

General Dental Service (GDS) Reform Programme

Brief Guidance on Assessment of Clinical Oral Risks and Needs (ACORN) Toolkit

Context

The GDS Reform Practices are expected to use this toolkit once a year as a part of the overall patient assessment (or at a longer interval if dental recall for a patient has been set longer than 12 months).

Patients who attend only for urgent care (e.g. dental abscess), a full assessment using the toolkit is not practical at the urgent appointment but an active offer to re-attend for such assessment and dental care should be made.

Please ensure the toolkits are fully completed and retained securely as a part of the patient notes. Reform practices may be requested to submit a sample of completed anonymised ACORN toolkits as a part of the monitoring, quality improvement, research and evaluation.

Practices are expected to use the toolkit to:

1. Understand what matters to patients;
2. Effectively communicate level of risk and need to patients (or their carers) and work with patients in making them understand changes they can make to prevent dental diseases and maintain oral health;
3. Agree on the oral health outcomes patients want to achieve;
4. Utilise the principles of Shared Decision Making in formulating a preventive dental care and treatment plan'
5. Monitor changes in the 'risk and need' of patients who receive ongoing care from the service

This updated ACORN guidance (version 1.1) support the revised ACORN version 1.1 dated 13th August 2019.

We have tried to make the content of the toolkit self-explanatory and content of the toolkit as concise as possible.

The toolkit is designed to summarise the risk and needs of individual patients following a more detailed assessment of medical, social, dental history, oral health related behaviours e.g. consumption of sugary food and drinks, oral hygiene at home, smoking and alcohol use.

This revised version 1.1 takes into account of the feedback from various stakeholders especially reform practices. The key improvement on the toolkit is the periodontal section of the toolkit. It attempts to implement the British Society of Periodontology (BSP) 2017 classification of periodontal diseases to reach a diagnosis in clinical practice.

See [Appendix A](https://www.bsperio.org.uk/news/bsp-flowchart-released) <https://www.bsperio.org.uk/news/bsp-flowchart-released>

You should find it beneficial to review the *BDJ paper Periodontal diagnosis in the context of the 2017 classification system of periodontal diseases and conditions - implemented in clinical practice* - <https://www.nature.com/articles/sj.bdj.2019.3.pdf>

Personal Development Plan (PDP) of clinical staff may need to include learning to assess and diagnose periodontal disease as per the BSP 2017 classification.

We have worked with the NHSBSA to integrate additional ‘risk and need’ data collection via FP17W. Practices participating in the GDS Reform Programme must report additional ‘risk and need’ data on the FP17Ws. You are only required to report ACORN data once a year (or at longer interval if a patient ‘dental recall’ is longer than 12 months).

Brief explanation of the content

Inherent Patient Risks from Medical, Social and Dental History –

The objective of this section is for dental team members to consider findings from detailed medical, social and dental histories that have implication for oral health and/or dental care planning.

Relevant medical history which impacts on oral health and /or dental care planning. Please specify	<input type="checkbox"/> Yes Yellow <input type="checkbox"/> No Green
Relevant social history which impacts on oral health and/or dental care planning Please specify	<input type="checkbox"/> Yes Yellow <input type="checkbox"/> No Green
Relevant dental history which impacts on oral health and/or dental care planning Please specify	<input type="checkbox"/> Yes Yellow <input type="checkbox"/> No Green

Dental team should specify the relevant history or finding on each area.

Medical history

Dental teams should take a detailed Medical History and update it on a regular basis.

Findings from medical history may be risks for oral health.

e.g. poorly controlled diabetes is a risk for periodontitis, dry mouth (Xerostomia) is a risk factor for tooth decay, many drugs have side effects on mouth, etc.

Findings from medical history may be relevant for dental care planning.

e.g. A patient’s mental health conditions/substance misuse/learning disability/latex allergy/uncontrolled epilepsy/cardiac conditions/frailty/many ongoing medical treatments, etc. are relevant for dental care planning

Social History

A patient’s social circumstances, history and care needs are recognised as risk factors to oral health e.g. a disabled person not able to carry out oral hygiene themselves. It is difficult for adults or children to establish oral hygiene habits if they have chaotic home lives.

Relevance of social history on dental care planning can arise from a number of factors e.g. Children in Need/Looked After Children, homelessness, asylum seekers/refugees, travelling community, inability to attend for dental appointments in certain days/hours, dental charge as a barrier to attendance, etc.

Dental History

History or presence of dental phobia or anxiety, dental attendance only when in pain, history of failed attendances/child not brought for previous appointments, regular dental trauma, failed treatments due to high tooth decay rate, etc. are relevant for oral health and dental care planning.

Offer of assessment and dental care to whole family should be made, if required, to improve dental attendance rate and also address oral health risk factors of the whole family.

Depending on the findings, dental teams may need to liaise more closely with other health and social care teams for safeguarding and or to improve overall patient care.

Some examples:

- A patient with dental phobia may require more time for assessment and prevention and referral for treatment under conscious sedation.
- Social, medical and dental history may reveal the complexity in organising and providing dental care for a patient. A number of teams outside dentistry may need to be involved to ensure patient receives the best prevention and dental care possible.
- In addition to parents, communication with a social worker may be required to understand why a child has not been brought for dental examinations and/or treatment.

Key Modifiable Behaviours and Protective Factors

Dental team members need to reflect if they are up to date on knowledge and competencies in behaviour change. Dental team members are encouraged to attend any courses on brief intervention and behaviour change. Many courses on Brief Interventions and behaviour change are available via the Health Education and Improvement Wales or Making Every Contact Count (MECC) teams.

As a minimum, information from this section should be used by the reform practices to communicate the modifiable risks to patients (and/or carers/parents) in the most appropriate way and agree with patients:

- which areas patients (and/or carers/parents) will need to improve to secure better oral health (e.g. reduction in consumption of sugary drinks and snacks, toothbrushing at night time and one more time a day using fluoride toothpaste, stop smoking/tobacco use, use of interdental brushes to stabilise periodontitis, etc.) &
- what practice can provide to support prevention (e.g. fluoride varnish applications twice a year, referral to/information on local smoking cessation services when a patient is ready to quit, information on alternative healthier snacks and drinks, etc.).

Making Every Contact Count (MECC) is an approach to behaviour change that utilises the millions of day to day interactions that organisations and individuals have with other people to support them in making positive changes to their physical and mental health and wellbeing.

Dental teams can register and access free E-learning resource from following websites.

<https://mecc.publichealthnetwork.cymru/en/>
<https://publichealthwales.traineeasy.com/login/index.php>

Key Modifiable Behaviours and Protective Factors

Tooth Decay Specific Risks

0-7 years only: supervised <u>toothbrushing</u> with fluoride toothpaste before bedtime and one more time during the day? OR >7years: Brushes (self or carer) at bed time and one more time during the day with fluoride toothpaste?	<input type="checkbox"/> Yes Green <input type="checkbox"/> No Amber
Consumes drinks other than water or milk outside of mealtimes more than once daily? (e.g. sports drinks, tea/coffee with sugar, fizzy drinks etc) <u>And/Or</u> Eats sugary snacks, sweets etc. outside of mealtimes more than once daily?	<input type="checkbox"/> Yes Amber <input type="checkbox"/> No Green

Periodontal Health Specific Risks (12+ only)

Smokes and/or uses of tobacco products	<input type="checkbox"/> Yes Amber <input type="checkbox"/> No Green
Brushes (self or carer) at bed time and one more time during the day?	<input type="checkbox"/> Yes Green <input type="checkbox"/> No Amber
Uses (self or carer) inter-dental aids as advised by the dental team? e.g. interdental brushes	Yes / No

Other risks/protective factors

Household/family factors Siblings and/or family members in the same household have active tooth decay?	Yes/No
Alcohol use above recommended limit Hint: more than 14 units per week spread over 3 or more days and no more than 6 (female) and 8(male) units in a single occasion.	Yes /No
Other risks (including dietary) or protective factors (e.g. ↑ strength F toothpaste use) Please specify	Yes/No

This section focuses on few key risk factors that have direct impact on two most prevalent oral diseases on dentate patients: tooth decay and periodontal disease.

Risks are categorised either as **Amber** (Present) or **Green** (not present).

This section also helps dental teams to consider other risks or protective factors. Additional risk factors are simply recorded on the toolkit as Yes/No and risks/protective factors not specified on the toolkit should be specified on the space provided.

A comprehensive assessment of risk and protective factors provides dental team full picture of the risk and protective factors. This information is useful in behaviour change and agreeing a preventive care plan with the patient.

Dental team members should update their knowledge and skills in behaviour change (e.g. motivational interviewing technique) and implement the Delivering Better Oral Health: an evidence based toolkit.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/605266/Delivering_better_oral_health.pdf

Tooth Decay Specific Risks

Toothbrushing at bed time and one more time during the day with appropriate strength fluoride toothpaste is important to prevent tooth decay. It is important dental teams to understand if toothbrushing (before bed time and one more time during the day) has been established **as a habit**.

Some adults and children may require close support from a carer for many daily activities including toothbrushing and/or overall mouth care e.g. carers may need to brush a person's teeth.

For younger children, it is important that parents (or an adult) start brushing their child's teeth as soon as the first tooth erupts in the mouth. As the child grows and develops manual dexterity, they can be taught how to brush their teeth but an adult still needs to supervise the toothbrushing so that all surfaces in all teeth are cleaned and more importantly to ensure all teeth surfaces comes in contact with fluoride in the toothpaste.

If such tooth-brushing habit (and therefore twice daily exposure to fluoride) has not been established, there is a risk that the patient will develop tooth decay. Presence of such risk has been categorised as '**Amber**'.

Sugary snacks and drinks

Consumption of sugary drinks, snacks and food outside mealtimes is a risk for tooth decay. Children (and the whole family) should be encouraged to swap any sugary drinks with plain milk and water. Dietary advice should be based on the Eat Well guide and Delivering Better Oral Health: an evidence based toolkit.

<https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/605266/Delivering_better_oral_health.pdf

Dental teams can access advice on prevention of tooth decay in children from Designed to Smile website.

<http://www.designedtosmile.org/info-pro/information-for-dental-practices/>

Periodontal Health Specific Risks

This section is to be completed for all aged 12 years and more.

Smoking

Smoking and/or use of tobacco products is a key risk factor for periodontitis (mouth cancer and many other diseases). For smokers, number of cigarettes smoked per day and number of years smoked should be recorded.

Dental teams should provide patients with brief intervention (BI) on smoking cessation, seek consent for referral and if consent provided, refer the patient to **Help Me Quit** so that they can receive free support in quitting. <https://www.helpmequit.wales/>

Consequences, including low success rate of any periodontal treatment, of continued smoking (and/or use of tobacco products) should be explained to patients.

Toothbrushing

Effective removal of plaque by tooth-brushing twice a day is required to achieve good periodontal health i.e. prevent gingivitis, periodontitis and stabilise active periodontitis.

Patients who have periodontitis may need to spend a lot longer than 2 mins to ensure effective cleaning.

Use of inter-dental aids

A dental team member may have advised a patient with periodontal disease to use inter-dental aids, e.g. an inter-dental brush. Dental teams must show and explain to patients the right technique and interdental aid to be used to stabilise periodontitis (or to prevent periodontitis).

Other risks and protective factors

Questions on this section helps dental teams to analyse additional risk factors and protective factors in more detail. The Delivering Better Oral Health: an evidence-based toolkit is a useful resource for dental teams.

A patient who reports high alcohol consumption could be advised to seek appropriate help from the General Medical Services or support services available in the locality.

Further information on Alcohol can be obtained from:

<http://gov.wales/docs/dhss/publications/160825guidelinesen.pdf>
<http://www.wales.nhs.uk/sitesplus/888/page/90938>
<http://www.drinkwisewales.org.uk/>

Clinical Findings

Clinical Findings

Soft Tissues Findings, dentures and Level of Plaque (for all patients)

Please specify findings (e.g. 2 × 2 cm suspected mouth cancer on lateral border of tongue on the right hand side, satisfactory full upper partial lower acrylic dentures *etc.*)

Level of Plaque: low, moderate or high

Tooth Decay (for dentate only)

Total number of teeth in mouth	N=	
No active tooth decay	Green <input type="checkbox"/>	
Active tooth decay within enamel only	Amber <input type="checkbox"/>	Or report Amber on FP17W if tooth decay risk is Amber.
Active tooth decay into dentine or beyond	Red <input type="checkbox"/>	
If Red, total number of teeth with active tooth decay	dt	DT

Other Dental Need (for all patients)

e.g. Tooth Surface Loss, Dental Trauma, repair and maintenance (e.g. cusp fracture), removal of overhangs, denture replacement required, *etc.*

Diagnosis/diagnoses (please specify):

Tick one only

- Red – Dental treatment required
 Amber – No treatment required but regular review required to monitor
 Green - None

Soft Tissue Findings, Dentures and Levels of Plaque

Findings from a thorough intra-oral, extra-oral examination and examination of dentures, if any, should be recorded here. e.g. 2 cm by 2 cm suspected mouth cancer on lateral border of tongue on right hand, poorly fitting full upper acrylic denture, 2 cm by 3 cm white patch on hard palate etc

Dental team members are encouraged to write on this section differential diagnoses or diagnosis e.g. Lichen Planus on buccal mucosa bilaterally, Chronic Hyperplastic Candidiasis etc.

Level of plaque present is an indicator of effectiveness of oral hygiene mainly toothbrushing. However it should be remembered that many factors will influence level of plaque present at the time of examination, e.g. toothbrushing just before dental visit, dependency on carers/others to clean teeth/denture, etc.

Dental teams can record level of plaque as 'low', 'Moderate' and 'High', which has been defined as below.

Level of plaque	Categories (please tick one only)
No visible plaque present or plaque present on up to 1/3 of the remaining teeth/dentures	Low
Plaque present on at least one third of teeth but less than 2/3 of teeth/dentures	Moderate
Plaque present on 2/3 or more teeth/dentures	High

Tooth Decay (for dentate only)

On this section, dental team should record the total number of teeth in the mouth, the RAG rating for tooth decay for the patient and if the patient is classified as **Red** the number of deciduous teeth and/or permanent teeth that have active decay into dentine or beyond.

If an active tooth decay into dentine or beyond is identified, the reporting category on FP17Ws is **RED**

If a patient has active tooth decay within enamel only and/or one or both of the key risks factors mentioned on the toolkit (lack of toothbrushing and sugar consumption as described) for tooth decay present, the reporting category on FP17Ws is **Amber**.

If a patient has no active tooth decay (and/or has arrested tooth decay only) and both risk factors (lack of toothbrushing and sugar consumption as described) are absent, the reporting category on FP17Ws is **Green**.

Other Dental Need

This section is intended to capture clinical treatment need or need to review oral health conditions that are not captured in sections under Tooth Decay and Periodontal Health.

Dental team should write down actual diagnosis/diagnoses on the toolkit

If there is a treatment need (e.g. repair of cusp fracture, denture replacement/repair etc), such treatment need is categorised as '**Red**' and appropriate box should be ticked. Only one box should be ticked.

e.g., Tooth Surface Loss, Dental trauma, repair and maintenance (cusp fracture), removal of overhangs required, denture replacement required,	Red – Dental treatment required
Diagnosis/diagnoses (please specify):	Amber – No Treatment required but regular review required to monitor
	Green - None

Red > Amber > Green – Please choose the highest clinical need regardless of the number of conditions being present with different level of treatment/care need. For e.g. If a patient's clinical need is 'Red' because of cusp fracture, 'Red' is selected as clinical need even though the same patient may have requirement for regular review for another condition such as Tooth Surface Loss (TSL)/dental trauma.

Note: Treatment items provided by the dental team is captured through the FP17W.

Periodontal Health (Dentate and aged 12+ only)

(Please refer to BSP Classification to complete this section of the toolkit)

This section of the toolkit has been amended reflecting feedback from reform practices including the need to improve assessment, diagnosis and dental prevention and treatment to maintain or improve periodontal health of the population that come in contact with a practice on a regular basis.

Dental teams should familiarise with the 2017 British Society of Periodontology Classification so that they can accurately complete this section. Dental team members may need to update on their knowledge and/or skills including skills in behaviour change because the biggest gain in periodontal health comes from patients maintaining and/or improving their oral hygiene and reducing their modifiable risk factors (e.g. stopping smoking).

Please use [Appendix A https://www.bsperio.org.uk/news/bsp-flowchart-released](https://www.bsperio.org.uk/news/bsp-flowchart-released) to complete following section on the toolkit.

For patients with periodontitis, dental teams should do additional detailed periodontal charting as recommended by the British Society of Periodontology.

Periodontal Health (Dentate and aged 12+ only)

(Please refer to BSP Classification)

Patient unable to tolerate periodontal examination (usually applies to special care dentistry patients)

BPE

BPE Score	_____		
Bleeding on Probing (BPE code 0/1/2 and 3 with no evidence of periodontitis)	<10% (Good health) <input type="checkbox"/>	10-30% (Localised gingivitis) <input type="checkbox"/>	>30% (Generalised gingivitis) <input type="checkbox"/>

If BPE score is 4 or 3 with pockets ≥ 4mm and/or bone loss from periodontitis, please complete the following section (radiographic assessment)

Extent (Pattern of bone loss)	Local <input type="checkbox"/>	Generalised <input type="checkbox"/>	Molar-Incisor <input type="checkbox"/>	
Stage (Interproximal bone loss – use the worst site)	Stage I (Mild) <input type="checkbox"/>	Stage II (Moderate) <input type="checkbox"/>	Stage III (Severe) <input type="checkbox"/>	Stage IV (Very Severe) <input type="checkbox"/>
	<15% (or <2mm from CEJ)	Coronal third of root	Severe (Mid third of root)	Very Severe (Apical third of root)
Grade (Rate of progression for the patient's age – use the worst site)	A (slow) <input type="checkbox"/>	B (moderate) <input type="checkbox"/>	C (Rapid) <input type="checkbox"/>	

Following information on the toolkit also reflects how periodontal health should be reported on FP17Ws following annual ACORN.

Periodontitis	Red <input type="checkbox"/>	Currently unstable PPD ≥ 5mm or PDD ≥ 4mm and BoP at these sites	
	Amber <input type="checkbox"/>	Currently in Remission BoP ≥ 10% PPD ≤ 4mm No BoP at 4mm sites	
	Green <input type="checkbox"/>	Currently Stable BoP < 10% PPD ≤ 4mm No BoP at 4mm sites	Green unless any specific modifiable perio risks noted. Then recorded as Amber overall on FP17W.
No periodontitis	Green <input type="checkbox"/>	No periodontitis <input type="checkbox"/> Gingivitis only <input type="checkbox"/> Good perio health	

Red > Amber > Green – Please choose the highest clinical need and/or risks

RAG categorisation of periodontal health and thus reporting via FP17Ws changes following amendments made on this version 1.1 of the toolkit.

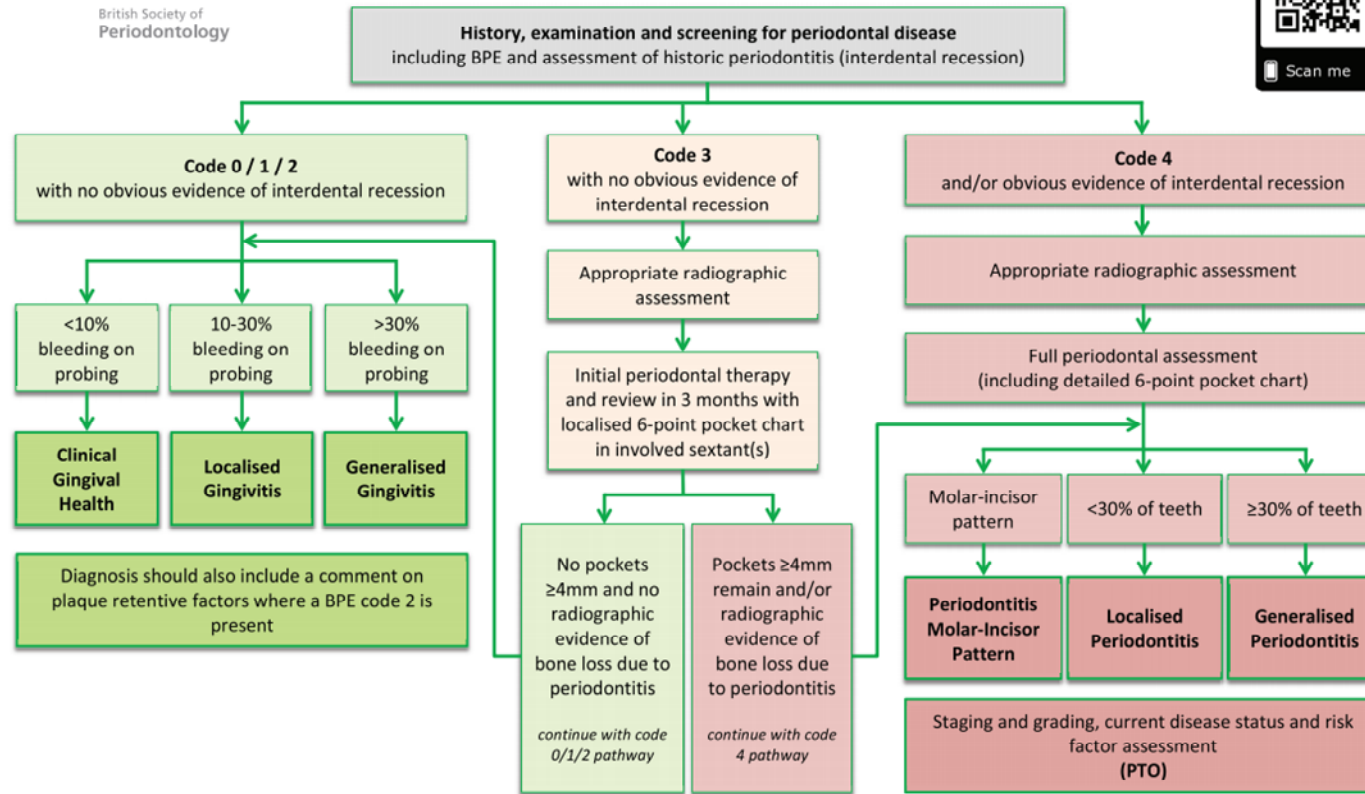
The final part of the toolkit requires dental teams to write a diagnosis as per the new BSP classification.

Diagnosis Statement: Extent – Periodontitis – Stage – Grade - Stability- Risk Factors **or** localised/generalised gingivitis only **or** good periodontal health

e.g Generalised periodontitis, Stage 3 Grade B – currently unstable-risk(s) smoker 15/day



Implementing the 2017 Classification of Periodontal Diseases to Reach a Diagnosis in Clinical Practice



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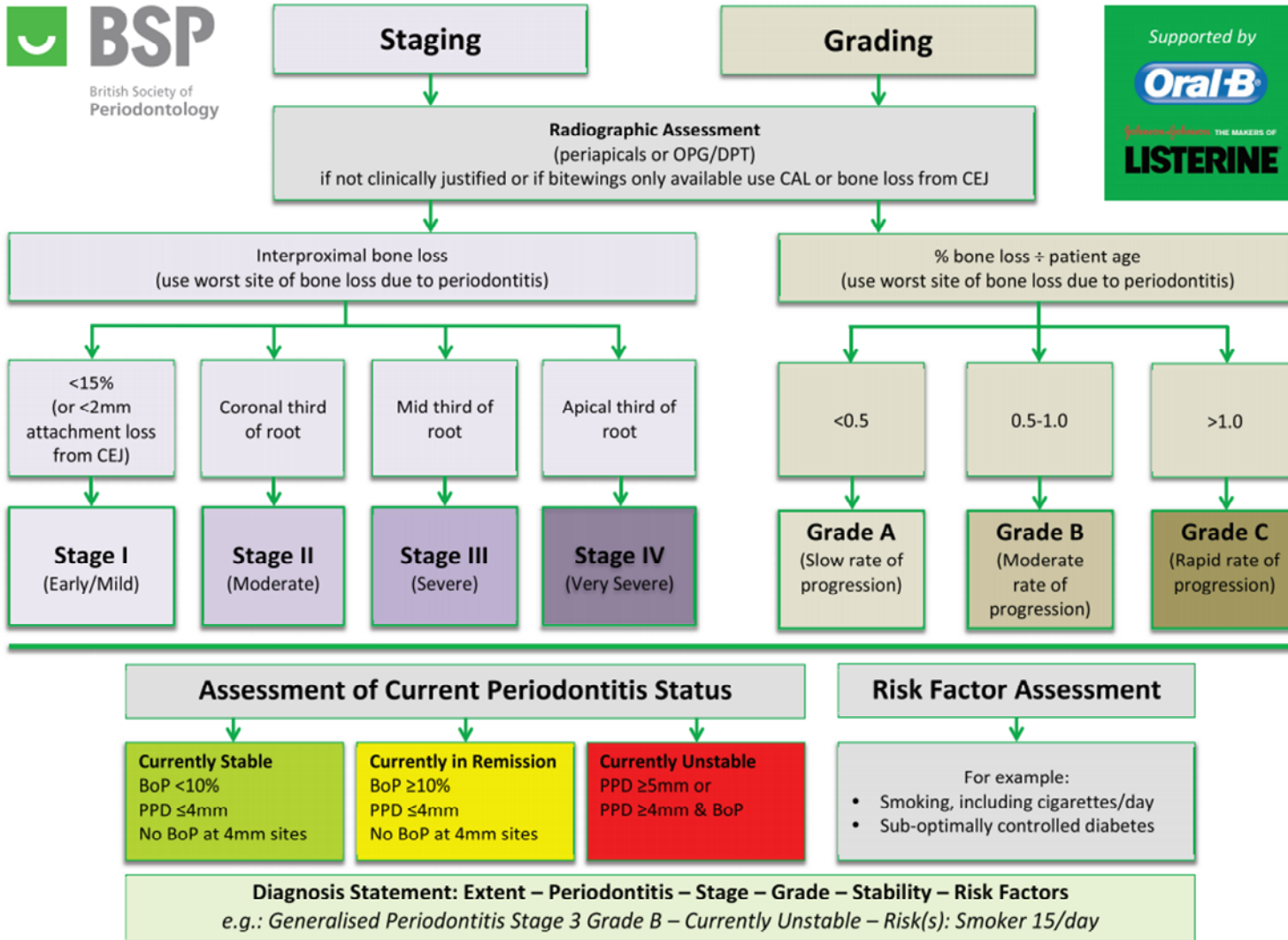
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