

Dental Quality and Outcomes Framework

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Dental Contract Pilots

Recent national surveys show that two-thirds of adults and children are now free of visible tooth decay; patients deserve a dental service that helps them maintain good oral health, and which focuses on improving the oral health of the remaining third, not one that is focused on treatment only.

The Government wants to enable dentists to exercise their professional judgment in working with patients to decide what care will be best to prevent ill-health and promote good oral health, whilst being accountable for the quality of the services they provide.

The Government wishes to put in place an NHS dental service delivering high quality clinically appropriate preventative, routine and complex care for those who choose it. As such, it plans to develop a new national contract based on registration, capitation and quality.

Our new contract proposals will give dentists a great deal more freedom to make their own decisions, using their own clinical judgment about what is in the best interests of their patients. The Dental Quality and Outcomes Framework (DQOF), which will measure the quality of their work, and the clinical outcomes they achieve, may provide a better way of holding them to account, than simply measuring the number of UDAs they carry out.

There will be a range of pilots, all of which essentially test ways of remunerating dentists not for the amount of treatment they carry out but for the number of patients they have in continuing care and for the quality of services they provide and the outcomes they achieve. The pilots will test how to develop a fair relationship between the annual contract value a practice receives and the number of registered patients for whom it should provide continuing care, and how to weight this capitation measure to reflect needs.

The DQOF will be underpinned by the use of a standardised oral health assessment and the development of a comprehensive set of accredited clinical pathways.

The importance of using clinical protocols using available evidence and professional consensus is a pillar of Government policy, and in the context of dentistry has been highlighted by clinicians who are already pioneering quality frameworks.

The pilots will help us to test the DQOF in dental practice, and to develop and refine the systems which we can use to monitor quality and outcomes.

The requirements of the DQOF are additional to the statutory terms.

Why improve oral health?

Just as health is the desired outcome of the rest of the NHS, so health should now be the desired outcome for NHS dentistry. The two major dental diseases, dental caries and periodontal disease are predominantly preventable. Poor oral health impacts on general health and wellbeing and can prejudice an individual's ability to eat, speak and socialise normally.

Pilot Dental Quality & Outcomes Framework (DQOF)

Quality is a necessary part of future dental contracts and it will take time to get a quality system that is solely outcome based. Quality is defined as covering three domains:

- Clinical effectiveness
- Patient experience
- Safety

Work on quality indicators, and in particular outcome indicators, is relatively new in the NHS and even more so in dentistry. A Dental Clinical Effectiveness and Outcomes Group undertook the development of an initial wide range of potential quality indicators. These have contributed to the initial DQOF which will continue to be developed over the coming years. The framework will be underpinned by the development of a comprehensive set of accredited clinical pathways. The importance of developing clinical protocols and algorithms using available evidence and professional consensus has been highlighted by clinicians from both the Clinical and Effectiveness & Outcomes Groups and the Salford & Oldham project.



DQOF pilot payments

The DQOF pilot payments will represent 10% of the contract value and be comprised of 1000 points. The domains are weighted as follows;

- 60% (600 points) for Clinical Effectiveness
- 30% (300 points) for Patient Experience
- 10% (100 points) for Safety

Paying for the DQOF

The contract pilots will allow us to test a payment system based on the three domains to determine the best scoring system. Factors to be considered in determining the scoring system include:

- the weighting that should be given to quality
- the weighting of the components of the DQOF

 the extent to which external factors (e.g. the size of the practice) affects the quality scores.

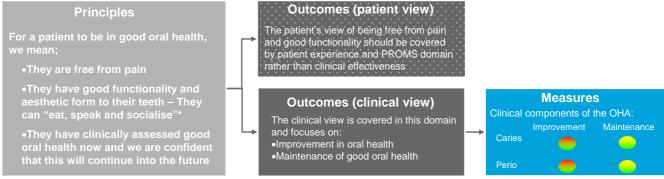
The weighting for payment based on performance against the DQOF will be determined by performance relative to peers. As we are working within a capped budget this approach allows the entirety of the budget to be used to reward improvements in oral health.

The Development of the DQOF

A working group was established to further progress the development of the DQOF. Membership included;

- Colette Bridgman Consultant in Dental Public Health
- Richard Emms BDA Representative
- Jane Moore BDA Representative
- Eric Rooney Consultant in Dental Public Health
- Sue Gregory Deputy Chief Dental Officer, Department of Health
- Serbjit Kaur Head of Quality and Standards, Dental Branch, Department of Health

The working group followed the process outlined below working back from first principles to define indicators that support the consensus within dentistry that good oral health is the ideal clinical outcome:



*(World Health Organisation 1982)

Shared Learning

A Department of Health initiated external stakeholder group developed and defined the Primary Dental Care Patient Assessment (PDCPA). The framework of the PDCPA will be used to underpin the DQOF.

In addition, a number of PCTs have tested blended contracts and have provided valuable learning regarding the use of clinical effectiveness quality measures as outcome measures. The Salford and Oldham primary dental care service redesign project, which used need and risk assessment tools (RAG scores) together with the care pathways, supports the proposal to use the four clinical domains and associated RAG scores to measure outcomes. The clinical indicators and outcome measures have captured improvement and deterioration. In particular colleagues from this project have found that using this approach has:

- Enabled the capture of oral health improvement as patients move RAG status. The
 project has learnt that, as some risk/modifying factors do not change, only the clinical
 components should be used as outcome measure
- Motivated dentists to deliver clinical care appropriate to need through robust, consistent clinical and risk assessment

- Incentivised dentists to perform detailed assessments and to value all patients the same through completing the same consistent, comprehensive assessment
- Aided communication with patients through the use of the RAG status.

Support & Training

Data collection

The full clinical dataset will automatically yield most of the indicators, with the majority of indicators being derived from the clinical activity in the Oral Health Assessment (OHA). The full data specification is being implemented with software suppliers to enable efficient data collection and reporting.

Training and support

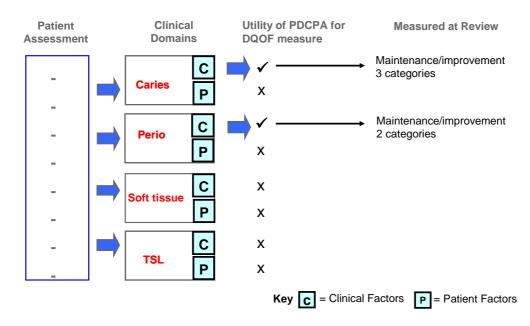
Support & training will be provided to pilot sites, which will include clear clinical definitions e.g. active decay and basic periodontal examination (BPE). Training will also be provided on the use of the OHA. The training and support will be provided through the pilot induction and training events.

Clinical Effectiveness and Outcomes

A key component of all pilots will be the implementation of the oral health assessment and a pathway approach to care, supported by evidence-based clinical guidelines where available. The PDCPA is a comprehensive assessment of a patient's oral health status carried out when a patient first visits a practice. It involves taking a full patient history and carrying out a thorough dental, intra-oral and extra-oral head and neck examination. Standardised information is collected which supports decisions about prevention, treatment and recall frequency.

The findings of the assessment can be described using a Red, Amber, Green (RAG) methodology. This is discussed between dentist and patient who then agree a personalised care plan and a defined care pathway. It enables an assessment of the patient's current status and patient modifying factors to determine risk of future disease, and should be refreshed at each review. It can also provide an assessment of need across a practice population. During piloting the utility of the PDCPA as an additional tool to weight capitation will be explored.

The clinical effectiveness outcome indicators included in the DQOF are based on the standardised PDCPA and the associated risk screening process. The clinical elements of the assessment will be used to inform quality and outcome payments.



The aim of the DQOF is to measure the maintenance or improvement of oral health with respect to caries and periodontal health. The risk screening process incorporates both clinical and patient modifying factors. For the purposes of the outcome measures, only the clinical factors are measured and evaluated. Clinical factors are objective and can be measured, recorded and improved by good care. Patient modifying factors can be subjective and some cannot be improved or changed by the dental team.

Clinical Effectiveness Outcome Indicators for payment (60%)

The following outcome indicators are derived from the clinical elements of the assessment based on the standardised NHS primary dental care patient assessment (PDCPA) and the associated risk screening process. The indicator information will be captured at oral health review and achievement of the indicator is described as either maintaining or improving a patient's condition.

If a contractor has no patients or survey returns for any particular indicator then they will score zero for that indicator. Where this happens for many contractors for any particular indicator

the Secretary of State may amend the DQOF, in consultation with relevant bodies and contractors, in order to make its operation feasible.

Indicator		Points - Max:600
	Decayed teeth (dt) aged 5 years old and under, reduction in number of carious teeth/child	150
	Decayed Teeth (DT) aged 6 years old and over, reduction in number of carious teeth/child	150
	Decayed Teeth (DT) reduction in number of carious teeth/dentate adult	150
	Patients with BPE score improved or maintained at oral health review	75
	Patients with BPE of score 2 or more with sextant bleeding sites improved at oral health review	75

Clinical Effectiveness Outcome Indicator 1

Definition

Decayed teeth (dt) aged 5 years old and under, reduction in number of carious teeth/child.

Achievement threshold

50% Under 5s active decay (dt) improved or maintained

The achievement threshold allows for both the impact of patient and carers on attaining required outcomes and individual patients susceptibility.

Rationale

Dental caries is preventable and at early stages reversible. This indicator will monitor the primary dental care team's adoption of evidenced informed preventative advice and intervention and their impact on oral health.

Evidence

Delivering Better Oral Health (DBOH), evidence based prevention. Selected Cochrane reviews:

Marinho VC, Higgins JP, Sheiham A, Logan S. 2003. Fluoride toothpastes for preventing dental caries in children and adolescents. Cochrane Database of Systematic Reviews. Issue 2. Art. no: CD002278 DOI: 10.1002/14651858.

Marinho VCC, Higgins JPT, Logan S, Sheiham A. 2007. Fluoride varnishes for preventing dental caries in children and adolescents. Cochrane Database of Systematic Reviews. Issue 2. Art. no: CD002279. DOI: 10.1002/14651858.

NHS Dental Epidemiology programme survey of 5 year olds in 2007/08 reports that 69% of 5 year olds are caries free.

Reporting and Verification

Practices should record the indicator information through tooth level data in the OHA/oral health review(OHR). Achievement of the indicator is described as either maintaining or improving a patient's condition.

Measurement will be based on the most recent paired reviews (OHA & OHR, OHR & OHR) within the financial year.

Data Item: no caries, early caries, established caries, arrested caries

Age Range: 0 - 5 years Exclusions: none

Verification: External verification is not required for piloting.

Clinical Effectiveness Outcome Indicator 2

Definition

Decayed Teeth (DT) aged 6 years old and over, reduction in number of carious teeth/child

Achievement threshold

75% of over 6's improved or maintained

The achievement threshold allows for both the impact of patient and carers on attaining required outcomes and individual patients susceptibility.

Rationale

Dental caries is preventable and at early stages reversible. This will monitor the primary dental care team's adoption of evidenced informed preventative advice and intervention and their impact on oral health.

Evidence

Delivering Better Oral Health (DBOH), evidenced based prevention toolkit. Selected Cochrane references; as above and

Ahovuo-Saloranta A, Hiiri A, Nordblad A, Worthington H, Mäkelä M. 2007. Pit and fissure sealants for preventing dental decay in the permanent teeth of children and adolescents. Cochrane Database of Systematic Reviews. Issue 2. Art. no: CD001830. DOI: 10.1002/14651858 CD001830 pub 2

Marinho VCC, Higgins JPT, Logan S, Sheiham A. 2007. Fluoride mouthrinses for preventing dental caries in children and adolescents. Cochrane Database of Systematic Reviews. Issue 2. Art. no: CD002284. DOI: 10.1002/14651858.

NHS Dental Epidemiology programme survey of 12 year old children 2008/09 found 66.7% of 12 year olds with no caries experience.

Reporting and Verification

Practices should record the indicator information through the tooth level data in the oral health assessment/oral health review. Achievement of the indicator is described as either maintaining or improving a patient's condition.

Measurement will be based on most recent paired reviews (OHA & OHR, OHR & OHR) within the financial year $\,$

Data Item: no caries, early caries, established caries, arrested caries

Age Range: 6-18 years Exclusions: none

Verification: External verification is not required for piloting.

Clinical Effectiveness Outcome Indicator 3

Definition

Decayed Teeth (DT) reduction in number of carious teeth/dentate adult

Achievement threshold

75% improved or maintained

The achievement threshold allows for both the impact of patient and carers on attaining required outcomes and individual patients susceptibility.

Rationale

Dental caries is preventable and at early stages reversible. This will monitor the primary dental care team's adoption of evidenced informed preventative advice and intervention and their impact on oral health.

Evidence

Delivering Better Oral Health (DBOH), evidence based prevention toolkit; Baysan A, Lynch E, Ellwood R et al. 2001. Reversal of primary root caries using dentifrices containing 5,000 and 1,100 ppm fluoride. Caries Res. 35: 41–46.

Adult Dental Health survey 2009 reports that 72% of adults in England had no visible coronal caries.

Reporting and Verification

Practices should record the indicator information through the oral health assessment/oral health review. Achievement of the indicator is described as either maintaining or improving a patient's condition.

Measurement will be based on most recent paired reviews (OHA & OHR, OHR & OHR) within the financial year.

Data Item: no caries, early caries, established caries, arrested caries

Age Range: 19 years and older Exclusions: edentate adults

Verification: External verification is not required for piloting.

Clinical Effectiveness Outcome Indicator 4

Definition

Patient Periodontal condition (measured using Basic Periodontal Examination (BPE) score) improved or maintained at oral health review

Achievement threshold

75% patients BPE score improved or maintained at oral health review
The achievement threshold allows for both the impact of patient and carers on attaining
required outcomes and individual patients susceptibility. The achievement also takes into
consideration that periodontal disease is not always reversible

Rationale

With early identification of a periodontal condition practitioners can improve and maintain BPE status. This will monitor the primary dental care team's adoption of the BPE and evidenced informed preventative advice and intervention.

Evidence

Delivering Better Oral Health (DBOH)evidence based prevention toolkit:

Guidelines for the management of patients with periodontal diseases. J Periodontol. 727: 1607–1611.

Nunn ME. 2003. Understanding the etiology of periodontitis: an overview of periodontal risk factors. Periodontology. 32: 11–23.

Albandar JM. 2002. Global risk factors and risk indicators for periodontal diseases. Periodontology. 29: 177–206.

Davies RM, Davies GM. 2005. Periodontal disease and general health. Dent Update. 32: 438–442.

Van der Weijden GA, Hioe KP. 2005. A systematic review of the effectiveness of self-performed mechanical plaque removal in adults with gingivitis using a manual toothbrush. J Clin Periodontol. 32(Suppl 6): 214–228.

Reporting and Verification

Practices should record the indicator information through the oral health assessment/oral health review. Achievement of the indicator is described as either maintaining or improving a patient's condition.

Measurement will be based on most recent paired reviews (OHA & OHR, OHR & OHR) within the financial year.

Data Item: BPE

Age Range: 19 years and older Exclusions: edentate adults

Verification: External verification is not required for piloting

Clinical Effectiveness Outcome Indicator 5

Definition

Patient Periodontal condition of BPE 2 or more with sextant bleeding sites improved at oral health review

Achievement threshold

50% of patients with BPE 2 or more with sextant bleeding sites improved at oral health review The achievement threshold reflects both the impact of patient and carers on attaining required outcomes and individual patient susceptibility. The achievement also takes into consideration that periodontal disease is not always reversible.

Rationale

With early identification of a periodontal condition and monitoring of sextant bleeding, practitioners can improve and maintain levels of gingival bleeding. This will monitor the primary dental care team's adoption of the BPE and evidenced informed preventative advice and intervention.

Evidence

Delivering Better Oral Health (DBOH), evidenced based prevention toolkit. Baker P, Needleman I, 2010. Risk management in clinical practice. Part 10. Periodontology. British Dental Journal, vol 209 no 11 557-565

Reporting and Verification

Practices should record the indicator information through the oral health assessment/oral health review. Achievement of the indicator is described as improving a patient's condition.

Measurement will be based on most the recent paired reviews (OHA & OHR, OHR & OHR) within the financial year.

Data Item: BPE, Sextant Bleeding Age Range: 19 years and older Exclusions: edentate adults

Verification: External verification is not required for piloting

Patient Experience Indicators for payment (30%)

Patient experience indicators are a fundamental part of performance frameworks in healthcare and are important for delivery of a patient-centred service. The indicators are needed to help ensure that the service delivered is in line with patient expectations and that the outcomes are in line with what patients want and need. The methodology of collection is yet to be defined and will be dependent upon a statistically valid response.

If a contractor has no patients or survey returns for any particular indicator then they will score zero for that indicator. Where this happens for many contractors for any particular indicator the Secretary of State has the power to amend the DQOF, in consultation with relevant bodies and contractors, in order to make its operation feasible.

Indicat	or	Points - Max:300
	Patients reporting that they are able to speak & eat comfortably	Max: 30 Level 1 45%-54% =15 Level 2 55%-100% =30
_		Max: 30 Level 1 80%-89% = 15 Level 2 90%-100% = 30
		Max: 30 Level 1 80%-89%= 15 Level 2 90%-100% = 30
PE.04	Patients reporting that they felt sufficiently involved in decisions about their care	Max: 50 Level 1 70%-84% = 25 Level 2 85%-100% = 50
	Patients who would recommend the dental practice to a friend	Max: 100 Level 1 70%-79% = 50 Level 2 80%-89%= 75 Level 3 90%-100%=100
	- anomic reperming cameracular many acriment	Max: 50 Level 1 80%-84% = 20 Level 2 85%-89% = 40 Level 3 90%-100% =50
PE.07	Patients satisfied with the time to get an appointment	Max: 10 Level 1 70%- 84% = 5 Level 2 85%-100% =10

Patient Experience Indicator 1

Definition

Patient survey question "Are you able to speak and eat comfortably?"

Achievement threshold

% of patients reporting that they are able to speak & eat comfortably Level 1 45%-54% = 15 Level 2 55%-100% = 30

Reporting and Verification

Patient Experience Indicators are to captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Patient Experience Indicator 2

Definition

Patient survey question "How satisfied were you with the cleanliness of the practice?"

Achievement threshold

% of patients satisfied with the cleanliness of the dental practice Level 1 80%-89%=15 Level 2 90%-100%=30

Reporting and Verification

Patient Experience Indicators are to captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Patient Experience Indicator 3

Definition

Patient survey question "How helpful were the staff at the practice?"

Achievement threshold

% of patients satisfied with the helpfulness of practice staff Level 1 80%-89%=15 Level 2 90%-100%=30

Reporting and Verification

Patient Experience Indicators are to be captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Patient Experience Indicator 4

Definition

Patient survey question "Did you feel sufficiently involved in decisions about your care?"

Achievement threshold

% of patients reporting that they felt sufficiently involved in decisions about their care Level 1 70%-84% = 25 Level 2 85%-100% = 50

Reporting and Verification

Patient Experience Indicators are to captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Patient Experience Indicator 5

Definition

Patient survey question "Would you recommend this practice to a friend?"

Achievement threshold

% of patients who would recommend the dental practice to a friend Level 1 70%-79% = 50 Level 2 80%-89%= 75 Level 3 90%-100%=100

Reporting and Verification

Patient Experience Indicators are to captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Patient Experience Indicator 6

Definition

Patient survey question "How satisfied are you with the NHS dentistry received?"

Achievement threshold

% of patients reporting satisfaction with NHS dentistry received

Level 180% - 84% = 20

Level 285% - 89% = 40

Level 3 90%-100% =50

Reporting and Verification

Patient Experience Indicators are to be captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Patient Experience Indicator 7

Definition

Patient survey questions "How do you feel about the length of time taken to get an appointment?"

Achievement threshold

% of patients satisfied with the time to get an appointment

Level 1 70%- 84% = 5

Level 2 85%-100% =10

Reporting and Verification

Patient Experience Indicators are to captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Safety Indicators for payment (10%)

Safety quality measures will fall under the remit of the CQC and work with professional bodies such as the GDC. The dental profession and commissioners are committed to ensuring that clinical practice remains safe and that safety is a fundamental part of the service that is delivered.

Consequently, patient safety overall is not something that should be rewarded through a quality payment as all dentists should adhere to safe practices. However clinical aspects of patient safety can be monitored and rewarded through payment and payment will be made on the following indicator:

Indicator		Points – Max:100
	90% of patients for whom an up-to-date medical history is recorded at each oral health review	100

If a contractor has no patients or survey returns for any particular indicator then they will score zero for that indicator. Where this happens for many contractors for any particular indicator the Secretary of State may amend the DQOF, in consultation with relevant bodies and contractors, in order to make its operation feasible.

Safety Indicator 1

Definition

Patients for whom an up-to-date medical history is recorded at each oral health review

Achievement threshold

90% of patients for whom an up-to-date medical history is recorded at each oral health review

Rationale

The capture of a patient's past medical history is required under GDC standards of professional conduct; "Make and keep accurate and complete patient records, including a medical history, at the time you treat them."

Patients are significantly at risk if this is not conducted prior to treatment.

Evidence

D'Cruz L, 2010. Risk management in clinical practice. Part 1. Introduction. British Dental Journal. Volume 209, No 1 July 10

Reporting and Verification

Practices should record the indicator information through the oral health assessment/oral health review.

Measurement will be based on all reviews within the financial year.

Data Item: PMH Age Range: All Exclusions: none

Verification: External verification is not required for piloting.

Indicators for monitoring overall quality (no payment)

It is proposed that the following quality indicators are monitored throughout the pilots to understand the impact of the change of system on clinical behaviour and patient perception.

Indicator	
CE.01	% of children aged 11 who have had an assessment of unerupted canines
CE.02	% of children aged 18 and under who have had fluoride varnish in the last
	year.
PE.08	Was the cost of treatment explained to you before your treatment started?
PE.09	Do you understand what you personally need to do to maintain and improve
	your oral health?
PE.10	Do you understand how healthy your teeth and gums are?

Clinical Effectiveness Indicator 1

Definition

% of children aged 11 who have had an assessment of unerupted canines

Rationale

Unidentified impacted canines, can pose risks to child oral health. Left impacted they can damage the roots of adjacent teeth. Early assessment and referral/ treatment can simplify or avoid future orthodontic intervention.

Reporting and Verification

Practices should record the indicator information through the oral health assessment/oral health review.

Measurement will be based on all reviews within the financial year.

Data Item: Unerupted canines assessed

Age Range: Under 12 years old

Exclusions: none

Verification: External verification is not required for piloting.

Clinical Effectiveness Indicator 2

Definition

% of children aged 18 and under who have had fluoride varnish in the last year.

Rationale

Marinho VCC, Higgins JPT, Logan S, Sheiham A. 2007. Fluoride varnishes for preventing dental caries in children and adolescents. Cochrane Database of Systematic Reviews. Issue 2. Art. no: CD002279. DOI: 10.1002/14651858.

Reporting and Verification

Number of courses of treatment for child patients, aged 3 or above, where fluoride varnish was provided/The total number of courses of treatment scheduled for child patients, aged 3 or above, x 100%

Verification: External verification is not required for piloting.

Patient Experience Indicator 8

Patient survey questions "Was the cost of treatment explained to you before your treatment started?"

Reporting and Verification

Patient Experience Indicators are to be captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Patient Experience Indicator 9

Definition

Patient survey question "Do you understand what you personally need to do to maintain and improve your oral health?"

Reporting and Verification

Patient Experience Indicators are to be captured through the Dental Services patient survey Verification: External verification is not required for piloting.

Patient Experience Indicator 10

Definition

Patient survey question "Do you understand how healthy your teeth and gums are?"

Reporting and Verification

Patient Experience Indicators are to be captured through the Dental Services patient survey Verification: External verification is not required for piloting.