as cardiovascular disease, the body of evidence is increasing rapidly.

For the vast majority of our patients, effective prevention, early diagnosis and management of periodontal diseases are also more dependent on patient motivation & communication and instrumentation skills, all within primary care setting, than complex procedures and intervention.

The latest adult dental health survey\(^1\) showed impressive improvements in the number of natural teeth retained to advancing age. We will be the first generation to live our lives with some if not majority of our natural teeth. Yet 66% of adult population of England, Wales and Northern Ireland had visible plaque with 45% with pockets of 4mm & above. Periodontal diseases are common, and preventable. Gingivitis is also reversible, with no net loss of tissue or attachment post treatment. Do our patients understand the significance of their daily oral hygiene routine in maintaining their periodontal health? Can we do more?

From encapsulating the evidence base for our advice to improve periodontal health\(^2\), the next logical step is to assess the outcome of the overall care pathway with prevention encased within it. Will it work? This is our chance to find out.

\(^1\)Adult Dental Health Survey (ADH) 2009, Office for national statistics changes; the impact is measured by improved outcomes rather than just processes.

\(^2\)Delivering better oral health, 2\(^{nd}\) edition, July 2009. Department of Health
Advice to patients

Section 6

Improving periodontal health

- Mechanical plaque control
- Toothpaste types/brands
- Mouthrinses
- Conditions that predispose to periodontal disease

Mechanical plaque control

Teeth should be brushed twice daily (V).

Modify the patient’s existing method of brushing, emphasising the need to systematically clean all tooth surfaces (V).

Disclosing tablets can help to indicate areas that are being missed.

Help the patient to select a small headed toothbrush with soft, round ended filaments, a compact, angled arrangement of long and short filaments and a handle that is comfortable for them (V).

Powered brushes with an oscillating/rotating action may be advised (I).

For interdental cleaning, the choice of aid (floss, tape, sticks, single tufted brush) should be based on the size of the interproximal or intradiscal spaces and the ability and motivation of the individual (V).

Toothpaste types/brands

Evidence suggests that toothpastes containing triclosan in combination with a copolymer or with zinc citrate are more effective than a fluoride toothpaste in improving plaque control and gingival health (I).

Mouthrinses

Chlorhexidine mouthrinses, either 10 ml of 0.2% or 15 ml of 0.12%, are very effective in improving plaque control and gingival health when used as an adjunct to tooth brushing (II). They are useful for short periods when an individual is unable to clean due to acute problems or incapacity.

Other mouthrinses containing essential oils or cetylpyridinium chloride are less effective than chlorhexidine.
Improving periodontal health - Care pathways with individually tailored optimal daily oral care

All aged < 36 years

- Notes on MH & social history
- Basic dental examination & BPE

- Diabetes - poor control
- Smoker / former < 5 yrs

<2 <2 <2
<2 <2 <2

2 <2 3

All aged ≥ 36 years

- Clinical notes on plaque level & bleeding on probing
- Satisfactory Plaque control
- Unsatisfactory Plaque control

BOP

Motivate, reinforce Oral Hygiene

- Improved Plaque control could improve glycaemic control
- Remove calculus & correct local factors
- Smoking cessation advice
- Code 3/4 sextant: detailed chart and reassessment
- Root surface debridement
- Consider referral if poor response

- Consider referral if >1 code 4 sextant
- Disclose and plaque score
- Monitor ongoing as early indication of response to treatment (unless smoker)
Guide to recording periodontal disease during piloting

Early diagnosis of periodontal diseases is essential in effective management of the disease, as early diagnosis and treatment can prevent irreversible damage that can lead to tooth loss, which has implications not only for the patient but for the dentist and the service as a whole. Periodontal dento-legal claims often involve the failure to diagnose the disease, or failure to provide adequate treatment for the disease.

Loss of periodontal attachment will be experienced by up to 90% of the population during their lifetime. Of these approximately 25% (22.5% of total population) will lose one or more teeth due to periodontitis.

From the patients medical history, it is important to record any history of Type II diabetes in the family. This is because there is an increased susceptibility to periodontal attachment loss in patients with type II diabetes, and as there is a genetic link to incidence of type II diabetes, it may help in identifying borderline cases.

As there is an established link between smoking and chronic periodontitis, it is important to record patients past & present smoking status. Patients that smoke should be informed of the implications of their smoking habit and the effect it will have on the treatment and prognosis. All patients that smoke should have early intervention and sign posting. Those wishing to stop smoking should either be referred for specialist advice at local NHS stop smoking clinic or their own general medical practitioner. Where the dental team have the necessary training, this specialist advice can be provided at the practice.

All new patients should have the basic periodontal examination (BPE) carried out as part of the oral health assessment and at each oral health review. The findings of the examination should be documented, explained to the patient and acted on appropriately.

The BPE should be carried out using a WHO 621 probe, which has a “ball point” of 0.5mm in diameter, and has a colour coded area between 3.5 to 5.5mm. The force during probing should not exceed 20-25gm.

For the BPE the dentition is divided into sextants. The teeth in each sextant are shown in the table below.

<table>
<thead>
<tr>
<th>UR7 – UR4</th>
<th>UR3 – UL3</th>
<th>UL4 – UL7</th>
</tr>
</thead>
<tbody>
<tr>
<td>LR7 – LR4</td>
<td>LR3 – LL3</td>
<td>LL4 – LL7</td>
</tr>
</tbody>
</table>

There must be at least two functioning teeth for a sextant to qualify for recording. Where there is only one remaining tooth in a sextant it is counted as part of the adjacent sextant.
<table>
<thead>
<tr>
<th>Code</th>
<th>Clinical features</th>
<th>Level of disease</th>
<th>Further examination or investigations</th>
<th>Management, treatment and preventive advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No pockets &gt;3mm</td>
<td>Healthy</td>
<td>Plaque level control</td>
<td>Ensure adequate plaque control</td>
</tr>
<tr>
<td></td>
<td>No calculus or plaque retentive factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No bleeding on probing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>No pockets &gt;3mm</td>
<td>Gingivitis</td>
<td>Plaque level control</td>
<td>Ensure adequate plaque control</td>
</tr>
<tr>
<td></td>
<td>No calculus or other local plaque retentive factors</td>
<td></td>
<td></td>
<td>Oral hygiene instruction</td>
</tr>
<tr>
<td></td>
<td>Bleeding on gentle probing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>No pockets &gt;3mm</td>
<td>Gingivitis with local factor</td>
<td>Plaque level control</td>
<td>Ensure adequate plaque control</td>
</tr>
<tr>
<td></td>
<td>Calculus or other local plaque retentive seen</td>
<td></td>
<td>Record bleeding on probing</td>
<td>Oral hygiene instruction</td>
</tr>
<tr>
<td></td>
<td>Bleeding on probing</td>
<td></td>
<td></td>
<td>Remove local factors</td>
</tr>
<tr>
<td></td>
<td>Occasionally no bleeding seen in smokers</td>
<td></td>
<td></td>
<td>Supra gingival scaling at affected sites</td>
</tr>
<tr>
<td>3</td>
<td>Periodontal probing depth of 4-5mm (colour coded area of probe partially visible) at one or more sites</td>
<td>Chronic periodontitis</td>
<td>Detailed periodontal examination in sextant with score of 3. To include measurement of attachment loss at Oral Health Review</td>
<td>Ensure adequate plaque control</td>
</tr>
<tr>
<td></td>
<td>Bleeding on probing</td>
<td>Unless patient &lt; 35 years old</td>
<td>Appropriate intra-oral radiographs for sextants scoring code 3</td>
<td>Oral hygiene instruction</td>
</tr>
<tr>
<td></td>
<td>Occasionally no bleeding seen in smokers</td>
<td></td>
<td>Record full mouth plaque score and bleeding</td>
<td>Remove local factors</td>
</tr>
<tr>
<td>4</td>
<td>Periodontal probing of 6mm or more (colour coded area of probe disappears into pocket) at one or more sites</td>
<td>Moderate to advanced chronic periodontitis. Unless patient &lt; 35 years old</td>
<td>Full mouth periodontal assessment</td>
<td>Ensure adequate plaque control</td>
</tr>
<tr>
<td></td>
<td>Bleeding on probing</td>
<td></td>
<td>Intra-oral radiographs of individual teeth where pocket exceeds 6mm</td>
<td>Oral hygiene instruction</td>
</tr>
<tr>
<td></td>
<td>Occasionally no bleeding seen in smokers</td>
<td></td>
<td></td>
<td>Non surgical periodontal treatment including root surface debridement under local anaesthesia</td>
</tr>
<tr>
<td>*</td>
<td>Attachment loss (probing depth plus recession) of 7mm or more at any site, or if a furcation can be probed</td>
<td>Moderate to advanced chronic periodontitis or a site requiring complex periodontal treatment</td>
<td>Full mouth periodontal assessment</td>
<td>Ensure adequate plaque control</td>
</tr>
<tr>
<td></td>
<td>Bleeding on probing</td>
<td></td>
<td>Intra-oral radiographs of sextant as well as individual teeth where pocket exceeds 7mm or there is a furcation detected</td>
<td>Oral hygiene instruction</td>
</tr>
<tr>
<td></td>
<td>Occasionally no bleeding seen in smokers</td>
<td></td>
<td></td>
<td>Non surgical periodontal treatment including root surface debridement under local anaesthesia</td>
</tr>
</tbody>
</table>

*code given if attachment loss of 7mm or more at any site, or a furcation can be probed
**Complexity assessment**

This complexity assessment is based on the Restorative Dentistry Index of Treatment Need developed by the Clinical Effectiveness Committee of the Royal College of Surgeons of England. For periodontal treatment it is based upon the BPE. (RCS Eng 2001)

**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**
- Surgical procedures associated with osseointegrated implants
- Surgical procedures involving periodontal tissue augmentation and/or bone removal (e.g. Crown lengthening surgery)
- BPE score of 4 in any sextant and including one or more of these factors
  - Patients under age 35
  - Smoking 10+ cigarettes per day
  - A concurrent medical factor that is directly affecting the periodontal tissues
  - Root morphology that adversely affects prognosis
  - Rapid periodontal breakdown >2mm loss in any one year

**Risk factors and indicators of rapid disease progression**

*Modifiable risk factors*
- Smoking
- Patients with diabetes
- Certain medications that can cause gingival hyperplasia such as Epanutin and Nifedipine
- Certain medications that can cause a dry mouth such as beta blockers and tricyclic antidepressants

*Indicators of rapid disease progression*
- BPE scores of 3, 4 or * in patients under 35 years of age
- Rapid periodontal breakdown > 2mm attachment loss in any one year
- Observed bone loss on sequential radiographs
- A family history of early tooth loss due to periodontal disease
References

