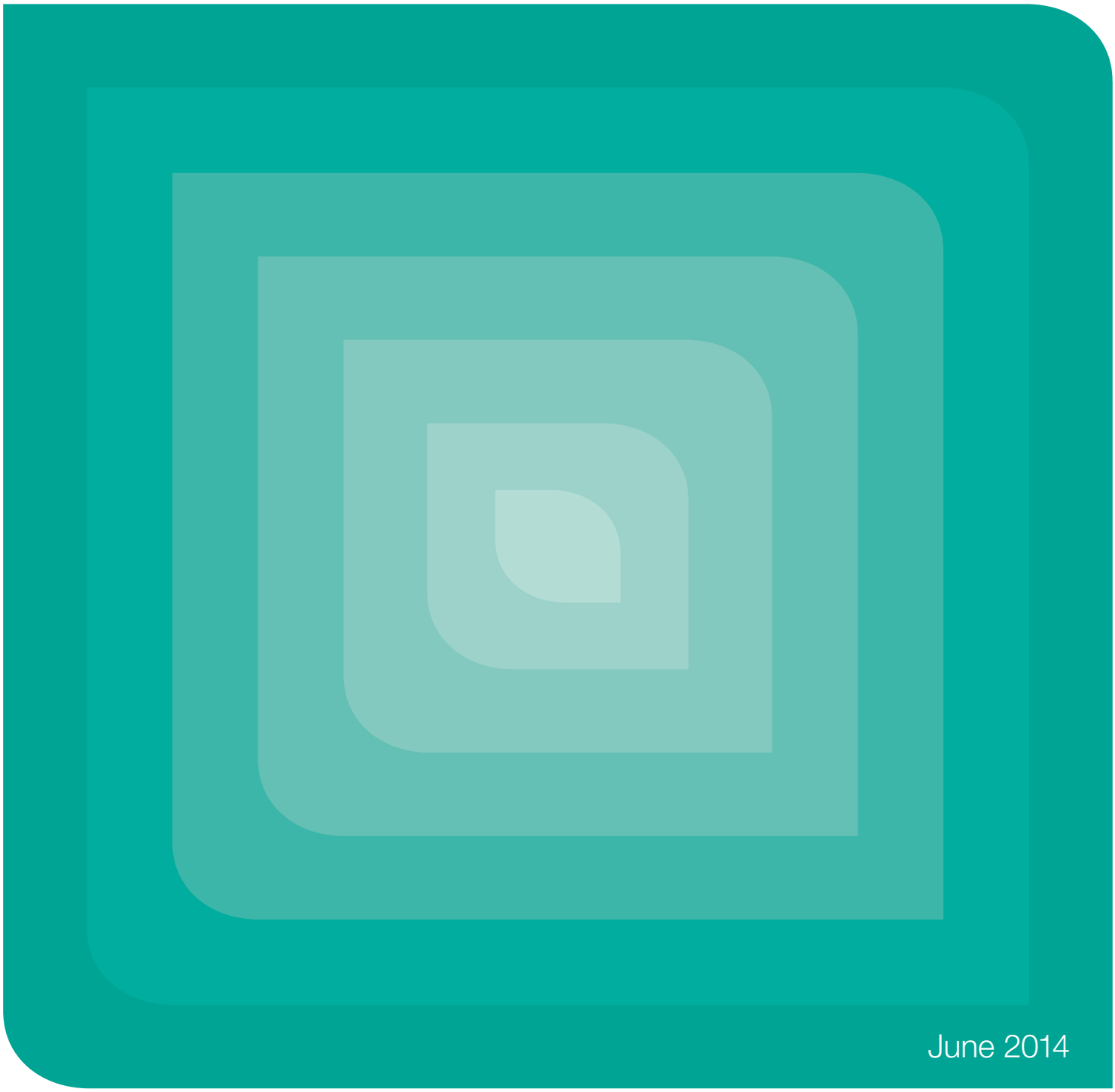
Department of Health

Dental Contract Reform: Engagement

Paper 3: The measurement of quality and outcomes



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Purpose

This paper discusses the approach to measuring quality and outcomes that we have been developing within the Dental Contract Reform programme. There are a wide range of potential indicators which we can measure and many will be valuable for driving quality improvement. The indicators used for remuneration may be formed from a subset of these. The paper explores:

1. The principles of measuring quality and outcomes

2. Quality and outcome indicators

3. Learning from piloting a Dental Quality and Outcomes Framework (DQOF)

4. Further development for measuring quality and outcomes

The Dental Contract Reform programme explores a payment system to a provider that is directly related to the outcomes associated with patients' oral health maintenance and improvement. The reform also looks at ways that dentists can be rewarded for delivering good quality care. In order to support these aims it is necessary to monitor and measure what is being provided and the outcomes being achieved.

There is an opportunity to feedback your comments at the end of this document.

1. The principles of measuring quality and outcomes

Measuring quality and outcomes is important to the accountability of any system. It is also important to know the current level of outcomes within a system in order to drive quality improvement. This section looks at how to measure quality and outcomes, measured by health status, and whether health changes are a result of the patient receiving an intervention or managed care. There are three recognised principles or dimensions of health quality measurement:

- structure
- process
- outcome.

'Outcomes remain the ultimate validators of the effectiveness and quality of medical care' but they 'must be used with discrimination'.[1]

These principles are now recognised internationally as the leading practice when considering this type of measurement and form the basis of the outcome measures being explored by the Dental Contract Reform programme. It is also important to consider the environment in which care occurs (measures of structure) and whether 'medicine is properly practised'[2] (measures of process). Outcomes depend on having the right structures and processes in place:

structure + process = outcomes

Historically, the NHS has measured structures or inputs, typically the amount of money spent on a clinical area or the number of professionals employed, e.g. the number of dentists per 1000 population in a region. However, measuring structures has limitations; structural indicators will not tell us whether individual dental practices are making the most of these resources and actually delivering high quality care.

2. Quality and outcome indicators

Process and outcome indicators give an insight into the quality of service that is being delivered. They can also show the impact that the care patients receive has on their health.

Process indicators

A Quality and Outcome Framework (QOF) has existed in General Medical Practice since 2004. The focus of many of the indicators is on process, i.e. for specified medical conditions, a patient presenting with a given medical history should receive a particular pathway. The indicator reports on the proportion of patients who receive the pathway or treatment – with appropriate exception reporting. The pathways and indicators are grounded in a strong evidence base of appropriate treatment.

The strength of these types of indicators is that they work well with quality standards of care and allow for the delivery of consistent services across the NHS. The limitation can be that some clinicians feel it restricts their professional judgement and can promote an overly rigid application of care rather than one appropriate to the need of individual patients.

During the pilot programme, new management data was collected for each practice. The data has the potential to allow practices to understand the risk profile of their patient cohorts. It can be used to track the recall intervals for oral health review broken down by patient risk status; the courses of treatment their patients received and the access levels for patients at the practice.

Outcome indicators

The final group of indicators are outcome indicators. Lord Darzi's report High Quality Care for All, identified the outcome areas from good quality care as follows:[3]

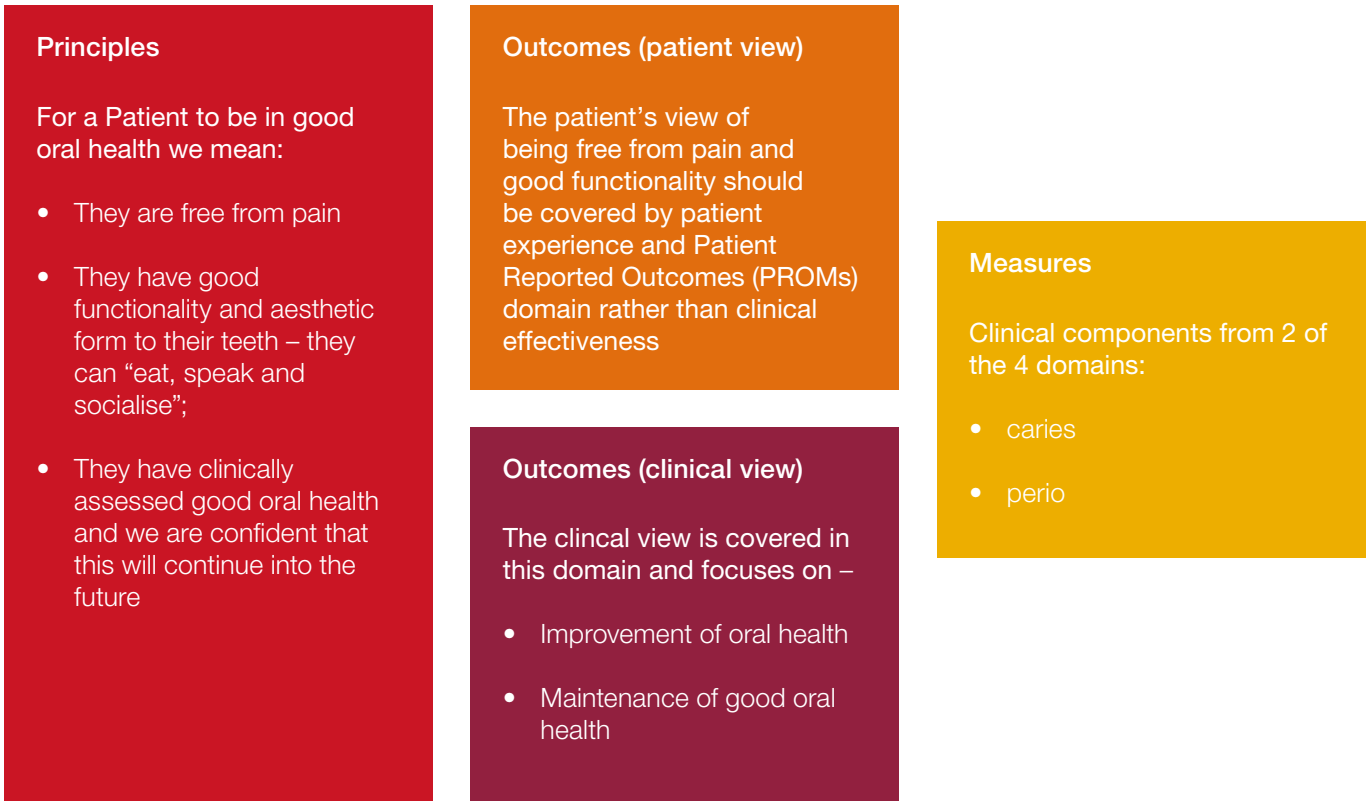
- clinical effectiveness
- patient experience
- safety.

These apply as much to dentistry as to other clinical services and formed the basis of the Dental Quality and Outcomes Framework (DQOF) used for the dental contract reform pilots. Outcome measures can be valuable indicators as they tell us whether, and to what extent, the patient has benefited from an intervention.

We have collected data for the domains identified above: clinical effectiveness, patient experience and safety for the DQOF. The original framework document, published in May 2011, can viewed here.[4] As you would expect the framework has been monitored and revised.

The indicators for the framework were constructed by a working group of clinicians. They drew from first principles and support the consensus within dentistry of what makes good oral health.

Figure 1 — Indicator development process



Clinical Effectiveness

Typically, clinical effectiveness indicators measure health status and whether the health status has changed:

- as a result of the a treatment of acute care; or
- over time during a period of managed care for chronic long terms conditions.

The NHS has started using and collecting outcomes measures at a national and local level. NHS England has been challenged by the Department of Health through the Mandate[5] document to expand their use. An example of which is the Patient Reported Outcomes (PROMs) Programme which covers areas of general surgery and orthopaedic surgery.

In the Dental Contract Reform programme, the clinical effectiveness indicators work by comparing the data collected at the oral health review with oral health assessment for the same patient. This allows us to see whether the oral health of individual patients has improved. At the start of the first year of the pilot, the majority of appointments are for oral health assessments. The volume of reviews picks up later in the year as patients are recalled with the red patients being the first to be seen.

Figure 2 — Clinical effectiveness indicators for 2014/15 Dental Contract Reform pilots

Indicator	
OI.01	Decayed teeth (DT) for patients aged under 6 years old
OI.02	Decayed teeth (DT) for patients aged 6 years old to 18 years old
OI.03	Decayed teeth (DT) for patients aged 19 years old and over
OI.04	BPE score for patients aged 19 years old and over
OI.05	Number of sextant bleeding sites for patients aged 19 years old and over

Patient Feedback

The traditional area for patient experience indicators covers the customer service aspect of healthcare. This includes overall satisfaction with the care patients have received, whether they feel they are treated with dignity and respect or the cleanliness of the surgery.

Another area of patient feedback is on whether the treatment they have received has had an impact on their function. Although patient reported, these are a form of outcome rather than experience measure.

For dentistry, function indicators focus on the patients' level of pain, ability to chew and appearance.

In the Dental Contract Reform programme, the data items for the patient experience indicators are collected via a survey questionnaire sent to patients by the NHS Business Services Authority (BSA). The BSA aims to randomly sample 700 patients who have received a course of treatment per practice. These indicators cover both patients' views on functionality and the 'customer service' aspects of care. The patient experience indicators collected during the pilots are shown below:

Figure 3 — Patient experience indicators for 2014/15 Dental Contract Reform pilots

Indicator	
PE.01	Patients reporting that they are able to speak & eat comfortably
PE.02	Patients satisfied with the cleanliness of the dental practice
PE.03	Patients satisfied with the helpfulness of practice staff
PE.04	Patients reporting that they felt sufficiently involved in decisions about their care
PE.05	Patients who would recommend the dental practice to a friend
PE.06	Patients reporting satisfaction with NHS dentistry received
PE.07	Patients satisfied with the time to get an appointment

Safety

Measuring safety is already an established field and the remit of the Care Quality Commision (CQC) and the General Dental Council (GDC), irrespective of whether a dental practice is providing NHS or private care. We have been careful that the measures in the QOF do not duplicate the work of these organisations. The working group took the view that safety should not be rewarded through quality payments as all professional dentists should adhere to the safety standards of the CQC with monitoring mechanisms already in place. Therefore, the QOF metric for safety focuses on clinical matters in the form of recording a patient's medical history at the oral health review. This can be viewed as a type of process indicator.

Figure 4 — Safety indicator for 2014/15 Dental Contract Reform pilots

Indicator	
SA.01	Recording an up-to-date medical history at each oral health assessment/review

3. Learning from piloting a DQOF

Most practices did well on most of the indicators, typically achieving high overall scores. For example, for four out of five of the clinical effectiveness indicators 87 out of the 92 practices scored full marks. The indicator which records the number of sextant bleeding sites for patients aged 19 and over, 81 out of the 92 practices scored full marks. While this is still a high number, it is the clinical indicator with which most practices struggled.

Practices also scored well on the patient experience set of indicators. For example, all practices scored full marks on the indicator which records whether a patient is able speak and eat comfortably. However, they do less well on the indicators about whether patients would recommend the practice to a friend or family member or on overall satisfaction.

Perhaps not surprisingly, a major lesson from the collection of data for DQOF in the pilot sites is that data quality is a key component of monitoring quality and outcomes. Roll out of the supporting software was not without its difficulties. It also takes time to process the data to produce the indicators and timely submission of data is important in order to achieve this. Therefore for 2014/15 data quality timeliness indicators were added to the DQOF. These cover both the pilot specific data (known as appointment data) and the data routinely required under the current contract (FP17 data).

As professionals, one would expect dentists to take account of, and to respond to, the quality and outcome indicators. Therefore, measuring and reporting on the main areas of dental services should lead to better services as dentists do their best to deliver on the indicators. This reiterates the importance of ensuring there is a consensus among the dental profession on the main areas that should be measured.

4. Further development for measuring quality and outcomes

The Department of Health remains committed to a Quality and Outcomes Framework for dentistry which collects information and demonstrates high quality services. It should also facilitate the option of making payments based on quality. For the pilots, the level of ambition was set high and the design of the indicators focused on outcomes. For a system of payments to be acceptable to the profession, it is important the indicators used are recognised as the right ones.

There is the potential to refine and further develop DQOF. We are also considering whether the number of indicators is right and whether the areas of coverage are right. For example, there is an option to look at the clinical indicators to consider whether they are in the right area. An alternative would be to look at whether process type indicators would also add value.

Questions:

We want to gather your views to inform further stages of the work. We have structured a series of questions to support you in providing comments. There is a free text box at the end of the section to pick up any other issues you would like to raise.

Please click on the button below to provide feedback.

Thank you for your contribution.

Question 1
Do you think that the areas of clinical effectiveness, patient experience and safety are the right ones for the Dental Quality and Outcomes Framework?

Question 2
Do you think that the focus on outcomes is correct or should some indicators measure process as well?

Question 3
Are there any other considerations that would apply to devising indicators for patients with additional needs, often seen in community dental services?

Question 4
If you would like to see some process indicators, what areas should the framework consider?

Question 5
For the clinical effectiveness indicators, do you think the focus on caries and Basic Periodontal Examination (BPE) is correct?

Question 6
What other areas of clinical effectiveness could be included as an indicator?

Question 7
For the patient experience indicators, do you think they cover the right areas?

Question 8
What other areas of patient experience, if any, should be included?

Question 9
Aside from the sort of measurement approach outlined in this paper, do you have other views and ideas about ways of assuring and promoting clinical quality?

Question 10
What monitoring tools and indicators can be used to assess:

- Patient safety?
- Clinical effectiveness?
- Patient experience?

Question 11
What quality measures would enable a practice to demonstrate that they are appropriately treating high risk patients?

Click here to feedback

References

[1] Donabedian A (1966). 'Evaluating the quality of medical care'. The Milbank Memorial Fund Quarterly, vol 44, no 3, pt 2, pp 166–203

[2] Donabedian A (1966). 'Evaluating the quality of medical care'. The Milbank Memorial Fund Quarterly, vol 44, no 3, pt 2, pp 166–203

[3] High Quality Care for All
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228836/7432.pdf

[4] Dental Quality and Outcomes Framework
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216300/dh_126627.pdf

[5] The Mandate: A mandate from the Government to the NHS Commissioning Board: April 2013 to March 2015
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256497/13-15_mandate.pdf

This paper has been produced by the Dental Contract Reform programme

Any comments or queries on the papers should be made to the team via the online feedback mechanisms.

Feedback on the papers, sent via email, will not be considered as part of this engagement activity.

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