Department of Health & Social Care

Dental Contract Reform

Evaluation of the first year of prototyping 2016-2017

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Introduction

This is the third report produced as part of the Dental Contract Reform (DCR) Programme and is a development of the initial 2016/17 mid-year findings presented to the DCR Programme Board (Programme Board) and the participating prototype practices in January 2017.

The report has been developed to assist the National Steering Group (NSG) for DCR and the Programme Board in the consideration of the next stages of the programme. The NSG is the national advisory steering group and includes external members. The Programme Board is part of the internal Department of Health and Social Care (DHSC) and NHS England programme governance.

The current prototype contract models started in spring 2016 and most of the data in this report covers the period 2016/17. However, to allow comparison, where relevant, with the pilots, that preceded the current prototype phase, some of the data in this report covers the period from the start of the programme in April 2011 until the present.

The practices in the programme have been recruited in three Waves, Waves 1 (2011) and Wave 2 (2013) who took part in the piloting process, and Wave 3 who joined when the prototypes started in 2016. It is important to recognise that there are key differences between these groups and where appropriate findings are reported separately.

The objective of the Dental Contract Reform Programme continues to be to maintain or improve access, quality and appropriateness of care and improve oral health, within the current cost envelope, in a way that is financially sustainable for dental practices, patients and commissioners.

The approach to this report has been developed by the DCR Evaluation Reference Group (ERG) (see Annex 3) and focusses on -

- Access and accessibility
- Quality and appropriateness of care
- Oral health
- Sustainability for dental practices
- Value for money

The data is drawn from information regularly submitted to the NHS Business Services Authority (NHS BSA) through FP17 forms and specific practice software, along with monthly and specific surveys administered by the DCR Programme. The report findings were shared with prototype practices at engagement events during 2017 and qualitative information from these events has been included in the commentary.

In many ways it is still too early to draw conclusions with confidence, however, with those caveats, the high level findings, conclusions and recommendations are as follows:

Access

For Wave 3 practices (new to prototyping in 2016, entering directly from the current 2006 contract system)

Wave 3 practices which became prototypes directly from the current 2006 contract in Spring 2016 provide the most realistic model of what might happen if the prototype contract is scaled. This is because Wave 1 and 2 have been involved from the very early stages of piloting and having lost access during the early period, they have generally been required to increase patient numbers in 2016/17.

Wave 3 practices had no capitation element to their contract prior to entering prototyping, but based on their historic data, an expected number of capitation patients for 2016/17 was set out in their contracts. As a group, these practices started the year with 102% of their expected capitated numbers.

- Access for Wave 3 practices, as measured by the practices capitation list, has remained above the expected numbers set in the contracts.

In setting the expected capitation numbers for the prototypes, a reference year was used to inform the calculations. This reference year is referred to as the "baseline". The baseline year for the Wave 3 practices was 2014/15. Using the patients seen in the last 24 month method, comparisons for the prototype year with the baseline year can be made, along with comparisons with the 2006 contract system over the same period.

- At the end of the first year of prototyping access for Wave 3 practices, as measured by patients seen in the last 24 months, has dropped to 97.2% of the baseline. This compares with no change in matched 2006 contracts over the same period.

For Wave 1 and 2 practices (previously pilot practices)

During the pilot phase, the Wave 1 and 2 practices lost access in the first few years as there was a concentration on embedding and delivering the clinical pathway, with limited commissioning pressure on access. Although some recovery was made from 2014 onwards, on entering the prototype phase in 2016, these practices generally had less capitated patients than the expected numbers set in the contracts.

- Access as measured by the practice capitated patient lists, increased in Wave 1 and 2 practices, but remained below the expected capitated numbers set in the contracts.

Using the 24 month access method -

- During the first year of prototyping access for Wave 1 practices, as measured by patients seen in the last 24 months, increased from 85% to 88% of the baseline.
- During the first year of prototyping access for Wave 2 practices, as measured by patients seen in the last 24 months, increased from 89% to 95% of the baseline.
- During the same period, in all 2006 contracts, patients seen in the last 24 months remained static at 101% of the baseline.
- During the same period, in matched 2006 contracts, access increased from 101% to 103% for Wave 1 and stayed constant at 103% for Wave 2.

Accessibility for patients

Accessibility for patients is measured through a standard patient survey question. This showed that:

- 90% of patients in prototypes felt – “The time it took to get an appointment was as soon as necessary” compared with 91% in the 2006 contract system.

Quality and appropriateness of care

A Dental Quality and Outcomes Framework (DQOF) has been defined and developed over the course of the DCR Programme. It has 15 indicators across four domains; Clinical Effectiveness, Patient Experience, Patient Safety and Data Quality (see Annex 1).

- 89% of prototype practices met all the Clinical Effectiveness outcome indicator thresholds;
- 99% of prototype practices met the Patient Safety indicator threshold;
- 65% of prototype practices met all the indicator thresholds in the Patient Experience domain;
- 51% of prototype practices met both the indicator thresholds in the Data Quality domain.

The clinical aspects of the DCR Programme focus on delivery of an evidence-based clinical pathway. The emphasis is on an oral health risk assessment, and based on this, evidence based prevention and appropriate timing of oral health reviews.

Oral Health Assessment (OHA) and Oral Health Review (OHR):

- In all prototypes, 87% of adults and 86% of children had received an OHA or OHR;
- In Wave 1, 87% of adults and 85% of children had received an OHA or OHR;

- In Wave 2, 81% of adults and 81% of children had received an OHA or OHR;
- In Wave 3, 94% of adults and 95% of children had received an OHA or OHR;

Delivery of prevention:

- The percentage of FP17s for adults reporting the delivery of best practice prevention was 62% in prototype practices, compared with 56% in 2006 contract practices.
- For children, these percentages were 60% and 58% respectively.
- For adults, a greater proportion of courses of treatment in the prototypes include the application of fluoride varnish compared with 2006 contract practices (4% compared to 3%).

The opposite is true for children, which is an unexpected finding and requires further investigation:

- 28% of courses of treatment for children in the prototypes show fluoride varnish were applied compared with 41% in 2006 contract practices.

Timing of oral health review -

- Analysis of planned review times shows broad correlation between the clinical risk of the patient and the time planned for review, as set out in National Institute for Health and Care Excellence (NICE) guidelines, with the exception of two-year review for low risk patients.

Oral Health

One of the objectives of contract reform is to improve patients' oral health, and data from the DQOF shows:

- Overall more than 90% of children and adults had maintained or reduced the number of teeth with dental decay between oral health assessment and review.
- Overall more than 80% of adults had maintained or improved their level of periodontal health (when measured using the Basic Periodontal Examination (BPE) and when measured using the number of sextant bleeding sites), between oral health assessment and review.

Sustainability for dental practices

The evaluation used both qualitative and quantitative information to assess the sustainability for practices. Contract performance was used as a quantitative measure and compared with current 2006 contract performance. The table below shows delivery compared with the 2006 contract system:-

Overall achievement at year-end 2016/17				
Contract achievement	Percentage of practices			
	Wave 1	Wave 2	Wave 3	2006 contract
above 100%	34%	41%	48%	33%
96%-100%	34%	35%	29%	33%
90%-96%	7%	6%	14%	15%
below 90%	24%	18%	10%	19%

* NOTE: Due to rounding, totals may not sum to 100%

Although delivery of the contract in the first year is commensurate or better than delivery levels in the 2006 contract system, the prototype practices previously delivered well and caution must be applied to any extrapolation to the 2006 contract group. It must be recognised that for some practices, particularly those in Wave 1 and 2, achieving these levels of delivery has not been easy given their starting point in 2016.

Qualitative data from surveys and the prototype engagement events elicited the following responses:

- *"It is a difficult balancing act to be able to provide access to patients, provide necessary treatment and meet contract measures".*
- *"Expecting patients to take responsibility of their own oral health is extremely difficult and takes an awful lot of time and effort".*
- *"Contract delivery at the end of 16-17 was achieved but at a substantial cost to practices".*
- *"There has been no recognition for the increased costs borne by practices to deliver contract requirements".*
- *"Put whichever figure you want but it is costing the practice more – all practices have put in more resources to deliver their contracts".*
- *"Every practice has had to invest in additional resources to maintain access levels".*

It is likely that these comments are weighted by the larger group of Wave 1 and 2 practices who have been working hard to recover access, increase capitated numbers and deliver specific amounts of activity during 2016/17. Although it is possible that transition into the prototypes for Wave 3 practices is also a factor.

Separate data for Waves 1, 2, and 3 based on survey responses show that:

- Stress levels in Wave 3 are generally lower than in Waves 1 and 2.
- A greater proportion of Wave 3 practices are *"managing"* or *"managing well".*

Value for money

Measuring value is complex. It may range in its sophistication from simple short term measures such as £ per patient seen per year, through to outcomes achieved and benefits accrued to patients using health economics concepts, which estimate the monetary value of benefits expected over much longer terms. In particular, the long term value of the preventive pathway in managing our increasing elderly, frail and dentate population, and in preventing our young children from developing oral health problems, needs to be understood and set against the cost of delivering the prototype approach.

At this point in the prototype phase, where Wave 1 and 2 practices are in an access recovery stage and where Wave 3 practices are going through the transition stage, there is insufficient "steady state" data to undertake meaningful analysis.

Conclusions

Given the analysis of the data collected and the feedback and views of the prototype practices at the engagement events, it is the ERG's view that:-

- Progress has been made in the first year of prototyping on the key issues of improving oral health, providing appropriate care and quality, and maintaining or increasing access to merit continuation of the programme.
- The clinical model is well accepted by the profession, however further work needs to be done and adjustments made to the business model and in a range of areas to improve the sustainability for practices.
- To improve the robustness of evaluation, and of any adjustments made, further practices should be recruited to the programme.

It is important to consider that it is possible to continue to develop and test an approach, looking to get the best contract for all parties, but to recognise that at some point a decision has to be taken that the approach is “good enough” for scaling up. It is a balance of risk for all parties and this point has not been reached yet.

In moving forward, based on the findings in this report, the following recommendations have been made:

Recommendations

1. Consideration is given to extending the period over which patients are transitioned from the 2006 contract system to the new clinical pathway approach.
2. Consideration is given to managing any future transition in areas where supply is greater than demand.
3. The length of the capitation period used in the prototypes is explored more fully.
4. The DQOF sub group continues to develop the DQOF and its use.
5. A patient survey is carried out to determine the impact of the prevention advice on patients' oral health behaviour.
6. A detailed piece of work is undertaken to understand the reasons and rationale from patient and professional perspectives for the approach to implementing the longest recall periods recommended by NICE.
7. The outcomes of the PREFER trial[vii] should feed into the review and development of the risk communication aspects of the clinical pathway.
8. The programme continues to monitor oral health at the practice, population and individual level, and that specific work to quantify the preventive activity takes place.
9. That further practices are recruited to the programme and randomly allocated to the Blends so as to provide a more robust evaluation of the Blends.
10. The exchange mechanism is more widely promoted and consideration is given to renaming the Expected Minimum Activity (EMA) measure.
11. When reform of contracts takes place, public facing communication is developed and delivered by the local health system to support scaling up.
12. A well designed comparison in terms of the National Health Service (NHS) commitment in matched practices is carried out.
13. The programme looks into how a robust and independent view of the impact of the prototypes on practice profitability may be established and reported.
14. A form of weighting, that supports the objectives of ensuring equitable access for patients, fairly reflects the resource required to meet the needs of patients and will be capable of working as part of the new models of care should be explored and tested through the remuneration workstream of the programme.
15. The contract design and the supporting infrastructure, software and NHS BSA data should support transparency of information for providers and performers to improve the sustainability of dental practices and the practice workforce.
16. Robust economic analysis is undertaken to establish a more sophisticated understanding of the value for money being delivered by the prototype practices.
17. Work with practices and software companies is undertaken to improve the quality and completeness of the information on private treatment delivered by the prototypes.

1. Introduction

This is the third report produced as part of the DCR Programme and is a development of the mid-year findings presented to the Programme Board and the prototype practices in January 2017. It has been developed to provide a general overview of the prototyping programme over the first year. Along with the Data Annex, it is intended to assist the NSG for DCR and the DCR Programme Board in their consideration of the next stage of the programme. The numbers in green in the text are references to figures in the Data Annex. Some of the figures have been reproduced within the body of the report for ease of reading, please note that the figure numbers will not be sequential.

The current prototype contract models started in spring 2016, and this report uses a full year's worth of data from the prototype practices for 2016/17. The report also references the period from the start of the programme in April 2011 until the present, to allow comparison with pilots which preceded the current prototype phase.

The objective of the Dental Contract Reform Programme continues to be to maintain or improve access, quality and appropriateness of care and improve oral health, within the current cost envelope, in a way that is financially sustainable for dental practices, patients and commissioners.

This report focusses on five themes identified by the Evaluation Reference Group (ERG):

- Access and accessibility;
- Quality and appropriateness of care;
- Oral health;
- Sustainability for dental practices;
- Value for money.

The report reflects that the fact that the prototype practices are not a homogeneous group, being made up of those who were previous pilot practices (Waves 1 and 2), and those who entered the prototype programme from the current 2006 contract system (Wave 3). This distinction is important for a number of reasons. Firstly, the familiarity with the clinical pathway elements of the system for both dental teams and their patients is likely to lead to differences in the efficiency and acceptability of the clinical pathway. Secondly, the relationship between the numbers of patients expected to be cared for in the first year of prototyping and the number they were caring for at the start of the prototyping period is different in the two groups. Three quarters (74%) of Wave 1 and 2 practices had expected patient numbers to be delivered under

the contract in excess of those delivered in 2015/16. In contrast, all Wave 3 practices entering from the 2006 contract system into the prototypes had patient list numbers at, or slightly above, their expected 2016/17 year end numbers.

In addition, whilst all practices are delivering the same clinical pathway and philosophy, there are two groups of practices, each with a different payment structure. Both types combine payment for the number of patients on the practice list (capitation) and payment for certain treatments delivered (activity), but the difference is in the Blend of these. In both Blends capitation forms the majority of the value of the contract, in Blend A, around 60% and in Blend B, around 83%. Information is therefore presented separately for the different Waves and where statistically credible, for the different Blends.

Data for the report is drawn from a number of sources. This includes information sent to the NHS BSA using the same means as for the 2006 contract practices, and also specific additional operational and clinical information. A monthly survey is completed by practices, and two specific surveys to support evaluation were undertaken in December 2016 - January 2017 and in July 2017 - August 2017, once the year-end contract positions had been finalised. The response rate for the specific surveys is difficult to quantify, with an estimate of around 60% for Wave 1 and 2 practices and 40% for Wave 3. The responses also come from a mixture of practice staff and will include different survey respondents on the two occasions. However, the results do give an indication of the views of those who chose to express them.

A matched set of practices was identified in the 2006 contract system and where possible, comparisons between these have been made, along with comparisons to the 2006 contract system as a whole. Caution needs to be exercised on the generalisability of the results to the 2006 contract practice population for various reasons. The pilots and prototypes were all volunteers and therefore self–selected, 40% of the original pilots did not continue into the prototype phase and those who did were generally the better performers in the pilot phase, and because the Blends were not randomly assigned.

The data and findings were shared with the prototype practices at two sets of engagement events in January and September 2017 for review and comment. Additionally, practice members were given the opportunity to shape further analysis. The results of these analysis and question raised have been included in this report.

2. Findings: Access and Accessibility

Access

Access to NHS Primary Care services, including dental services, is a key component of the Five Year Forward View (FYFV) for the NHS. Maintaining or improving access to primary dental care is an important objective of the DCR programme as, without access, patients cannot benefit from the care and treatment that the dental team can provide. The current Government have recently restated their commitment to this in their manifesto[i] and in parliament -

"We will…support NHS Dentistry to improve coverage (access) and reform contracts so that we pay for better outcomes…"

NHS England has a statutory responsibility to exercise its powers so as to secure the provision of primary dental services throughout England to the extent that it considers necessary to meet all reasonable requirements. Access is therefore important for NHS Commissioners[ii].

Access, based on a 24-month window, is regularly reported for NHS dentistry provided under the current 2006 contract. However, there is no direct contractual lever associated with it because the contract currency is banded courses of treatment and not patients cared for. Access measured using 'patients seen in the last 24 months' at a 2006 contract practice contract level reveals considerable variation in access from year-to-year for a stable NHS commitment. The prototype contract introduces a direct contractual lever for access, by having payment associated with the maintenance of a capitation list. The capitation list in prototypes operates over a 36-month period.

Access is important for the prototype practices because the majority of their NHS contract income (60% in Blend A and 83% in Blend B) is related to the number of patients accessing the practice, as measured by their capitated list.

In this report, access has been described using two methods:-

- The number of patients on the practice capitation list, which is based on patients seen by the practice in the previous 36 months, and who have not moved to another practice during that time.
- The number of patients seen at the practice in the last 24 months. This is the standard measure of access in 2006 contract practices for adults (12 month for children), as reported by NHS Digital. In this report, 24 months has been used for combined adults and children as the access measure.

As explained in the introduction, it is important to look at the results for Wave 1 and Wave 2 practices separately from Wave 3.

Wave 3 Practices

Wave 3 practices which became prototypes directly from the current 2006 contract in spring 2016 provide a more realistic model of what might happen if the prototype contract is scaled. This is because Wave 1 and 2 have been involved from the very early stages of piloting and having lost access during the early period, they have generally been required to increase patient numbers in 2016/17.

Wave 3 practices had no capitation element to their contract prior to entering prototyping, but based on their historic data, an expected number of capitation patients for 2016/17 was set out in their contracts. As a group, these practices started the year with 102% of their expected capitated numbers.

- Access for Wave 3 practices as measured by the practice's capitation list has remained above the expected numbers set in the contracts. Figure 1
- At year end of the first year of prototyping, the Blend A practices had maintained access at 102% and the Blend B sites had dropped to 101%. Figure 1

Because of the small number of practices, and the small changes involved, it is not possible to draw any conclusions about the Blends.

Although there has been a small drop in capitated patients over the year, Wave 3 practices have maintained their capitation levels above those expected in the contract. This is in part due to practices taking on additional patients prior to entry into the prototype programme, in the expectation that there would be some loss of patients as the practices transitioned to the new system. As capitation is measured based on attendance in the last three years, the indicator responds slowly to changes which may be happening now. It is important therefore to monitor this figure closely going forward.

In setting the expected capitation numbers for the prototypes, a reference year was used to inform the calculations. This reference year is referred to as the "baseline". The baseline year for the Wave 3 practices was 2014/15. Using the patients seen in the last 24 month method, comparisons for the prototype year with the baseline year can be made, along with comparisons with the standard 2006 contract over the same period.

- At the end of the first year of prototyping, access for Wave 3 practices as measured by patients seen in the last 24 months has dropped to 97% of the baseline. Figure 2
- This compares with no change in matched 2006 contracts over the same period. Figure 2

This was not unexpected as during the earlier pilot phase of the programme, it was observed that as practices moved from the standard 2006 contract system into the pilot arrangements, their patient numbers decreased. There has been speculation that this is due to the change to a standardised clinical pathway involving a more comprehensive oral health assessment, and a stronger focus on delivering prevention. It was therefore expected that there would be a reduction in the capitation list of the prototype practices, but a hope that this would be less than in previous Waves, and that it would recover.

- Although there has been a slight drop which was expected in the first year (four percentage points), the rate of reduction at transition has been much less than at the start of Wave 1 (ten percentage points) and Wave 2 (eight percentage points). Figure 2

Due to the small numbers and the variability of the practices it is not possible to determine any significant difference between Blend A and Blend B.

The initial loss in access has been observed in all 3 Waves of the programme, albeit less severely in the Wave 3 practices. As discussed above, this is most likely due to the transition to the new clinical pathway, and it is known from our survey data that practices struggle to find appointment time to accommodate the preventive elements of the pathway, whilst keeping up with their recall of patients. This is an issue for the public in terms of getting appointments and for the practices in terms of maintaining their capitation list.

Currently practices introduce the new clinical pathway for all patients on the first occasion that the patient returns for a check-up with the practice. To minimise the impact of this and to maintain patient access at the transition period, a phased approach to the introduction of the pathway for the practice population could be introduced.

Recommendation 1

Consideration is given to extending the period over which patients are transitioned from the 2006 contract to the new clinical pathway approach.

Wave 1 and Wave 2 practices (previously pilots)

During the pilot phase, the Wave 1 and Wave 2 practices lost access in the first few years as there was a focus on embedding and delivering the clinical pathway, with no commissioning pressure on access. In Year 4 for the Wave 1 practices and Year 3 for the Wave 2 practices, access began to recover. At the start of the prototype phase, a number of practices left the programme and the denominator for the groups changed, and this can be seen by the break and resetting of the percentage access values in Figure 2.

Despite this recovery, on entering the prototype phase, the Wave 1 and 2 practices generally had less capitated patients than the expected numbers set in the contract.

- Access as measured by the practice capitated patient lists, increased in Wave 1 and 2 practices, but remained below the expected capitated numbers set in the contracts. Figure 1

During the first year of prototyping -

- Wave 1, Blend A practices increased their access from 89% to 94% of expected capitated numbers and the Blend B sites from 92% to 98%. Figure 1

- Wave 2, Blend A practices increased their access from 93% to 97% of expected capitated numbers and the Blend B sites from 92% to 99%. Figure 1

The increase in access observed in 2016/17 towards their expected capitated numbers is because these practices generally entered the prototype phase having lost access during the piloting phase and with numbers of capitated patients less than they had when they first began the previous piloting programme. An expected number of capitated patients were set in the contract for each practice which generally required the practices to increase the number of patients on their capitation lists. This is a situation which is unique to the transition from piloting to prototyping, and is not something that would be expected to occur in a transition from current 2006 contract to a prototype-like model. As discussed above, a more appropriate test of any future transition on access relates to the Wave 3 practices.

Access as measured by patients seen in the last 24 months also shows an increase in Waves 1 and 2 prototypes, although access levels are still less than the levels in the baseline years preceding entry to piloting for these practices Figure 2. The baseline years for the Wave 1 and 2 practices were 2010/11 and 2012/13 respectively.

- During the first year of prototyping, access for Wave 1 practices as measured by patients seen in the last 24 months increased from 85% to 88% of the baseline. Figure 2
- During the first year of prototyping, access for Wave 2 practices as measured by patients seen in the last 24 months increased from 89% to 95% of the baseline. Figure 2
- During the same period, in all 2006 contracts, patients seen in the last 24 months remained static at 101% of the baseline. Figure 2
- During the same period, in matched 2006 contracts, access increased from 101% to 103% for Wave 1 and stayed constant at 103% for Wave 2. Figure 2

Maintaining or increasing access is complicated, in that patients are removed from the capitation list if they have not been seen for three years. Reasons for this vary, but there is a need for the practice to continue to accept new patients. Additionally, patients have dropped off and practices struggle to replace them during the transition phase for Wave 3 practices or recovery phase for Wave 1 and 2 practices.

Reasons for not being able to take on new patients may relate either to supply side issues - a change in the practice's approach, for example a lack of capacity in the practice due to staffing issues, or time pressures introduced by the changed clinical pathway, or demand side issues - a limited pool of patients requesting NHS dentistry in the area, or competition from other practices. Supply side issues are discussed further in the sustainability section, but it is important to recognise the interplay of these factors on access and the ability of practices to meet their capitated numbers in the contract.

Recommendation 2

Consideration is given to managing any future transition in areas where supply is greater than patient demand.

When discussing these results at the engagement events, the following comment was made:

"The length of capitated period should be looked at. Is 3 years right?"

We know from analysis by the NHS BSA that over many years and under a number of different contractual models, data shows that around 50% of the population attend an NHS dental practice on a regular basis for check-ups, and that the remaining percentage attend as and when they feel they need to, often when they are experiencing dental problems. Both of these groups need access and there may be some merit in looking to measure access or coverage in a different way. Extending the period over which the capitation list operates would provide a more complete measure of the number of people receiving NHS care in the way that they wish. Feedback from the profession has suggested it may also help practices manage their contract more effectively. This may or may not be the case, and requires further exploration.

Recommendation 3

The length of the capitation period used in the prototypes is explored more fully.

Figure 1 – Percentage of capitated patients by Blend and wave, relative to expected 2016/17 capitated numbers

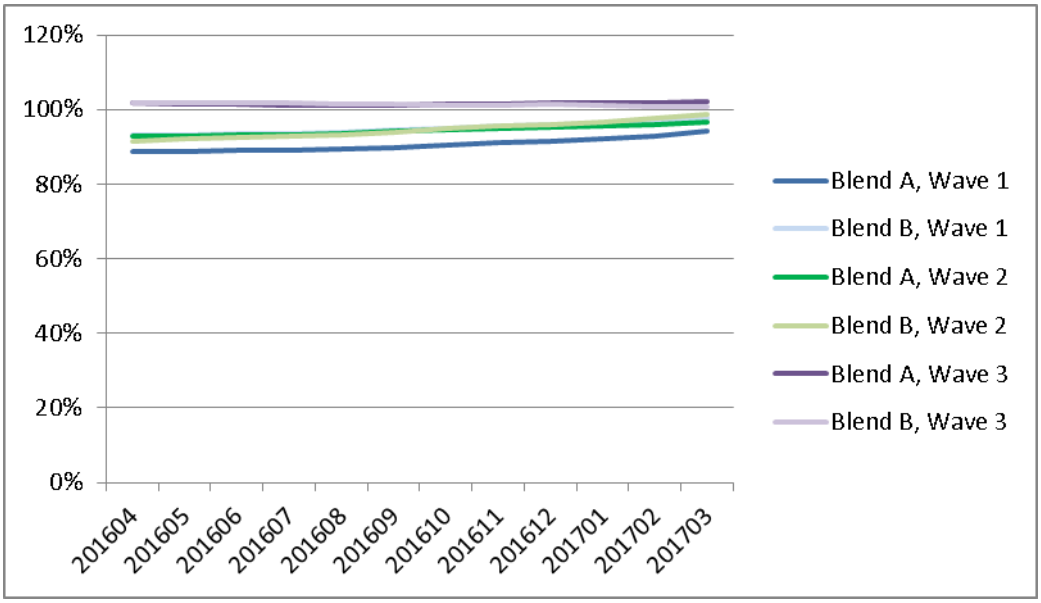
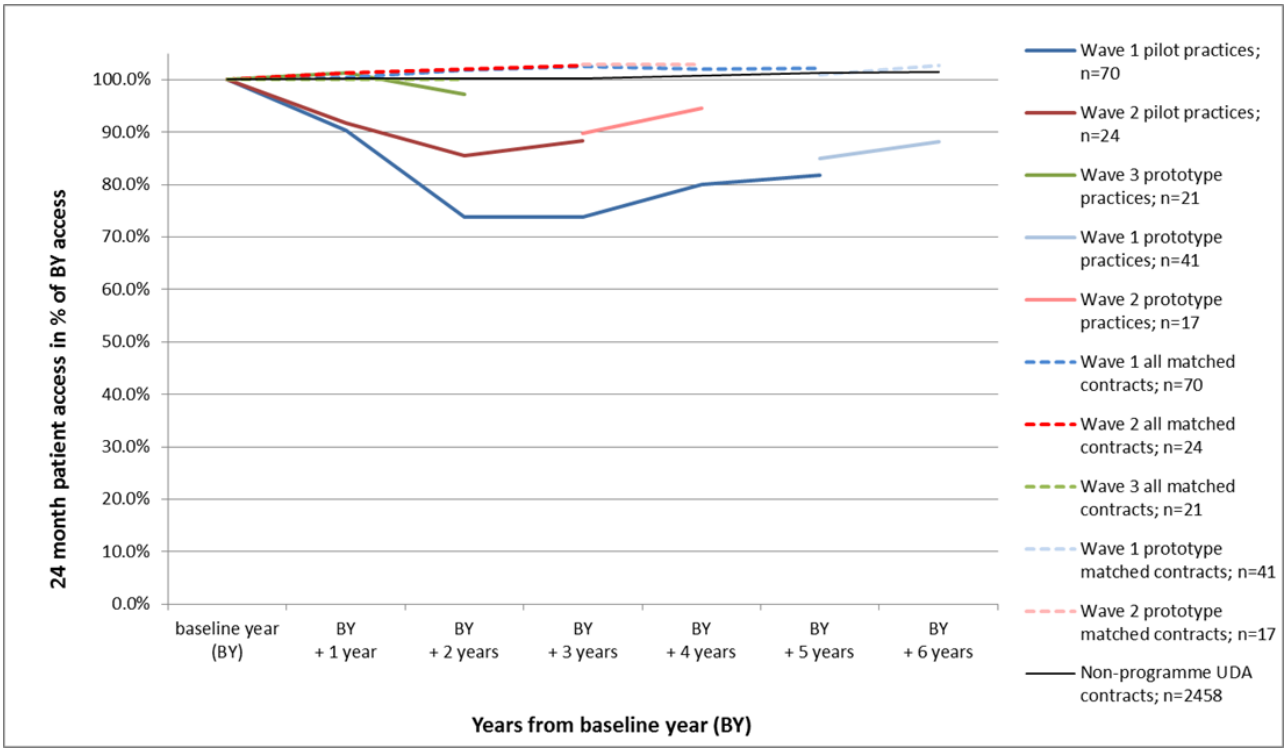


Figure 2 – Median 24-month patient access as a percentage of the baseline year access



Accessibility

Accessibility is the ability of patients to get an appointment that meets their needs within a reasonable period of time, in relation to their clinical need. This aspect is measured in two ways within the programme. Firstly from the practice perspective, where the monthly survey of practices asks how long the period is until the third next available appointment for an oral health assessment or review (check-up).

- For Wave 1 and 2 practices, waiting times have reduced by a small margin over the last year, although Wave 2 practices have longer waiting times than Wave 1. Figure 3
- The median time to the third next available appointment over 2016/17 was 17 days for Wave 1 practices and 21 days for Wave 2 practices. Figure 3
- For Wave 3 practices the waiting times have gradually increased throughout their first year, fluctuating month-to-month from 11 days to 23, with a median of 16 days in 2016/17. Figure 3

This is not an unexpected finding. It has been observed previously and is a frequent comment at engagement events as patients move from the traditional clinical model to the new preventively focussed pathway model. The impact of this on practices is discussed in the sustainability section.

The second measure is from a patient perspective, and whilst this is to some degree subjective, patients are asked for their views via the NHS Dental Experience Survey, run by the NHS BSA. This contains the same questions as used in 2006 contract practices (although the sample rate for the prototypes is higher here).

The NHS Dental Services Patient Survey showed that:

- 90% of patients in prototypes felt *"The time it took to get an appointment was as soon as necessary"* compared with 91% in the 2006 contract system. Figure 4

3. Findings: Quality and appropriateness of care

Quality

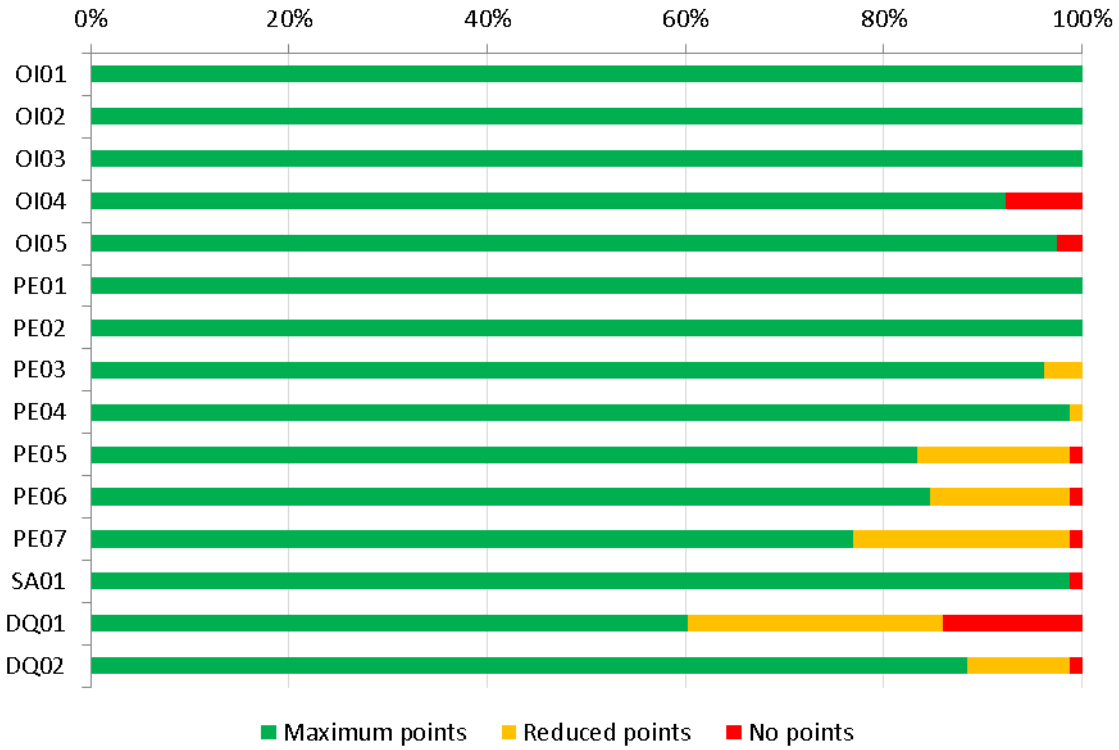
A Dental Quality and Outcomes Framework (DQOF) has been defined and developed over the course of the DCR Programme. It has 15 indicators across four domains; Clinical Effectiveness, Patient Experience, Patient Safety and Data Quality (see Annex 1).

The detailed data from the DQOF have been included in the appropriate sections of this report, however, in summary -

- 89% of prototype practices met all the Clinical Effectiveness outcome indicator thresholds Figure 5;
- 99% of prototype practices met the Patient Safety indicator threshold Figure 5;
- 65% of prototype practices met all the indicator thresholds in the Patient Experience domain Figure 5;
- 51% of prototype practices met both the indicator thresholds in the Data Quality domain Figure 5.

The majority of practices are achieving the threshold levels in all of the domains and the summary above hides the fact that 100% of practices met some of the individual indicators, for example outcome indicators OI01, OI02 and OI03 and patient experience indicators PE01 and PE02.

Figure 5 - Achievement against the DQOF indicators- All prototypes 2016/17



Although it was originally intended that 10% of the contract value would be based on DQOF performance, it was agreed that for 2016/17 this would not be operationalised. A DQOF reference group, involving some prototype representatives amongst others, has been set up to consider how best this framework might be used to support continuous quality improvement.

Feedback from the engagement events suggests that balancing two measures - capitation and activity - is not easy and makes planning for contract delivery complex. It suggested the introduction of a further financially-related measure into the contract would add further complexity.

In 2017, individual reports were made available for each practice. Feedback from practices highlighted issues with presentational style, and this is currently being reviewed with the DQOF reference group.

The intention is to embed the reports in the prototype practice feedback and develop a road-map for bringing together the best aspects from the DQOF and those indicators used in current 2006 contract practices to provide a consistent and comparable framework, with the reference group also taking this forward.

Recommendation 4

The DQOF reference group continues to develop the DQOF and its use.

Patient experience is a key aspect of quality. Patient questionnaires are sent by the BSA to a sample of patients receiving NHS dental care. The results of the NHS Dental Experience Survey shows that -

- 97% of prototype patients were “quite” or “very satisfied” with NHS dentistry received in the prototype system compared with 96% in the 2006 contract system.

The DQOF includes patient experience indicators and these show high levels of satisfaction with the prototype practices -

- 98% reported they were able to speak and eat comfortably. Figure 6
- 97% were satisfied with the cleanliness of the practice. Figure 6
- 98% were satisfied with the helpfulness of the practice staff. Figure 6
- 97% felt sufficiently involved in decisions about their care. Figure 6
- 97% would recommend the dental practice to a friend. Figure 6
- 97% were satisfied with the NHS dentistry received. Figure 6
- 89% were satisfied with the time to get an appointment. Figure 6

Appropriateness of care

The DCR Programme has from its inception been more specific than the current 2006 contract in relation to setting out processes to assure the quality and appropriateness of care. This was in response to Jimmy Steele's Independent Review of NHS Dentistry in 2009[iii] which highlighted the variability in the NHS services offered to patients and suggested that:-

"NHS primary care dentistry provision should be commissioned and delivered around a staged pathway through care".

The DCR programme sets out a clinical care pathway focussed on ensuring patients receive a comprehensive oral health assessment, appropriate evidence-based prevention advice and treatment, and a planned review period based on clinical risk.

Not all patients are expected to follow the clinical pathway and receive a complete oral health assessment, for example patients attending only for emergency care, or on referral from another practice. Recognising this however, the vast majority of patients received this element of the clinical pathway -

- In all prototypes, 87% of adults and 86% of children had received an oral health assessment or review. Figure 7
- In Wave 1, 87% of adults and 85% of children had received an oral health assessment or review. Figure 7
- In Wave 2, 81% of adults and 81% of children had received an oral health assessment or review. Figure 7
- In Wave 3, 94% of adults and 95% of children had received an oral health assessment or review. Figure 7
- In all prototypes, 99% of prototypes met the DQOF standard for recording an up to date medical history, taken at assessment or review. Figure 5

After undertaking a comprehensive oral health assessment, including identifying the patient's risks for oral disease, the pathway and the prototype software supports practices to work with patients on personalised prevention. This approach is very much in line with the focus on prevention and self-care in the NHS Five Year Forward View. The evidence base for this prevention is "Delivering Better Oral Health- an evidence based toolkit for prevention".[iv]

Data from routine reporting shows that -

- The percentage of FP17s for adults reporting the delivery of best practice prevention is 62% in prototype practices, compared with 56% in 2006 contract practices. Figure 8
- For children, these percentages are 60% and 58% respectively. Figure 8
- For adults, a greater proportion of courses of treatment in the prototypes include the application of fluoride varnish compared with 2006 contract practices (4% compared to 3%). Figure 8

The opposite is true for children -

- Only 28% of courses of treatment in children show fluoride varnish was applied in the prototypes compared with 41% in the 2006 contract system. Figure 8

This is a surprising finding and further work to investigate the causes needs to be undertaken.

Previous reports during the pilot phase have shown that patients liked the preventive aspects of the clinical pathway, reporting a better understanding of what to do and that they had changed their oral hygiene behaviour[v].

At the engagement events, concern was expressed that the introduction of activity measures and the need to increase the number of patients on the capitated list for some practices may have shifted the focus away from the objective of supporting patients to take responsibility for their own prevention on a daily basis.

Recommendation 5

A patient survey is carried out to determine the impact of the prevention advice on patients' oral health behaviour.

The final part of the clinical pathway relates to planning an appropriate time for review of the patient's oral health. Over the years a culture of recalling patients at 6-monthly intervals for dental check-ups has developed. Many patients and dentists are comfortable with this approach. However, the NICE published guidelines on recommended recall intervals in 2004[vi]. The Guidelines suggest that oral health reviews should be related to patient risk, and range from three months to a maximum of 24 months. The guidelines were incorporated into the clinical pathway being used in the original DCR pilots and now the prototypes. Analysis of planned times for oral health reviews show that:

- There is a broad correlation between the clinical risk of the patient and the time planned for review as set out in NICE guidelines, with the exception of the two-year review for low risk patients. Figures 9 and 10

Figure 9 – Adult planned recall times

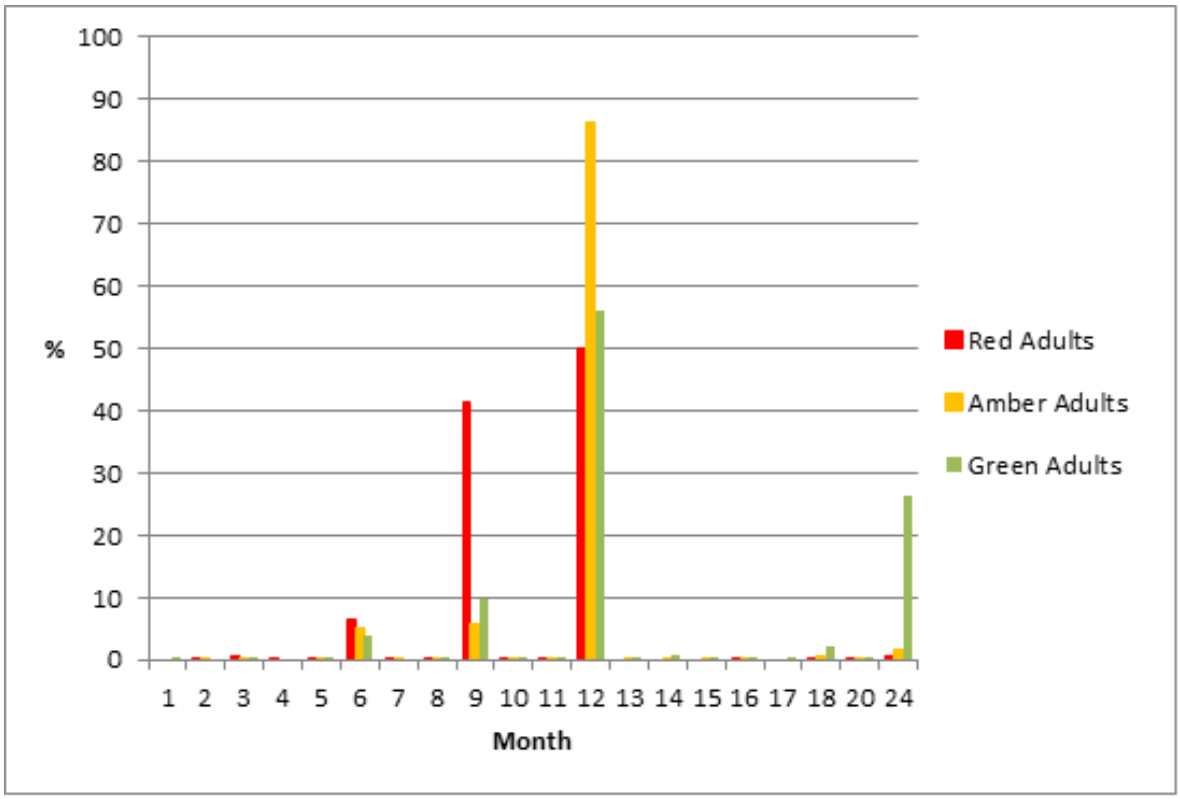
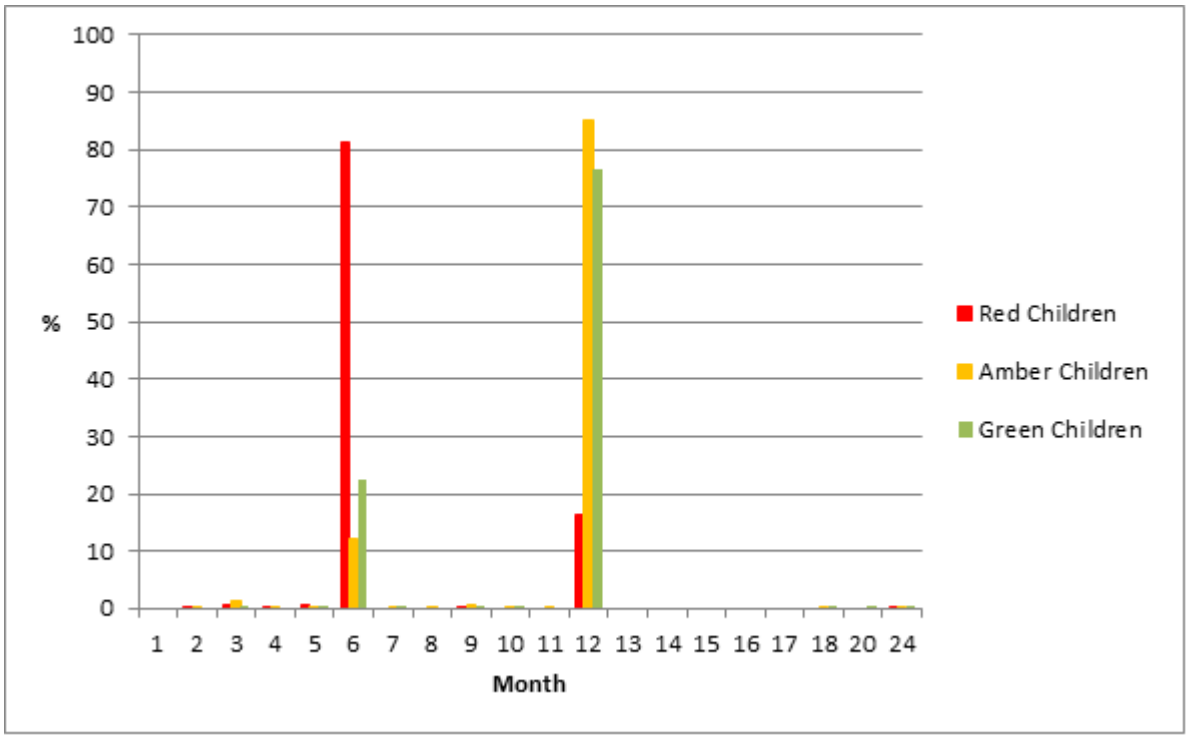


Figure 10 – Child planned recall times



Whilst data on the use of NICE guidelines to set recall intervals according to risk is encouraging, further work needs to be done to explore both the patient and professional issues associated particularly with the longest recall intervals for low risk patients. This is important in terms of the

overall capacity potentially available to maintain or improve access and to enable practices to manage their workload.

Recommendation 6

A detailed piece of work is undertaken to understand the reasons and rationale from patient and professional perspectives for the approach to implementing the longest recall periods recommended by NICE.

One of the concerns about the introduction of a care pathway was that it would compromise clinicians' clinical freedom, and this was expressed in the early stages of the piloting process. Two surveys of clinical staff during the prototype phase have shown that the majority of those who responded feel that they “have flexibility to use clinical judgement”. Figures 11 and 12

4. Findings: Oral Health

Improving oral health and rebalancing the focus of dental care towards oral health, rather than the delivery of restorative care, was a key principle of the Independent Review of Dentistry in 2009.

"Just as health is the desired outcome of the rest of the NHS, so health should now be the desired outcome for NHS dentistry."

In the section on Quality, we have outlined the high level of delivery of the clinical care pathway: the process, but in terms of outcomes, there are other measures to look at. The clinical pathway records data at each oral health assessment or review, and feeds into the clinical domain of the DQOF, when at least one assessment and review have taken place.

The DQOF data shows that across the prototype practices:

- Overall more than 90% of children and adults had maintained or reduced the number of teeth with dental decay between OHA and OHR. Figure 13
- Overall more than 80% of adults had maintained or improved their level of periodontal health (when measured using the Basic Periodontal Examination (BPE) and the number of sextant bleeding sites) between OHA and OHR. Figure 13

It is also possible to track the risk level which has been assigned to the patient both generally and for each of the individual clinical domains. This has been done for a group of patients from Wave 1 and Wave 2 practices for patients who had an oral health assessment between January and June 2014 and where an OHA/OHR has taken place on at least one other occasion. These patients (approximately 137,000) have been followed through piloting and prototyping until March 2017.

The Wave 3 practices have not been included, as only high risk patients would likely have had an assessment and review within the first year.

Wave 1 and Wave 2 practices

Not all patients who had an initial OHA, including risks identified, returned to have a further one during the period:

- 20% adults and 18% children did not return for a subsequent OHR.

Overall risk

Of the adults who did return, there has been a slight increase in the proportion with an overall green risk status, a slight decrease in the proportion rated as amber and no change in the proportion of red patients. This pattern is the opposite for children; there is an increase in the proportion of children rated amber overall and a decrease in children rated green overall.

Of those having more than one oral health review:

The proportion of adults with an overall green risk increased from 15% to 16% Figure 14

The proportion of adults with an overall red risk stayed the same at 20% Figure 14

The proportion of children with a green risk decreased from 43% to 39% Figure 15

The proportion of children with an amber risk increased from 29% to 34% Figure 15

Figure 14 – Overall RAG rating over time for adults for Wave 1 and 2 practices

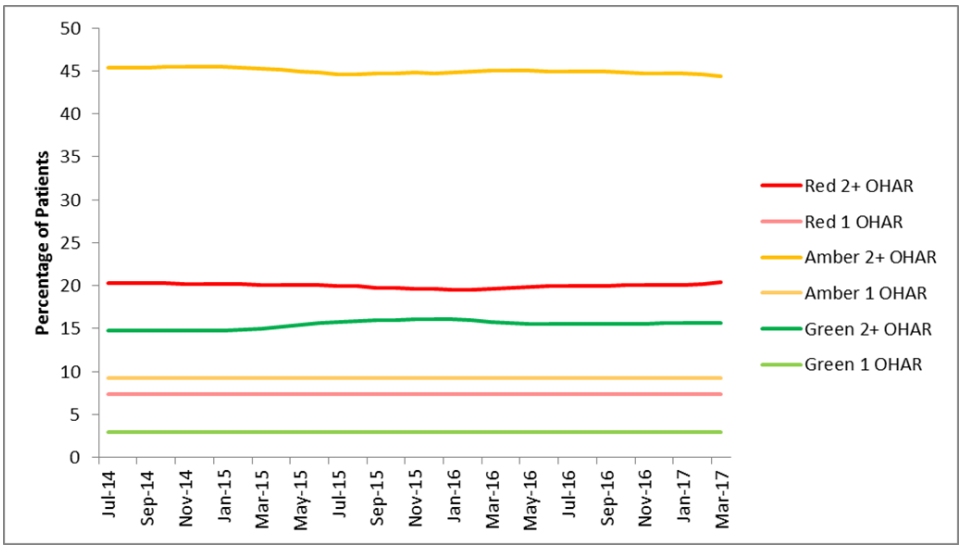
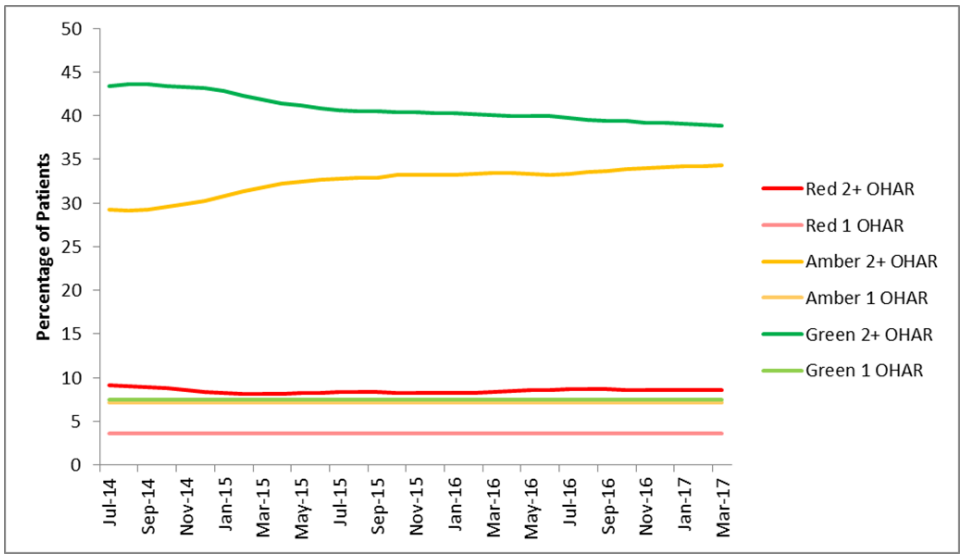


Figure 15 – Overall RAG rating for children for Wave 1 and 2 practices



The reduction in the proportion of children with a green risk is not unexpected given that they start with mouths free of disease. Although this pathway focusses on prevention, some will develop active disease resulting in a red risk status, and some will, because of other risk factors including a high sugar diet which develops as they grow older, become amber rated.

The overall risk rating is made up of four separate risk assessments and the results for the two most common diseases - caries (dental decay) and periodontal disease (gum disease) - are presented below:

Caries risk

- Of the adults returning for a subsequent OHR, the proportion of green risk rated patients increased between 2014 and 2017, while the proportion of amber and red risk rated patients decreased. Figure 16
- Of the children returning for subsequent OHR, the proportion receiving a green risk rating decreased and those with an amber risk rating increased, for caries between 2014 and 2017. Figure 17

Periodontal risk

- For adults, there was a slight decrease in the proportion with amber periodontal risk rating and an increase in the proportion of those with red risk rating. Figure 18
- For children, there was an increase in the proportion with a green periodontal risk rating in the first few years, but a reduction from late 2016 onwards. Figure 19

The reduction in green periodontal ratings for children seems to coincide with an increase in missing ratings. The reasons for this require further investigation.

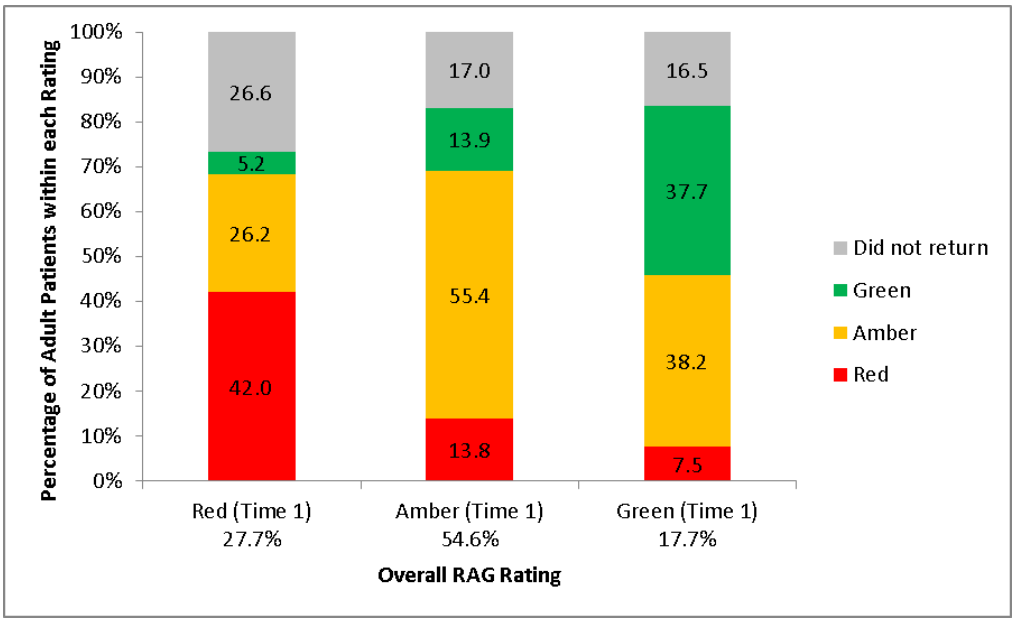
The results above show how the risk within the practice population who have returned for OHRs has changed. However, it is also important to follow through individual patients to see how their personal status has changed over time. From an individual perspective, it shows how risk changed for those patients who were initially considered to have high (red) medium (amber) or low (green) risk.

Change in overall RAG rating from January and June 2014 to most recent OHA/OHR over three years shows: Figure 20

For Adults

- Of those given a red risk rating at their first assessment, 5% were green, 26% were amber and 42% were still red at the most recent review (27% were lost to follow up). Figure 20
- Of those given an amber risk rating at their first assessment, 14% were green, 55% were still amber and 14% were red at the most recent review (17% were lost to follow up). Figure 20
- Of those given a green risk rating at their first assessment, 38% were still green, 38% were amber and 8% were red at the most recent review (16% were lost to follow up). Figure 20

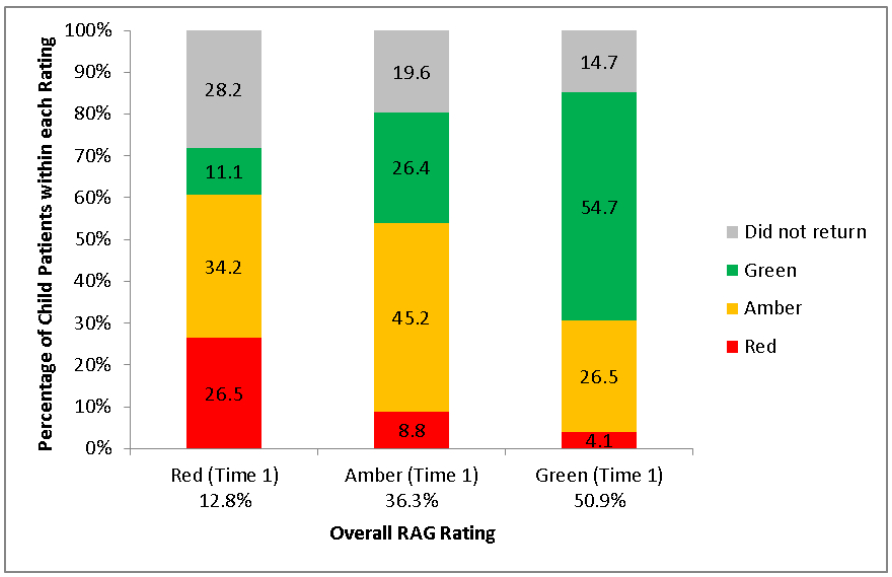
Figure 20 - Change in risk for individual adult patients followed through from 2014 in Wave 1 and 2 practices



For children

- Of those given a red risk rating at their first assessment, 11% were green, 34% were amber and 26% were still red at the most recent review (28% were lost to follow up). Figure 21
- Of those given an amber risk rating at their first assessment, 26% were green, 45% were still amber and 9% were red at the most recent review (20% were lost to follow up). Figure 21
- Of those given a green risk rating at their first assessment, 55% were still green, 26% were amber and 4% were red at the most recent review (15% were lost to follow up). Figure 21

Figure 21 - Change in risk for individual child patients followed through from 2014 in Wave 1 and 2 practices



In the wider system, practices and dentists may be implementing various forms of risk assessment but there is no consistent approach and no collection of this information. This means that it is not possible to compare these risk changes with the current 2006 contract system.

As well as guiding clinical prevention and treatment decisions for the clinician, the risk status is used as part of the communication with patients to help motivate change in their personal oral health preventive behaviours.

Feedback from the engagement events suggested that for this purpose:

"RAG status is too broad. An incremental stepped measure would be a better way to motivate patients e.g. 'amber' or 'amber ([score of] 30)'."

The inclusion of a score (as suggested in the feedback above) rather than just a colour may be one way of doing this. However, the National Institute for Health Research (NIHR) Health Service and Delivery Research Programme has funded the PREFER trial[vii] which aims to determine the most effective methods of risk communication. It is important that the outcomes of this feed into the development of the DCR programme.

Recommendation 7

The outcomes of the PREFER trial should feed into the review and development of the risk communication aspects of the clinical pathway.

During the engagement events, there was considerable discussion about the impact of new patients. There was a feeling that they were generally at higher risk of disease and therefore had a disproportionate impact in terms of time and resource when replacing patients who had dropped off the capitation list. Analysis of new patients visiting prototype practices in 2016/17 showed some support for this, with around 40% of adult patients being assigned a red risk status. Patients with red risk ratings typically require a greater number of appointments and utilise more Units of Dental Activity (UDAs), meaning that they are likely to take up more practice resources while their oral health is being stabilised.

Although this section is about improvement in oral health, one of the summary comments made from the engagement events was a concern that:

"*Changes from Wave 1 pilot to prototype phase with a change in focus has diminished some of the gains being made."*

It is an important point which cannot be substantiated with data at this point, but reflects a professional concern, and perhaps a knowledge that the operational aspects of the delivery of the pathway have changed in the blended contract model.

Recommendation 8

The programme continues to monitor oral health at the practice population and individual level, and that specific work to quantify the preventive activity takes place.

5. Findings: Sustainability for dental practices

The reformed contract has to work for patients, the taxpayer, and importantly for the practices if there is to be a stable and sustainable NHS dental system. The oral health and quality aspects from a patient and public perspective have been discussed in previous sections. The value for money from a taxpayers' viewpoint follows in Section 6. This section is particularly concerned with the impact of the prototype contract on the practices, and those working within them.

Contract delivery

The measurement of delivery of the prototype contract is based on the achievement of the combined Blend of the number of capitated patients and the amount of activity delivered. The expected annual numbers for both of these measures are set out in the contract. There is an exchange mechanism in place to allow activity (clinical treatment) to be exchanged for additional patients where the volume of treatment set out in the contract is not clinically needed to service the existing patient list.

Like the current 2006 contract, practices are expected to deliver at least 96% of the contract. If they delivery less than this, there are financial penalties. While respecting the support from these volunteer practices and the potential risks involved, the penalties are limited to 10% of the contract value. Contract delivery between 100% and 102% may be paid for or carried forward into the following year's calculation.

As outlined in the introduction, the different Waves of practices had different journeys to make to achieve delivery of their contract. It is important therefore to look at the 3 Waves of practices separately. Figure 22

Figure 22 - Overall contract achievement for 2016/17 by prototype Wave

Overall achievement at year-end 2016/17				
Contract achievement	Percentage of practices			
	Wave 1	Wave 2	Wave 3	2006 contract
above 100%	34%	41%	48%	33%
96%-100%	34%	35%	29%	33%
90%-96%	7%	6%	14%	15%
below 90%	24%	18%	10%	19%

* NOTE: Due to rounding, totals may not sum to 100%

Although delivery of the contract in the first year is commensurate or better than delivery levels in 2006 contract practices, there is a need to recognise that the prototype practices were self-selecting and had previously performed well. Caution therefore needs to be exercised in generalising these results to the wider 2006 contract population.

As discussed in the introduction, the Wave 3 practices are most likely to show what might happen for any future practices moving to a reformed contract, however, they are small in number and are still in the transition phase.

Although contract Blend A and Blend B are equally represented in Wave 3, their selection was not random and the numbers in each group are too small to be able to make any conclusions on whether Blend A or Blend B works best to support practices achieving their contract.

In the prototypes, financial penalties are applied if contract performance at year end is less than 96%. At this point, the NHS recovers money from the practice which is often referred to by practices as "claw back". In the prototypes, this financial recovery by the NHS is limited to a maximum of 10% of the overall contract value.

- Of the three waves, the Wave 1 group of practices had the greatest proportion (31%) of practices who were below 96% and had financial penalties applied. This was followed by around a quarter of Wave 2 (24%), and Wave 3 (24%) practices having money clawed back. Figure 22

Considering whether Blend A or Blend B is related to greater or less achievement is difficult to determine for the whole group as each of the Waves is at a different stage in the prototyping programme. Wave 1 had the greatest amount of recovery to make from the pilot phase, followed closely by Wave 2. On the other hand, Wave 3 were adapting to the new prototype way of working. The results are therefore presented separately. Figure 22

Figure 23 - Proportion of practices achieving contract delivery of 96% or greater by Wave and Blend

	Blend A	Blend B
Wave 1	55%	78%
Wave 2	81%	67%
Wave 3	72%	80%

Feedback offered in the engagement events proposed that:

“High need areas where patients require more intervention are better with Blend B".

It is not possible with the numbers involved and the method of selection to make any clear recommendation based on the data about which of the two Blends works best and in what circumstances in this first year.

Recommendation 9

That further practices are recruited to the programme and randomly allocated to the Blends so as to provide a more robust evaluation of the Blends.

Although delivery of the contract in the first year is commensurate or better than delivery levels in 2006 contract practices, it must be recognised that for some this has not been easy to achieve,

"It is a difficult balancing act to be able to provide access to patients, provide necessary treatment and meet contract measures"

It is not possible to predict the exact volume of treatment required for the practice population and as explained above, additional patients may be exchanged for delivering less than the activity set out in the contract. In 2016/17, a total of 27 practices used this mechanism and achieved their contract. The term used for the activity set out in the contract is the 'Expected Minimum Activity' (EMA). This terminology may lead practices to see this as the minimum target number of UDAs that must be delivered, irrespective of the needs of the population. This is reflected in the following comment which implies practices, especially in Blend A, are "chasing" activity, even though capitation forms the majority of the contract value in both blends, and they can use the exchange mechanism:

"Blend B better suits delivering access as practices are not focused simply on activity."

Recommendation 10

The exchange mechanism is more widely promoted and consideration is given to renaming the 'Expected Minimum Activity' measure.

Practice views

A survey was sent out to practices at the interim evaluation stage (January 2017) to understand how they are responding to the prototype experience. This survey has been re-run in August

2017 after a full year of prototyping. Views were also gathered at engagement events in January and October 2017.

A regular theme at the engagement events was the pressure on time to deliver the clinical pathway and to meet contractual requirements.

- There was broad consensus through the survey responses that around 20 minutes is required for an OHA Figure 24 and 15 minutes for an OHR. Figure 25

After the oral health assessment or review, motivating patients to care for their teeth and mouths and helping them to understand why there is a focus on prevention was cited as something which demands time:-

"Expecting patients to take responsibility of their own oral health is extremely difficult and takes an awful lot of time and effort."

"It is crucial for patients to be informed and educated about the oral health benefits of the pathway approach in a national campaign."

Recommendation 11

When any reform of contracts takes place, public facing communication is developed and delivered by the local health system to support the scaling up.

Although the majority of contracts achieved over 95% of the combined delivery, many of the participants at the engagement events reported that they had achieved this by working extra hours and employing additional staff.

Data from the monthly survey on hours worked shows that additional hours have been reported during 2016/17, with seasonal fluctuation around autumn and year-end. Figure 26

Unfortunately there is no data on 2006 contract practices relating to hours worked for comparison, for any of the Waves including the 2011-2016 piloting years.

Recommendation 12

A well designed comparison in terms of NHS commitment in matched practices is carried out.

Practice costs and profitability

The programme does not gather information about the costs incurred, practice overheads, or the split between private and NHS care. However, increased costs were a common theme at the engagement events:

"Contract delivery at the end of 16-17 was achieved but at a substantial cost to practices."

"There has been no recognition for the increased costs borne by practices to deliver contract requirements."

"Put whichever figure you want but it is costing the practice more – all practices have put in more resources to deliver their contracts."

"Every practice has had to invest in additional resources to maintain access levels."

"Can questions be asked about whether profitability has changed worse or better- might help identify whether sustainable long term."

It is not possible to distinguish the relationship to the Waves in these comments. However, many Wave 1 and 2 practices were striving to increase their capitation list and to deliver activity greater than the previous year. At his time, Wave 3 practices were experiencing pressures of transition, as previously mentioned, and this needs to be taken very seriously.

Recommendation 13

The programme looks into how a robust and independent view of the impact of the prototypes on practice profitability may be established and reported.

Stress and managing

Practices were asked in the surveys how well they were managing in the prototype system. Generally practices are managing better in Wave 3 compared to Waves 1 and 2: Figures 27 and 28

- 91% of Wave 3 practices reported they were managing "well or very well" in August 2017 and no-one responded to say they were managing "poorly or very poorly". Figure 27

- In contrast 46% of Wave 1 and 2 practices reported they were managing "well or very well" in August 2017 and 38% "poorly or very poorly". Figure 28

Practices were asked how personal stress in the prototype programme compared to working in the 2006 contract system:

- Almost 50% of respondents in Waves 1 and 2 said that personal stress was much worse. Figure 29
- In contrast 55% of respondents from Wave 3 said that personal stress was much better (an increase from 22% in January). Figure 30

Practice stress shows a similar pattern to personal stress with:

- Almost 50% of respondents from Wave 1 and 2 in August 2017 reported practice stress was much worse. Figure 31
- Just over 40% of Wave 3 respondents reported practice stress was much better. In August 2017, no-one from Wave 3 reported practice stress to be much worse, a drop from 22% in January 2017. Figure 32

The responses to personal and practice stress show an almost mirror image between the Wave 3 practices and the Wave 1 and 2 practices. From discussion at the engagement events, this is likely to reflect the additional challenge faced by Wave 1 and 2 practices in increasing their patient numbers and activity. It is also possible that these practices are comparing their current situation in the prototypes with their experience in the pilots, rather than in the 2006 contract system, which for some was four or more years previously. The Wave 3 practices on the other hand have more recent experience of the 2006 contract system and encouragingly show a trend towards the "much better" responses in the second survey, when they had more experience of the prototype system.

Staffing

At the engagement events, some practices were concerned about the impact of the prototype contract on staffing and recruitment, suggesting that the stress and the unfamiliarity with the contract measures lead to problems with recruitment and retention. Information from NHS local offices highlights that in certain areas there is a wider problem with practices sourcing dentists.

It has been recognised since the early reports on the programme that much of the preventive work associated with the clinical pathway and the simpler treatment elements could be delivered by a range of members of the dental team.

The survey results suggest that:

- Overall, the majority of respondents thought that skill mix change would be an advantage under the new system. Figures 33 and 34

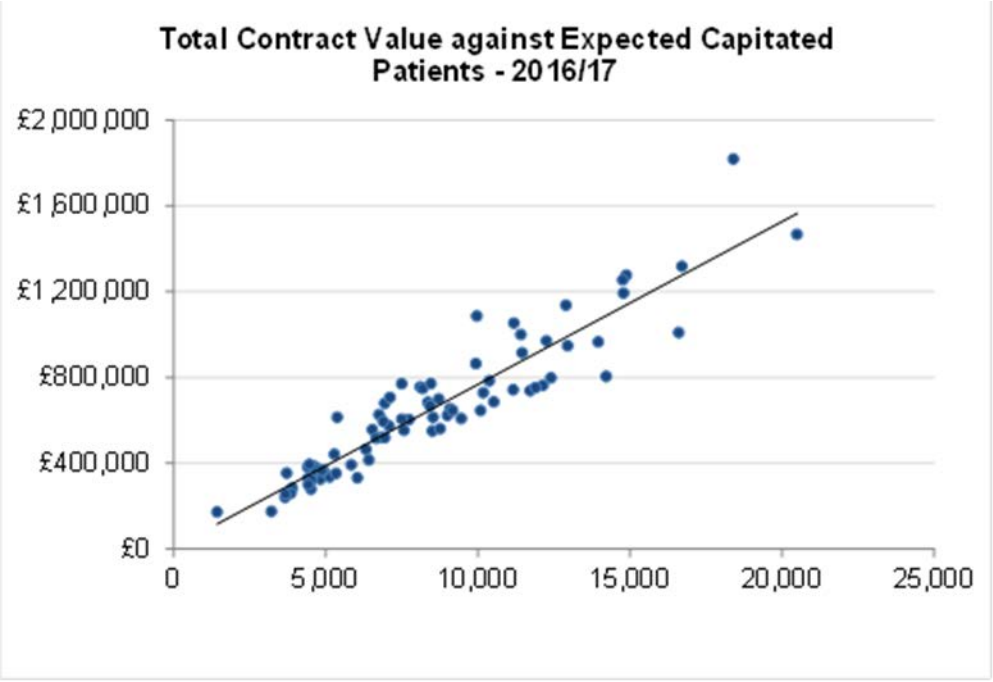
However, respondents were mixed in their feelings about whether skill mix had changed to deliver the clinical pathway approach. In Wave 1 and 2 practices, there was a consistent majority agreement over the two surveys that skill mix had changed. Figure 35

In contrast, in the Wave 3 practice group there seems to have been a swing from agreeing that skill mix had changed in January 2017 to disagreeing in August 2017. Given the small number of responses involved, it is possible this is due to different practices responding in January and August. Figure 36

Inequity

To provide stability as practices entered each of the Waves of the DCR programme, the contract value was maintained as it had been in 2006 contract and the patient numbers based on a baseline year prior to entry. The activity to be delivered was based on the baseline year, less 20% in Band 2 courses of treatment and 30% in Band 3 courses of treatment, to allow more time for prevention and to take account of potential improvements in oral health. Whilst that seems fair, it pre-supposes that the historic values in some way relate to the needs of the practice population. This is not necessarily the case and is a function of the conversions that were done at the introduction of the 2006 contract - a key reason for this reform programme. It is also entirely probable that some practice populations will have changed over that time and that the contract values are either low or generous to meet the needs of the current population. There is considerable variation across the prototype practices in the amount of money in the contract per patient expected to be on the capitation list. Figure 37

Figure 37 – Total contract value against expected capitated patients, 2016/17



Concern about this was expressed at the engagement events and suggestions made:

"Will consideration be given to establish a common £ per patient or UDA or both, across the country."

It is important that the resource a practice has is adequate to meet the needs of its population, or put another way that the number of patients the practice is being asked to care for in a fixed contract value is sensibly related to those patients' needs. During the previous pilot phase, a weighted capitation system was modelled based on proxy measures that have a relationship to oral health status and thus patient need and practice resource requirements. There is no weighting for capitation in the prototypes. The introduction some form of weighting, either in the capitation element (which makes up the majority of the contract value, and is a clear driver for access), or in the activity component. To an extent this already exists through the UDA measure. However, it impacts on a smaller proportion of the contract value and only has two levels in the Blend A model and is a single value in Blend B. This issue was discussed at the engagement events

"Need a sensitive weighted capitation system to make this work."

This is important, not only for the practices, but also to ensure equity of access for patients. Concern has been expressed that there is no incentive in the current prototypes to take on high needs patients, and this is important:

"We feel that the current system does not support care to high needs patients."

"Not cost effective to treat high need perio patients without greater funding."

The current transformation of the NHS as set out in the FYFV[viii] is increasingly focussing on delivering services for local populations in an integrated way, using pooled budgets and capitated arrangements particularly in primary care. NHS dental services are an important part of the primary care offer and a reformed contract needs to work in the models of care which are developing.

Recommendation 14

A form of weighting, that supports the objectives of ensuring equitable access for patients, fairly reflects the resource required to meet the needs of patients and will be capable of working as part of the new models of care should be explored and tested through the remuneration workstream of the programme.

Practice management and efficiency

Learning from the engagement events and from the experience of the programme support team have identified that there are some common themes to the management of practice in those that are doing well:

"The profession needs to be fully aware of the prototype system at the start and good quality management is key to delivering contract measures."

Strong leadership in the practice and an inclusive approach to the overall aims of the service to be delivered and the collective responsibility to deliver the contract are important:

"The whole clinical team need to understand how the contract value is achieved."

"It is imperative that the whole team understand the system if contract measures are to be achieved?"

Since 2006, there have been two levels of transaction at play within the dental contract system - that between the NHS and the practice owner/s (providers) through the NHS dental contract, and that within the practice or business between the provider and the dentists who work there (the performers). Whilst this relationship is a matter for the Provider to determine, this is an area that has caused considerable discussion in the engagement events with both problems and solutions expressed:

"Associate remuneration and contract monitoring is extremely difficult."

"Effective and efficient management of time is essential with individual performer expectations agreed."

Although the arrangements between providers and performers are primarily the business of the providers, certain NHS benefits accrue to performers and the sustainability of any arrangements is vital to the delivery of NHS dental care, and to the success of the contract reform process. There are clearly enabling elements, for example accurate and timely data by performer which will support providers and performers to deliver better care and run more efficient businesses. It is important that the broader structures and processes of the reformed contract support a sustainable workforce.

Recommendation 15

The contract design and the supporting infrastructure, software and NHS BSA data should support transparency of information for providers

and performers to improve the sustainability of dental practices and the practice workforce.

Practices are still reporting inefficiencies in the way that the prototype software supports their delivery. In any major scaling up, consideration needs to be given to the engagement of the software supplier market and to the developments which are already happening around the introduction of SNOMED CT[ix] coding.

With regard to internal practice management, opportunities to encourage software companies and prototypes to use some of the business efficiency solutions with the prototypes should be explored.

6. Findings: Value for Money

Currently 21% of the Primary Care spend is on Dental Services. The role of this evaluation is not to evaluate the overall spend on NHS dentistry, but to consider the value received for the money spent within the prototype arrangements.

Measuring value is complex and may range in its sophistication from simple short-term measures, such as £ per patient seen per year, through to outcomes achieved and benefits accrued to patients using health economics concepts which estimate the monetary value of benefits expected over much longer terms.

With regard to a more sophisticated approach, the long-term value of the preventive pathway in managing our increasing elderly, frail and dentate population, and in preventing our young children from developing oral health problems, needs to be understood and set against the costs.

There have been numerous policy documents in recent years emphasising the need for a greater focus on prevention. Starting with an economic view by the treasury in 2002[x] and culminating in the current FYFV. The preventive focus of the clinical pathway is evidence-based and, if implemented, may well produce benefits. Public Health England (PHE) has recently established the return on investment expected from a range of dental preventive measures. For example, the use of fluoride varnish to prevent dental decay is a key part of the clinical pathway in the prototypes and PHE estimate a return of £2.74 for every £1 spent after 10 years.

At an individual level, better patient experience and better clinical experience for the dental team have value too, but at the moment it is not possible to put a monetary value on them. A NIHR study, the Raindrop Study[xi], at Newcastle University has begun to explore the value that patients put on their oral care and it would make sense to include this learning in future.

At this point in the prototype phase, where Wave 1 and 2 practices are in an access recovery stage, and where Wave 3 practices are going through the transition stage, there is insufficient data to undertake an analysis of the “steady state” position.

Recommendation 16

Robust economic analysis is undertaken to establish a comprehensive understanding of the value for money being delivered by the prototype practices.

As independent businesses that contract with the NHS, practices may have a combination of patients who they see privately, and patients who they see on the NHS. The regulations also allow for the provision of private care within an NHS course of treatment. In a contract model,

where the capitated list provides the bulk of the contract income the extent of that mixing of care needs to be understood. Prototypes agreed to provide that information during 2016/17. However, the quality and volume provided is not sufficient to undertake analysis and guide the programme how best to deal with this issue.

Recommendation 17

Work with practices and software companies is undertaken to improve the quality and completeness of the information on private treatment delivered by the prototypes.

7. Conclusions

Given the analysis of the data collected, the feedback and views of the prototype practices at the engagement events, it is the Evaluation Reference Group's view that:

- Progress has been made in the first year of prototyping on the key issues of improving oral health, providing appropriate care and quality, and maintaining or increasing access to merit continuation of the programme.
- The clinical model is well accepted by the profession, however, further work needs to be done and adjustments made to the business model and in a range of areas to improve the sustainability for practices.
- To improve the robustness of evaluation, and of any adjustments made, further practices should be recruited to the programme.

In moving forward, it is important to consider that it is possible to continue to develop and test an approach, looking to get the best contract for all parties, but to recognise that at some point a judgement call has to be made that the approach is “good enough” for scaling up. It is a balance of risk for all parties and this point has not been reached yet.

8. Summary of Recommendations

1. Consideration is given to extending the period over which patients are transitioned from the 2006 contract to the new clinical pathway approach.

2. Consideration is given to managing any future transition in areas where supply is greater than demand.

3. The length of the capitation period used in the prototypes is explored more fully.

4. The DQOF reference group continues to develop the DQOF and its use.

5. A patient survey is carried out to determine the impact of the prevention advice on patients' oral health behaviour.

6. A detailed piece of work is undertaken to understand the reasons and rationale from patient and professional perspectives for the approach to implementing the longest recall periods recommended by NICE.

7. The outcomes of the PREFER trial[vii] should feed into the review and development of the risk communication aspects of the clinical pathway.

8. The programme continues to monitor oral health at the practice population and individual level, and that specific work to quantify the preventive activity takes place.

9. That further practices are recruited to the programme and randomly allocated to the Blends so as to provide a more robust evaluation of the Blends.

10. The exchange mechanism is more widely promoted and consideration is given to renaming the 'Expected Minimum Activity' measure.

11. When any reform of contracts takes place, public facing communication is developed and delivered by the local health system to support the scaling up.

12. A well designed comparison in terms of NHS commitment in matched practices is carried out.

13. The programme looks into how a robust and independent view of the impact of the prototypes on practice profitability may be established and reported.

14. A form of weighting that supports the objectives of ensuring equitable access for patients, fairly reflects the resource required to meet the needs of patients and will be capable of working as part of the new models of care should be explored and tested through the remuneration workstream of the programme.

15. The contract design and the supporting infrastructure, software and BSA data should support transparency of information for providers and performers to improve the sustainability of dental practices and the practice workforce.

16. Robust economic analysis is undertaken to establish a more sophisticated understanding of the value for money being delivered by the prototype practices.

17. Work with practices and software companies is undertaken to improve the quality and completeness of the information on private treatment delivered by the prototypes.

Annex 1 - DQOF indicators

Indicator		Definition	Max Points
Patient Safety	SA.01	Recording an up-to-date medical history at each oral health assessment/review	100
Total			**100**
Clinical Effectiveness Outcome	OI.01	Decayed teeth (dt) for patients aged under 6 years old	125
	OI.02	Decayed teeth (DT) for patients aged 6 years old to 18 years old	125
	OI.03	Decayed teeth (DT) for patients aged 19 years old and over	125
	OI.04	BPE score for patients aged 19 years old and over	75
	OI.05	Number of sextant bleeding sites for patients aged 19 years old and over	50
Total			**300**
Patient experience	PE.01	Patients reporting that they are able to speak & eat comfortably	30
	PE.02	Patients satisfied with the cleanliness of the dental practice	30
	PE.03	Patients satisfied with the helpfulness of practice staff	30
	PE.04	Patients reporting that they felt sufficiently involved in decisions about their care	50
	PE.05	Patients who would recommend the dental practice to a friend	100
	PE.06	Patients reporting satisfaction with NHS dentistry received	50
	PE.07	Patients satisfied with the time to get an appointment	10
Total			**300**
Data Quality Indicator	DQ.01	Timeliness of appointment transmissions	50
	DQ.02	Timeliness of FP17 submissions	50
Total			**100**

Annex 2 - Glossary of terms

Acronym	Definition
BDA	British Dental Association
BPE	Basic Periodontal Examination
CDS	Community Dental Services
CQC	Care Quality Commission
DCR	Dental Contract Reform
DHSC	Department of Health and Social Care
DQOF	Dental Quality and Outcomes Framework
EMA	Expected Minimum Activity
ERG	Evaluation Reference Group
GDS	General Dental Services
NHS	National Health Service
NHS BSA	NHS Business Services Authority
NICE	National Institute for Health and Care Excellence
NIHR	National Institute for Health Research
NSG	National Steering Group
OHA	Oral Health Assessment
OHR	Oral Health Review
PHE	Public Health England
RAG	Red Amber Green
UDA	Units of Dental Activity

Annex 3 - Evaluation Working Group

The Dental Contract Reform (DCR) Evaluation Reference Group is a sub group of the DCR National Steering Group. It provides advice to that group. It is chaired by Eric Rooney, Deputy Chief Dental Officer England and membership includes the Chief Dental Officer for England, a prototype practice provider, the British Dental Association (BDA), Care Quality Commission (CQC), NHS England (analysis and national commissioning), Pubic Health England (PHE), NHS BSA and DHSC policy. The full current membership as of March 2018 is set out below:

Name	Title	Organisation
Eric Rooney (Chair)	Deputy Chief Dental Officer England	NHS England
Sara Hurley	Chief Dental Officer England	NHS England
Carol Reece	Head of Dental & Optical Services Commissioning	NHS England
Dawn Fagence	Analyst, Secretariat	NHS England
Helen Miscampbell	Head of Dental, Optical, Voluntary Sector, Long Term Conditions and End of Life (DOVLE)	DHSC
Carol Doble	Head of Service – Operational Readiness NHS Dental Services	NHS BSA
Paul Batchelor	Advisor to the British Dental Association (BDA)	BDA
Richard Emms	Vice Chair of the General Dental Practice Committee (GDPC)	BDA
John Milne	National Dental Advisor	CQC
Sandra White	Director of Dental Public Health for England	PHE
Paul Worskett	Dental Practice Principal	Amblecote Dental Care (Prototype practice)

9. References

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