Title: Dental system contract reform
IA No: 9591

RPC Reference No: N/A

Lead department or agency: NHSE

Other departments or agencies: DHSC

Impact Assessment (IA)

Date: 27/10/2022

Stage: Final

Source of intervention: Domestic

Type of measure: Primary legislation

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Summary: Intervention and Options

RPC Opinion: Not Applicable

Cost of Preferred (or more likely) Option (in 2019 prices)			
Total Net Present Social Value	**Business Net Present Value**	**Net cost to business per year**	**Business Impact Target Status**
£m	£m	£m	Qualifying provision

What is the problem under consideration? Why is government action or intervention necessary?

There have been issues with people accessing NHS dental care for some time, and this has been exacerbated by the pandemic. With dentists consistently operating at below 100% capacity, particularly since the start of the pandemic, many people have not been able to regularly access an NHS dental professional. This is mainly due to issues with the dental contract agreed in 2006 which does not fully incentivise dentists to provide more complex NHS dental care, leading to patients seeking alternatives (private care, deferring dental problems)[1]. We are taking action to address this, in a way that is fair for patients, dentists, and the taxpayer during the period of Covid recovery and beyond.

Making changes to the General Dental Services (GDS) and Personal Dental Services (PDS) contracts, the patient charges regulation and the Statement of Financial Entitlements (SFE) directions will improve information for patients; improve incentives in the contract to deliver more complex care; and enable NHS commissioners to deliver better value for money care. As part of this package of improvements, the Government is making two amendments to regulations through a statutory instrument, followed by an amendment to the NHS dental Statement of Financial Entitlements.

This impact assessment is based on internal NHSE modelling with impacts and costs agreed with NHSE Finance team.

What are the policy objectives of the action or intervention and the intended effects?

The intended outcomes are to improve access to NHS dental services for patients; improve care for high needs patients; more fairly remunerate NHS dentists for providing complex care, making NHS dentistry a more attractive place for dentists and their teams to work; and maximise NHS resources to capitalise on underused capacity. Through fairer remuneration for delivery of more complex care and a reduction in clinically low value care (in line with current NICE guidance), NHS dentistry will be focused on patients with high needs. This will aim to reduce inequalities in NHS dentistry.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 1 – Do nothing (business as usual)

Option 2 – Implementation of full reform package (reforms a-f as set out below)

The preferred option is that of implementing all the reform changes in one package. This will address multiple problems with the aim of improving access to NHS dental services, targeting services to areas of most need, reducing inequality by improving geographic access and developing skills for dental practitioners.

Is this measure likely to impact on international trade and investment?		Yes / No		
Are any of these organisations in scope?	**Micro** Yes/No	**Small** Yes/No	**Medium** Yes/No	**Large** Yes/No
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Traded:**	**Non-traded:**	
Will the policy be reviewed? It will/will not be reviewed. **If applicable, set review date:** Month/Year				

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

[1] GP Patient Survey 2022

Signed by the responsible SELECT SIGNATORY: Neil O'Brien Date: 3/11/2022

Summary: Analysis & Evidence

Policy Option 1 – Business as usual

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2022	**PV Base Year** 2022	**Time Period 10** Years	**Net Benefit (Present Value (PV)) (£m)**		
			Low: Optional	**High:** Optional	**Best Estimate:** 0

COSTS (£m)	**Total Transition** (Constant Price) Years		**Average Annual** (excl. Transition) (Constant Price)	**Total Cost** (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				**0**

Description and scale of key monetised costs by 'main affected groups'

None

Other key non-monetised costs by 'main affected groups'

There is likely to be a decreasing provision of NHS dental services. This will lead to worsening population oral health, increased health inequalities.

BENEFITS (£m)	**Total Transition** (Constant Price) Years		**Average Annual** (excl. Transition) (Constant Price)	**Total Benefit** (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				**N/A**

Description and scale of key monetised benefits by 'main affected groups'

None

Other key non-monetised benefits by 'main affected groups'

None

Key assumptions/sensitivities/risks	Discount rate (%)	
None		

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			**Score for Business Impact Target (qualifying provisions only) £m:**
Costs:	**Benefits:**	**Net:**	

Summary: Analysis & Evidence

Policy Option 2 – Proposed changes

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2022	PV Base Year 2022	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate:** £530m

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	**£460m**
High	Optional		Optional	**£601m**
Best Estimate				**£530m**

Description and scale of key monetised costs by 'main affected groups'

Based on the overview of the internal modelling provided to DHSC by NHSE, the main monetised costs are:

a. To fund extra Units of Dental Activity (UDAs) in the preferred option "all changes" is estimated to cost **£322m (discounted)** over ten years to 2031/32.
b. The requirement for dentists to update information on the NHS 'find a dentist' online tool is estimated to cost dentists **£1.5m (discounted)** over ten years.
c. Patient charge revenue lost due to re-weighting of UDAs for band 2, and reduced patient recall is estimated to cost £24m each year. This is **£207m (discounted)** over 10 years.

Other key non-monetised costs by 'main affected groups'

None

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				**N/A**

Description and scale of key monetised benefits by 'main affected groups'

None

Other key non-monetised benefits by 'main affected groups'

We expect that more UDAs will be delivered by contract rebasing. This will provide increased dental access.

Rebasing Band 2 treatments will incentivise dentists to deliver more complex treatment to patients and provide more quality treatments.

Increased utilisation of dental workforce through better use of dental team skill-mix is expected to provide more patient access.

Reduced patients recall through NICE recall guidance is expected to free up appointment places for dentists to take on new patients. The benefit of improved access to unmet patients' needs has not been monetised.

Key assumptions/sensitivities/risks Discount rate (%) 3.5%

Assumptions here are based on internal NHSE modelling agreed with the Finance team.

It has been assumed that no additional contracts fall into consistent underperformance, and contracts exceeding targets will continue at similar performance levels to absorb extra UDAs, otherwise commissioners will face difficulty in re-allocating UDAs in the rebasing exercise

By adhering to NICE guidance of reduced patient recall, there is possibility that some high-risk cases may go undetected or mis-diagnosed and lead to oral health deterioration. This should be mitigated by proper use of the recall interval guidance itself.

It has been assumed that the use of other dental practitioners in skill mix will result in increased workforce, however this could be limited by the constraint of space or estates, or individuals' reluctance to adapt to a new work practice.

It has been assumed that UDA rebasing will increase dental access and reduce inequality,

however this will depend on how well local commissioners manage the contracts. We have discounted cost of extra UDAs at standard 3.5% per annum	

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			**Score for Business Impact Target (qualifying provisions only) £m:**
Costs:	**Benefits:**	**Net:**	

Evidence Base

Problem under consideration and rationale for intervention

Outline of the current dental market and funding model

1. NHS dentistry was a challenging area prior to the COVID-19 pandemic, with patient access proving difficult in some areas of the country (see paragraph 5 below). The COVID-19 pandemic exacerbated problems with patient access and created a backlog of patients seeking access to NHS dentistry.
2. NHS dentistry has a patient contribution to the cost of oral healthcare, the cost of which falls into four bands (band one, two, three and 'urgent'), with a set cost to the patient for each band. These are detailed in the table below. These bands also have a corresponding 'Unit of Dental Activity' (UDA) value, and the dental contract that each practice holds stipulates how much activity the practice should deliver to meet the requirements of the contract. Dentistry is, however, free to access for many patients, with eligibility determined by age, eligibility for some benefits and whether a patient is pregnant or has had a baby in the preceding 12 months. In the last year for which data is available (2021/22), 46.3% of NHS dental patients received NHS dentistry free of charge.
3. There are also long-standing shared concerns with the current dental contract, which was implemented in 2006, that have been identified both by the British Dental Association (BDA) and by the wider group of stakeholders from across the sector. These typically focus on the areas that this package of changes seeks to address, such as the level of remuneration for complex activity which the contract currently provides.
4. This package of reform is the first significant set of changes to the NHS dental contract since the contract was implemented in 2006. The proposals were initially worked up by NHS England and the Department through focus groups with dentists. They were then negotiated formally with the British Dental Association, who have accepted them. Additionally, a range of stakeholder organisations, including bodies representing other professional groups within the dental workforce and patients were consulted and were supportive of the package.
5. Since 2006, dental 'Unit of Dental Activity' (UDAs) and 'Courses of Treatment' (CoTs) have been arranged into three bands. A description of what is included within each CoT band, along with the current patient charges, is provided in table [1] below:

Table 1 – Description of Course of Treatment Bands

Band	Description	UDA value	Patient Charge (as at Mar 2022)
1	This band includes examination, diagnosis (including radiographs), advice on how to prevent future problems, scale and polish if clinically needed, and preventative care (e.g. applications of fluoride varnish or fissure sealant)	1	£23.80
2	This band covers everything listed in Band 1, plus any further treatment such as fillings, root canal work or extractions. Within this band a simple filling or extraction could take 20 minutes, but a filling on a molar tooth needing root canal treatment would take 75 minutes and need more expensive equipment.	3	£65.20
3	This band covers everything in Bands 1 and 2, plus course of treatment including crowns, dentures, bridges and other laboratory work	12	£282.80
Urgent	This band covers urgent assessment and specific urgent treatments such as pain relief or a temporary filling.	1.2	£23.80

Policy objective

6. The policy objective is to improve access to NHS dental services for patients, improve care for high needs patients, and to more fairly remunerate NHS dentists for providing complex care.

7. Access to NHS dentistry is challenging for many people across the country, and there are some areas where this issue is more pronounced. Although there isn't a single measure that gives the complete picture of demand or access for NHS dentistry, we can look at access in terms of UDAs commissioned, where at a regional level the North West has generally good access (but with pockets of poor access in rural areas), compared to the South West and East of England where access is generally poor, particularly in rural and coastal areas. Another measure of access is dentists per 100,000 of the population which shows that the number of NHS dentists per 100,000 population ranges from 31.9 per 100,000 in NHS North Lincolnshire CCG to 76.8 per 100,000 in NHS South Tyneside CCG1. Access will be further influenced by factors such as population preferences and affordability.

8. There is often an overlap between areas of poor access and indicators of deprivation, which creates a negative impact on health inequalities. Additional aims of this policy are to bridge the shortage of dentists in deprived areas by making NHS dentistry a more appealing career choice, and uplift the minimum rates paid for UDAs in order to incentivise retention of dentists in areas of low UDA rates.

9. In April 2021, the Government set out that any changes to NHS dentistry must meet six tests:
    a. Be designed with and enjoy the support of the profession
    b. Improve oral health outcomes (or, where insufficient data are not yet available, credibly be on track to do so)
    c. Reduce perverse incentive for dental care that is not clinically necessary
    d. Demonstrably prevent the loss of NHS commissioned dental activity to private pay
    e. Improve patient access to NHS care, with a specific focus on addressing disparities, particularly those linked to deprivation and ethnicity
    f. Be affordable within available NHS resources made available by Government, including taking account of dental charges.

10. The indicators of success will be more new patients starting a course of treatment with a dental professional (particularly more complex band 2 treatments), more commissioned UDAs being delivered and more accurate adherence to NICE guidance on recall intervals and provider of care (monitored by data from the FP17).

Rationale for intervention

11. The package of reforms to the dental contract in 2022/23 are aimed at tackling the most pressing issues in NHS dentistry which are:

    - **A lack of appropriate incentivisation for NHS dentists to do more complex work**. The present contract pays dentists the same number of UDAs for any treatment delivered across band 2, so dentists are reimbursed the same amount for doing one filling as three fillings. This fails to incentivise NHS dentists to do more complex treatments as part of Band 2. This in turn may lead to dentists not taking on new patients, who may not have seen a dentist for an extended period, to avoid being confronted with more complicated treatments. These patients are often encouraged to seek alternatives including treatments in private care or if that is not affordable, via secondary care or deferral of treatment, placing burdens on other areas of the health system[2]. With the reform, dentists would be better incentivised to do more complex band 2 treatments, which will be to patients' oral health benefit.

    - **Reduction in percentage of UDAs commissioned that were delivered, including during the pre-Covid period (see Table 2 below).** The difference between UDAs commissioned and those delivered is essentially care that should have been provided within the envelope of

[1] NHS Dental Statistics, NHS Digital, 2020-21

[2] Hospital Accident & Emergency Activity 2021-22 - NHS Digital shows attendance to A&E for dental treatment

the NHS dental contract. These reforms are aimed at releasing and reallocating these UDAs that are not delivered and therefore providing extra care for patients. This should also enable the dental backlog of care, currently estimated at around 13m courses of treatment, to be cleared more quickly. Table 2 shows commissioned UDAs against those delivered, from 2016-17 to 2020-21.

Table 2 - Commissioned UDAs delivered against number commissioned

Reporting year	UDA Commissioned (£M)	UDA Delivered (£M)	UDA Shortfall (£M)	%UDA delivered
2016/17	87.8	84.4	3.3	96.2%
2017/18	87.2	82.0	5.2	94.0%
2018/19	86.9	81.9	5.0	94.2%
2019/20	88.2	78.5	9.6	89.1%
2020/21	86.7	23.9	62.8	27.6%

- **Poor workforce morale and motivation.** The Dental Working Patterns Survey[3] shows that there are high levels of poor morale amongst dentists, with 55.9% of providing-performers and 46.3% of associates self-reporting their rate of morale as 'low' or 'very low' in 2019/20. The proportion reporting 'high' or 'very high' morale has fallen between 2012/13 and 2019/20, from 27.8% to 20.7% for principal dentists, and from 42.3% to 25.6% for associates. Results also show that the more time dentists spend on NHS work, the lower their levels of motivation due to disincentives with the existing dental contract and lack of control over workload. The incentives from the reform will bring about improved dentists' morale and motivation.
- **Reduction in patient access.** In 2022 the GP Patient Survey[4] reported that of those who tried to get an NHS dental appointment in the last two years, 24% were unsuccessful. This is an increase from 6% in 2019. Patients with no pre-existing relationship with a practice find it increasingly hard to get an appointment (31% success) compared to 82% for those who had visited the practice before. There is also geographic variation in access, with shortfalls in dentist numbers particularly in rural and coastal areas.

[3] Data for self-employed primary care dentists in England, who complete some NHS activity. For 2019/20 73.0% of responding dentists time was spent on NHS work.
Dentists' Working Patterns, Motivation and Morale - 2018/19 and 2019/20 - NHS Digital
[4] Statistics » GP Patient Survey Dental Statistics (england.nhs.uk)

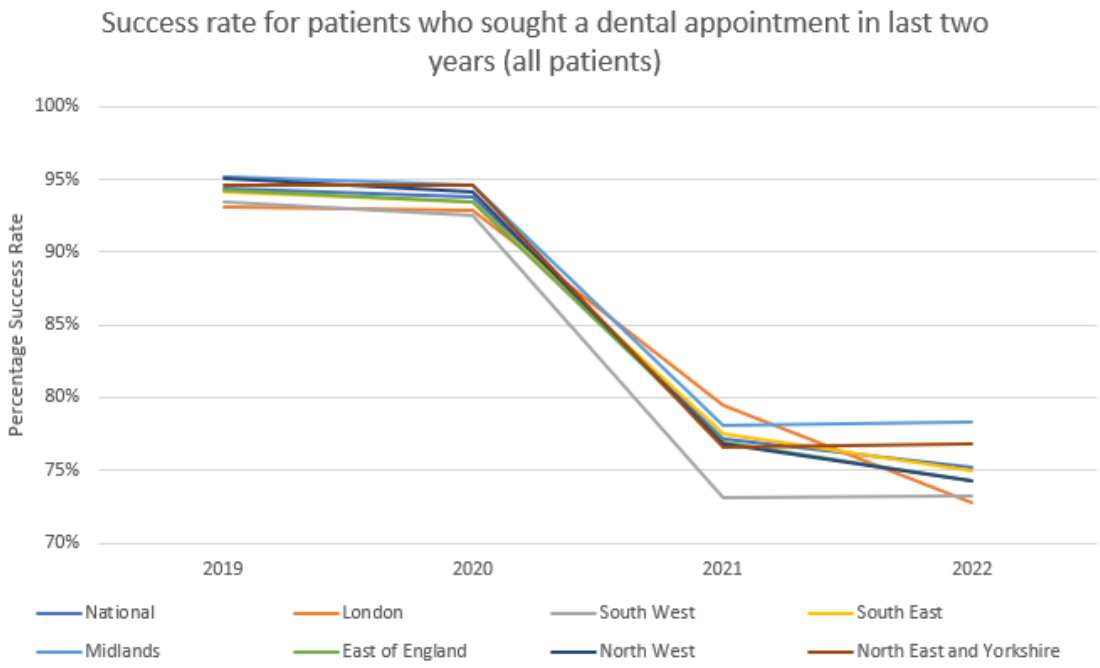
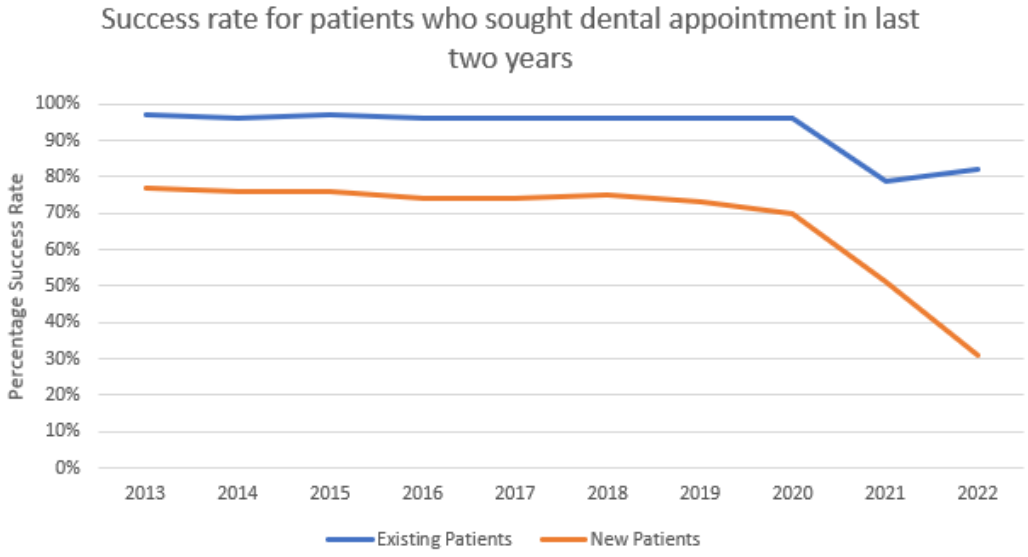


Table 3 – GP Patient Survey – dental appointment statistics, 2012, 2020 & 2022

GP Patient Survey - Dental Section	2012	2020	2022
Proportion tried to get an NHS appointment in past 2 years	60%	58%	52%
Successful - been before (excluding can't remember)	97%	96%	82%
Successful - not been before (excluding can't remember)	77%	71%	31%

12. If these issues are not addressed, it is likely that the situation will continue to deteriorate leading to worsening population oral health, increased health inequalities and a decreasing provision of NHS dental services.



13. The current contract needs to be reformed to address concerns, particularly with regard to making the dental contracts reward dentists more fairly for complex Band 2 treatments and help encourage them to continue to deliver NHS care. The remuneration for Band 2 work, which is often complex, does not currently reflect the broad range of treatments provided. Re-weighting Band 2 will incentivise dentists to deliver more care to high needs patients and discourage low value, clinically unnecessary dental check-ups for those with good oral health. This would also help to mitigate against potential increases in dentists' costs due to the recent high inflation.

Dental Reform Proposals

14. To address the issues highlighted above, these proposals seek to increase access for patients, improve the attractiveness of the NHS to dental professionals, and secure value for money for taxpayers, as a critical first step in reform. Seven changes to the contract are proposed:

    a. Enabling high performing practices to deliver more care, up to 110% of contract value (amendment to the NHS dentist Statement of Financial Entitlements)
    b. Re-weighting Band 2 courses of treatment to more fairly remunerate dentists for undertaking more complex treatments) (amendment to regulations through a statutory instrument)
    c. Requiring NHS practices to update their information on the NHS website a minimum of every 90 days (amendment to regulations through a statutory instrument)
    d. Enabling the NHS to manage persistent contract under-performance better (TBC)
    e. Promoting the effective use of skill-mix across the profession (through NHSE guidance)
    f. Reducing low value, clinically unnecessary care (through NHSE guidance)
    g. Introducing a minimum indicative UDA value (through regional commissioners).

15. Further details of NHS Dental Reform improvement proposals:

    a. **Enabling high performing practices to deliver more care:** Incentivising NHS dentists who are able to provide more than their contracted activity to do so. Currently, NHS dental contractor over-delivery is capped at 4% and that over delivery is carried forward. The relevant regulations will be updated to allow contractors to deliver up to 110% of their actual contract value, in agreement with commissioners. This additional activity will be funded from under delivery on other contracts, with approval from commissioners. In the process, dental commissioners will work in line with NHS guidance and carry out a local assessment of health needs and impact. This will help them allocate the extra UDAs effectively to achieve the best health outcome. It is expected that commissioners will employ professional expertise and judgement to ensure good outcome for health inequality. It is expected that patient access will increase from the extra UDAs delivered.

    b. Re-weighting band 2 courses of treatment to more fairly remunerate dentists for undertaking more complex treatments: Rebalancing NHS dental bands to incentivise the provision of more comprehensive care when providing treatment to patients with urgent needs. The current band 2 Unit of Dental Activity (UDA) remuneration structure does not incentivise the most effective treatment of patients with complex needs. The UDA value (3 UDAs) often means the dentist remuneration does not reflect the treatment required. The reforms will create additional sub-bands within band 2 treatments:

        i. 5 UDAs for fillings or extractions on three or more teeth

        ii. 7 UDAs for molar endodontic care

        iii. All other band 2 care will continue to attract 3 UDAs.

    Band 2 courses of treatment were identified in a Health Select Committee report in 2008 as ‘incorporating too wide a variety of treatment’. This was also echoed in clinician feedback during the focus groups NHSE undertook to inform the current proposals. Specifically, two groups of patients were identified as being under-remunerated at 3 UDAs: those requiring care to multiple teeth and those requiring endodontics, particularly to molar teeth. In practice, this puts patients at risk of having treatment to multiple teeth delivered as a ‘phased course of treatment’ or choosing to spread over multiple courses of treatment. This both increases the number of UDAs which can be accrued and costs to the patient. Poor oral health tends to correlate with income deprivation and other inequalities. In the case of endodontics, there is the risk of perverse incentive for extraction rather than restoration which has the potential for poorer outcomes in the longer term.

We do not have up to date information on what it costs dentists to deliver band 2 courses of treatment. The best available study is the BDA Heathrow timings study, undertaken in 1995. This gives the time taken for a standard filling to be 21 minutes, an extraction of a single tooth as 18 minutes, lower premolar root filling 49 minutes and molar root filling 76 minutes. Root fillings, which require endodontic treatment also need more equipment and materials than simple filling or extractions. It is on this basis that we think the proposed tariff for complex band 2 courses of treatment is a fairer reflection on costs to dentists than the current tariff.

These changes are aimed to reward dentists more fairly for complex Band 2 treatments they deliver. The new UDA structure means that dentists can deliver complex band 2 treatments for a fairer reward. Patients will benefit as their complex dental needs will be met andthe reform will encourage dentists to take on new patients since they will be fairly rewarded for the more complex work resulting from 'new' patients (i.e. those who have not had a recent dental check-up).

c. **Requiring NHS practices to update their information on the NHS website:** A key concern raised by patients and patient groups like Healthwatch, is that the NHS 'find a dentist' online tool is often not up to date. This change will require dentists, as part of their contract, to update this information, helping to ensure there is more accurate information about practices to better support patient access to NHS dentistry. Although this would have a small time-impact on dental practices, it is expected to provide better access by reducing the time patients spend trying to access care.

d. Managing persistent contract under-performance: Enabling NHS commissioners to mandate contract rebasing for repeatedly underperforming contracts. NHSE estimate that pre covid pandemic around a third of practices underperformed against their contract with around 90% of these having sustained underperformance over a 3-5 year period. Whilst NHSE can clawback monies at the end of the financial year, this funding cannot be used to recommission activity due to the requirement to spend it in year. Re-allocation of the underdelivered UDAs means that there will be more access for patients, and the re-allocated UDAs can be targeted to areas of need.

e. **Promoting skill mix:** Enabling greater use of the dental team. Currently there is a perception in the sector that the opening of a Course of Treatment (CoT) in NHS dental contracts can only be done by a dentist and is a barrier to the use of full skill mix of teams in NHS practices. We will work with NHSE to provide guidance on how dental therapists and hygienists can open new CoT, within their scope of practice. Additionally, we will agree a programme of activity with GDC and other stakeholders to support practices to work safely within the existing regulations. Over time we expect this to improve patient access and free up dentists time to deliver more complex treatments, although this will depend on workforce supply in some parts of the country, and recruitment decisions. This will be the first step in a much wider programme of work to encourage development of dental teams and support a wider range of professionals to work in dental practice. We expect this will increase the dental workforce therefore increase patient access. This will free up dentist's time so they can prioritise more complex treatments, to patients benefit.

f. **Reducing low-value, clinically unnecessary care: improving adherence to NICE patient recall guidelines:** Some clinicians default to the historical practice of six-monthly intervals between check-ups irrespective of patient oral health and despite contractual requirements to adhere to NICE guidelines. Some of these activities are of lower clinical value, so the released resources will be used to provide higher clinical value and care to patients. In the reform NHSE will monitor new recording of recall intervals and intervene to ensure NICE guidelines are adhered to. Dentists will have capacity to take up new patients, and the unmet needs of patients who were not able to get a dentist appointment will reduce.

[5] The 1999 BDA Heathrow Timings Study: A Bearne & A Kravitz

g. **Uplifting very low UDA rates:** Following feedback from the profession NHSE have reviewed low value indicative UDA rates and the impact on patient access. A new floor of £23 has been agreed as minimum payment for UDA, which will impact on ~200 practices. This means that dentists in low UDA areas will be incentivised to deliver NHS treatment. Although in keeping within the contract value, overall UDA numbers will reduce slightly, but this UDA rate uplift is expected to support recruitment and retention in some challenging areas and overall improve contract delivery and support improved patient access.

Rationale and evidence to justify the level of analysis used in the IA (proportionality approach)

16. A decision is required on whether to accept the package of reforms as proposed above. The reforms represent relatively minor changes to the dental contract established in 2006. These changes are aimed at addressing long-standing, well understood contractual issues and are low risk in terms of the impacts. In accordance, NHSE analysts have developed modelling that assesses how the individual reforms work together to impact NHS dentistry.

17. The modelling covers ten years of costs and benefits (in the form of extra UDAs), which is the standard timeframe for Impact Assessments. A period of five years was the requirement for the NHS England Finance team for their modelling purposes, so we have projected forward the costs based on year five estimates as agreed with NHSE analysts. Therefore, the final five-year profile should be considered as indicative in terms of costs over a full 10-year period. This is because there continues to be uncertainty on when wider reforms will be introduced (potentially as soon as 2023/24) and whether the reforms included in this current package will be continued in the long term or superseded. For this impact assessment we have projected the costs and benefits forward to cover the possibility that these more minor reforms will be remain part of the dental contract beyond 2023/24.

18. A sensitivity analysis of the reforms has been provided in the Annex, however, as the last five years costs are indicative, there is potential for a wider range of benefits in the later years if reforms were to exist beyond the five-year period modelled by NHSE.

Description of options considered

19. The options are:

Option 1 – Do nothing (business as usual)

For this option we assume that there are no reforms implemented and the current 2006 dental contract continues. A baseline of 2019/20 contractual performance of 74.1m UDAs delivered is assumed for years 2022/23 to 2031/32 (see Annex A).

Option 2 – Implementation of full reform package (reforms a-g as set out above)

The preferred option is that of implementing all the reform changes listed above in one package. This will address multiple problems with the aim of improving access to NHS dental services, targeting services to areas of most need, reducing inequality by improving geographic access and developing skills for dental practitioners.

20. A combination of other options was considered, with feedback taken on board from the British Dental Association (BDA), but the package above was felt to represent the best way to deliver improved access and services for patients.

21. The preferred package of reforms is compared against a baseline of 2019/20 contractual performance for years 2022/23 to 2031/32 (i.e. business as usual), with a subset of contracts selected for the analysis (6,299 contracts that have existed between 2017/18 and 2021/22, and have a delivery of UDAs less than 110% of contracted UDAs).

Monetised and non-monetised costs and benefits of each option (including administrative burden)

Option 1 – Do nothing (business as usual)

<u>Costs</u>

22. We have not quantified this into monetary costs, however there are ongoing issues with dentistry which is expected to get worse if there is no intervention to correct the problems which have led to poor dental access and patients care.

23. Currently, the low delivery of contracted UDAs coupled with the complications of Covid has led to an estimated dental backlog of ~13m courses of treatment. We expect that this backlog will continue to grow without the reform interventions outlined.

24. Dentists' will not be fairly remunerated for delivering complex band 2 treatments. Feedback from a focus group indicated that this could lead to further deterioration of dentists' morale. Patient access to dental treatment could potentially suffer, and oral health may also deteriorate. Dentistry has had negative press coverage due to patients' inability to get dental appointments. This will continue to get worse with the 'do nothing' option.

Option 2 – Implementation of full reform package (reforms a-g as set out above)

25. This section presents the costs and benefits of the preferred option of introducing the full package of reforms to NHS dentistry. All modelling assumptions used are based on internal analysis by NHSE and agreed with the NHSE Finance team. DHSC have been provided with an overview of the modelling approach and documentation to complete this impact assessment. Costs have been calculated over a 10-year time-horizon as the IA standard. A five-year horizon was required for NHS England financial modelling, and year 5 had been rolled forward for years six to ten to show indicative costs over 10 years.

Table 4a – Summary of costs of all proposed reform changes

	Option	Details	Costs over 10 years – net of PCR (discounted) (NPV) millions
a	Enabling high performing practices to deliver more care, up to 110% of contract value	Allow contractors to deliver up to 110% of their actual contract value, in agreement with commissioners	None
b	Re-weighting Band 2 courses of treatment	Re-weighting Band 2 courses of treatment to more fairly remunerate dentists for undertaking more complex treatment).	£76
c	Requiring dentists to update the NHS website	Requiring NHS practices to update their information on the NHS website a minimum of every 90 days.	£1.5
d	Contracts Rebasing: manage persistent contract under-performance	Better enabling the NHS to manage persistent contract under-performance and re-allocate underdelivered UDAs to areas of highest need.	£51
e	Skill Mix	Promoting the effective use of skill-mix across the profession. Enabling greater use of the dental team.	£195
f	Risk-Based recall	Reducing low value, clinically unnecessary care. This would incur loss of patient charge revenue from fee-paying patients	£207[6]

[6] £207m is the estimated loss of PCR from Risk-based recall and band 2 re-weighting

g	Uplifting Low UDA rates	Introducing a minimum indicative UDA value.	None
	Total Monetised		£530[7]

Table 4b – Summary of non-monetized patient benefits of all proposed reform changes

	Option	Details	Expected non-monetised benefits
a	Enabling high performing practices to deliver more care, up to 110% of contract value	Allow contractors to deliver up to 110% of their actual contract value, in agreement with commissioners	Increase upper ceiling for UDAs, increasing access to patients. The impact on equality will depend on how well ICB commissioners manage the UDA re-allocation process.
b	Re-weighting Band 2 courses of treatment	Re-weighting Band 2 courses of treatment to remunerate dentists more fairly for undertaking more complex treatment).	It is estimated that 4.8m extra UDAs will be released over ten years through Band 2 re-weighting. Patients will gain improved oral health care from dentists prioritising treatment of complex Band 2 cases. Attention to complex Band 2 cases will reduce the rate of GP and A&E visits for dental cases
c	Requiring dentists to update the NHS website	Requiring NHS practices to update their information on the NHS website a minimum of every 90 days.	This will support increased patients' access. Patients will spend less time navigating to find the right dental service.
d	Contracts Rebasing: manage persistent contract under-performance	Enabling NHS commissioners to mandate contract rebasing for repeatedly underperforming contracts.	This is expected to release 3.2m undelivered UDAs over ten-year period to be re-allocated for delivery This will provide 1.0m patients with access to dentistry. Commissioners will seek to deploy the UDAs to areas of unmet need. Underperforming dentists may push to improve in their UDA delivery to avoid the UDAs being removed and reallocated. This could further increase patient access.
e	Skill Mix	Promoting the effective use of skill-mix across the profession. Enabling greater use of the dental team.	This will increase workforce to deliver more dental treatments and increased patient access. 12.6m UDAs is estimated to be released through skill-mix. This will provide dental access to 4.1m patients. Patients will benefit from improved dental care as dentists will be able to deliver more Band 2 treatments as time spend on Band 1 is freed-up due to skill-mix.

[7] Total – this does not include monies clawed back at the end of the financial year for under-performance as this cannot be applied to individual components of the reform. Nor does the total cost account for an interaction or overlap of individual components of the reform. This was modelled by NHSE and resulted in larger overall costs, however DHSC do not have access to the modelling undertaken and therefore this total has not been included in the impact assessment.

f	Risk-Based recall	Reducing low value, clinically unnecessary care.	More dental access to patients as dentists may be more able to take on new and complex cases, rather than repeated recall of cases that only require a simple check-up.
g	Uplifting Low UDA rates	Introducing a minimum indicative UDA value.	The incentive of UDA uplift could help with dentists' retention, especially in areas with low UDA values. This will be of benefit to patients in those areas.

Key Monetised Costs

26. Table 4a provides a summary of the monetised costs of the outlined reforms. The main monetised cost is due to applying an average cost per UDA of £28 to the additional UDAs we expect due to the reforms. These additional UDAs will also attract patient charge revenue from fee-paying patients.

27. For the reweighting of band 2 CoTs the estimated cost is £76m (discounted) across ten years. As dentists will be better recompensed for more complex dental work, they will be incentivised to do more of it. Therefore, this change will increase the number of UDAs for the same amount of work, increasing the costs. Costs are based on modelling of 7 UDAs for molar endodontics, and 5 UDAs for non-molar endodontics and 3+ fillings/extractions. The additional costs are based on the assumption that additional UDAs earnt on the current delivery of complicated Band 2s are used by contractors to deliver more than their existing level. We have assumed this change comes into the contract for in October 2022, so half of 2022/23. This gives a potential additional 0.5% of UDAs delivered by each individual contractor in 2022/23 and a potential additional 1% delivered in all subsequent years. It should be noted that in this scenario the ability of contractors to over-deliver is only available for contractors currently delivering less than 100% of contracted UDAs.

28. The requirement for dentists to update the NHS website (c) is expected to have slight time impact on dental practices. NHS England have estimated that the cost per month for this function would be around £2, resulting in costs of £178k per year across 7,000 dental practices. This would amount to £1.5m (discounted) over ten years, averaging £50 per dental practice.

29. For contracts rebasing (d) the estimated costs is £51m (discounted) across ten years. The aim is to release UDAs from underperforming contracts so that they can be delivered elsewhere. The behavioural impact of these changes has been modelled, in addition to the release of UDAs by rebasing contracts:

    - 50% of underperforming contracts are rebased each year and that these UDAs are released to allow other contractors to over deliver.
    - Contractors that delivered between 90% and 96% in 2019/20 but were not in consistent clawback deliver at least 96% of contracted UDAs in all 5 years included in the model.
    - No other contracts fall into consistent clawback.

    It should be noted that regional commissioners will decide whether to re-commission these UDAs, ensuring that expenditure is maintained at a regional level. For this analysis contractors in clawback (i.e. those consistently under-performing) for the years 2017/18, 2018/19 and 2019/20 were assumed eligible for permanent re-basing. However, the planned contractual change is contractors in clawback for the years 2019/20, 2022/23 and 2023/24. The impact of mid-year rebasing has not been modelled. These UDAs will largely be a subsection of the UDAs available for permanent rebasing and we believe the amount of this is within the uncertainty bounds of what has been modelled here.

30. A major monetised cost due to UDA release is the from an increased mix of skills (e) in NHS dentistry. This is expected to bring increases to the dental workforce delivering treatment. UDAs delivered through skill mix is estimated to cost £195m (discounted) over the ten years. This assumes that over the 5 years of the model delivery of 12.5% of all band 1 courses of treatment are delivered by non-dentists and that the UDAs that would have been delivered by dentists in this time are still delivered. Although dental therapists can deliver all care up to permanent filling the constraints on this delivery include availability of dental therapists and dental surgeries/chairs to deliver care.

31. The net costs of these effects will be £322m (discounted) across ten years, though these costs will be absorbed within NHSEs existing budget for NHS dentistry.

32. In addition to the above costs, the re-weighting of UDAs for band 2 treatments and reduced patient recall (f) will present an additional cost pressure of around £24m each year. This is due to the lost patient charge revenue from increased UDA numbers for fee paying band 2 patients, and fewer band 1 check-ups (an assumed 5% reduction) taking place due to the work to improve alignment with NICE recall guidance and reduce low-clinical value interventions. This potential additional cost will have to be found from within the existing NHSEI funding envelope. Total cost over ten-year period will be £207m (discounted). There is an interaction of the costs of this effect with band 2 reweighting, however these costs have been presented under element (f) for ease of presentation.

Key Non-Monetised Costs

33. It is expected that some minor administrative costs would arise from the process of re-allocating extra UDAs, however as this process requires further guidance to be made available from NHS England, so these costs have not been monetised. NHSE has advised that this cost is negligible and is expected to decrease with time as the process gets more efficient.

34. There could also be potential for some movement to the private sector for patients who may not be satisfied with their allocated recall interval, however these numbers are likely to be low.

Key Monetised Benefits

35. Due to the complexities in monetising the reform benefits and a lack of evidence, it has not been possible to link extra UDAs (and therefore improved access to dentistry), with monetised health benefits. Therefore, we have not been able to monetise health benefits and have presented benefits in terms of increased access to dentistry.

Key Non-Monetised Benefits

36. The reform is estimated to release 20.5m extra UDAs over the next ten-year period (see Annex A). This would give dental access to 6.6m additional patients. This is derived by applying NHSE's conversion model of 3.08 UDAs per patient seen.

37. The reform aims at providing better rewards to dentists for their work as UDAs are assigned to specific treatment types in band 2. There will also be benefits accruing from the increased access to dental care, including supporting the clearance of the current backlog.

38. DHSC has conducted modelling that has estimated that there is NHS dental backlog of ~13m courses of treatment. This resulted from the first two years of the pandemic, on top of unmet need that existed prior to March 2020. The model for clearing the backlog is based on the assumption that Band 2 treatments will be prioritised. In the current proposal, it is expected that the use of skill-mix and adherence to NICE recall guidance would free up substantial amount of Band 1 treatment therefore enabling dentists to concentrate on Band 2 treatments. This would lead to faster clearance of the dental backlog. Due to the difficulty of establishing a clear link between increased access and quantifiable health benefits within dentistry, this effect has not been monetised.

39. It is expected that re-weighting of band 2 UDA's will incentivise dentists to deliver more complex Band 2 treatments, which would contribute to clearing the backlog quicker.

40. Additional benefits of each of the reform components are considered below:

    a. **Enabling high performing practices to deliver more care:** This change will reward good performance by NHS dentists by increasing the activity they will be paid for. It will also increase the number of UDAs delivered, improving access for patients. The aim is to target the additional available care at underserved areas and reduce inequalities, but this will be dependent on NHSE guidance on how UDAs will be reallocated. UDA commissioners will work with a set of NHS guidance and carry out local assessment of health needs and impact. This will help them allocate the extra UDAs effectively to achieve the best health outcome. It

is expected that commissioners will employ professional expertise and judgement in this process to ensure good outcome for health inequality.

b. **Re-weighting band 2 courses of treatment to remunerate dentists more fairly for undertaking more complex treatment:** The expected impact on dentists from this change is that they will be better financially rewarded for complex Band 2 work and incentivised to do more of it. Band 2 re-weighting promises better care and increased access to patients with more complex band 2 needs. It ensures that dentists are not just selecting the simplest band 2 tasks and avoid more complex ones, which are then dealt with in private care, secondary care or are deferred. Behavioural tendency has been for dentists to avoid taking on new patients who may not have seen a dentist for an extended period and will hence have more complicated issues requiring multiple treatments. Under the current contract, dentists would be reimbursed the same for a basic Band 2 treatment as for a more complicated treatment, therefore creating a disincentive to treat more complex dental problems for those who are most in need.

   This will encourage dentists to take on new patients and lead to endodontics being offered more often and more patients requiring treatment on three or more teeth being seen. Given there is a relationship between worse oral health and increased deprivation this second aspect of this change should lead to a decrease in health inequalities. However, this change will slightly increase the UDAs delivered for the same amount of work. This change is accounted for in the modelling. This reform may lead to a shift in care from private to NHS treatment and this effect is discussed in the risks section.

c. Requiring dentists to update the NHS website: It is expected that this will reduce the time spent by patients trying to access care. Anecdotal assumption is that this will save on the average 5 minutes of patients' time.

d. **Managing persistent under-performance:** Currently, commissioners can only rebase contract values with the agreement of the contractor, which is very rare. This change will enable commissioners to unilaterally rebase contract values on a recurrent basis where a contractor is in persistent (three years) under-delivery.

   Additionally, commissioners and contractors will be able to rebase in year (non-recurrent) following the contractual mid-year review process. These proposals will provide new levers to commissioners to act in a more dynamic way and make best use of the available budget.

   This change will reduce the number of UDAs in commissioned contracts that are currently undelivered. This is estimated at 3.2m undelivered UDAs over a ten-year period. When re-allocated, this will provide 1.0m additional dental access to patients.

   While applying professional judgement, commissioners will seek to deploy the UDAs to areas of where needs can be best met. Underperforming practices may push to improve in their UDA delivery to avoid the UDAs being taken away from them. This will increase patient access

e. **Promoting skill mix (enabling greater use of the dental team):** The expected impact on dental workforce is that the size of the workforce delivering dental treatment will increase leading to better access for patients and increased delivery of UDAs. We also expect that dental care professionals working to their full potential will feel more fulfilled at work leading to improved morale. There is the potential that patients will not accept being treated by a non-dentist, but there is also the potential of reduced anxiety if patients know the possibility of invasive treatment is very small because they are seeing a DCP rather than a dentist. It is also likely that communication with patients will be improved due a reduced use of very technical terms. If the chance of getting a dental appointment is improved due to additional dental skills, this could mitigate against other patients' concerns. Where quantifiable these changes have been included in the modelling.

f. **Reducing low-value, clinically unnecessary care:** This change is expected to lead to a reduced number of unnecessary check-ups which would release dentist time for more clinically needed treatment and save time, money, effort, and environmental travel impact on the part of patients. The expected change in attendance for Band 1 courses of treatment is included in the model.

g. **Uplifting very low UDA rates:** This change should improve recruitment and retention of staff in practices that currently have low UDA rates. This is particularly relevant in challenging areas and should support the wider package of reforms to deliver an improvement in contract delivery and support improved patient access.

Risks

41. Enabling high performing practices to deliver more care:
    a. As UDAs will be released from underperforming contracts and reallocated to areas with capacity, there is a risk of lack of capacity elsewhere to re-commission the released UDAs.
    b. The administration of the reallocation process will need to be efficiently managed to ensure that the extra UDAs released are successfully reallocated.
    c. Within the modelling we have assumed that the only available capacity for re-commissioning is that made available by skill mix changes. It is possible that more UDAs than modelled will be re-commissioned and therefore there may be need for more capacity than estimated to deliver more UDAs.

42. Re-weighting band 2 courses of treatment to remunerate dentists more fairly for undertaking more complex treatment:
    a. The aim of this reform is to incentivise NHS dentists to do an increased volume of more complicated Band 2 dental procedures. This could take business away from the private sector if patients whose move to private was solely due to lack of access and quality care, move back to NHS care which is now available as a result of these reforms.
    b. We have assumed that the additional UDAs rewarded for complicated Band 2 courses of treatment are offset by a reduction in delivery of band 1 courses of treatment. If dentists do not extend recall intervals to risk-based intervals (rather than six monthly check-ups) then there may be fewer UDAs than estimated in the modelling. Our base scenario is that the increased UDAs as a result of paying additional UDAs for complicated Band 2s could be up to 1% of UDAs delivered each year.

43. Managing persistent under-performance:
    a. We have assumed that the current persistently underperforming dental practices will continue to underperform, however there is possibility that in response to the incentives offered by the reform, such as better rewarded UDAs in in band 2 and the use of skill mix, those practices may improve in their delivery and meet their targets. In that case the additional UDAs modelled may be overestimated.
    b. It is possible that some under-performing practices have relied on UDAs from repeat recalls in achieving their delivery targets. Such practices may struggle with the NICE guidance reduced recall.

44. Promoting skill mix (enabling greater use of the dental team):
    a. Non-dentists delivering dental treatment can result in undesired outcomes if not properly regulated. This is unlikely, not least because the scope of practice of dental care professional is set out in GDC guidelines, and non-dentists already delivering quality dental care in the private sector.
    b. It has been assumed that the use of other dental practitioners in skill mix will result in higher workforce, however this could be limited by the constraint of space or estates.

45. Reducing low-value, clinically unnecessary care:

a. There is the potential of missing at-risk patients (e.g. for oral cancer checks and diabetes). A discussion of this risk is mentioned below under wider impacts. This risk should be mitigated by adherence to the risk stratification approach set out in the existing NICE clinical guidance[8].
b. Where there is an established dentist-patient relationship, and patients are unhappy with reduced recall, dentists may find other justifications to retain regular recall of low-risk patients, to satisfy patient preferences. This could make it difficult to implement the change.
c. Some patients who have concerns in their allocated recall interval may choose to move to the private sector thereby reducing revenue from fee paying patients, or who will return to the dentist at short time intervals because they do not want to be removed from the dental practice 'list'. This would however have minimal impact, as delivering NHS dentistry for fee-paying patients costs more than is recouped from patient charges.

46. Uplifting very low UDA rates:
    a. A contractor currently having a lower indicative UDA value, when increased to £23, will retain their total contract amount but their UDA target will reduce due to the increase in UDA value. This will reduce the number of commissioned UDAs. For most contracts their delivered UDAs are less than this so it will not cause a problem. However, for some contracts this new target will be smaller than their historical delivery. In this situation it is possible that fewer UDAs will be delivered by these contracts, though this is estimated to be a minor impact.

47. With the full package of reforms, the potential gains in patients access and care could attract a move of some private practices to NHS, especially for those who previously may have left NHS to private dental. This could amount to a loss in revenue for private dental businesses. The extent of potential move to NHS dentistry cannot be evaluated at this time due to non-availability of credible data, and the extent of human behaviour around this is uncertain. It is important to note however that any change in a practice's mix of NHS and private dental provision will be a business decision, which is likely to factor in impact on revenue.

Assumptions used in modelling

48. The average cost of a Unit of Dental Activity (UDA) has been computed as £28, which is the average UDA value in 2020-21. There is a correlation between underperformance and low UDA, therefore because most modelled additional activity occurs in underperforming contracts this may lead to a small overestimate of costs.
49. We have assumed that all NHS dentists are currently working 'at capacity' and that any additional activity can only be delivered by the changes to the contract being made (for instance, skill-mix is expected to increase the workforce to deliver dental treatment so free-up dentists' time. Reduced frequency of recalls through NICE guidance will also free up dentist's time).
50. We have assumed a higher proportion of additional patients seen are fee exempt compared with those currently seen. Therefore, it is possible that we have underestimated the PCR recovered in delivery of the additional UDAs.
51. We have assumed that most dental contractors in 2019/20 were delivering at capacity and that any additional delivery is due to release of capacity for either Band 2 re-weighting, or non-dentists delivering care. The exception to this is dentists delivering between 90% and 96% contracted UDAs, we have assumed that the possibility of their contracts being re-based will ensure they deliver at least 96% in future years.
52. We have assumed that no additional contracts fall into consistent underperformance. This means that contracts who currently deliver activity within contract tolerance continue to do so and therefore do not become at risk of re-basing. This means that the total number of contracts that are rebased are those who would be eligible were the contractual change in place today.
53. We have modelled the impact of requiring dentists to maintain their Directory of Services profile to cost ~£1.5m over 10 years. We expect this change to have minimal impact on dental performance or

[8] NICE recall guidance - https://www.nice.org.uk/guidance/cg19/chapter/Introduction

access. The main impact will be on reducing time spent by patients finding a dental practice which would be difficult to measure accurately.

54. It has been assumed that the gains expected from extra UDAs rebased will be of benefit to dental patients, however the rebased moneys currently being recovered from non-performing contracts are for the NHS funding, not dental alone.

55. We have assumed that data required for monitoring and evaluation will be readily available, and there will be no hinderance in data collection, however this will be subject to the effectiveness of NHSE's data collection tools and effective engagement with data providers. There is possibility that this will encounter initial bottleneck and delays in data collection and consolidation. However, it is expected that availability of data will normalise over time.

56. The contract reforms outlined in this IA do not affect patient charges, which have been frozen since 2020, therefore fee-paying patients will continue to pay for dental care as per Table 1 above. We therefore expect impacts of recent inflation increases to be minimal for this series of reforms.

Impact of inflation on dentistry

57. Since 2006, dentist income from NHS care is funded by contracts negotiated with the NHS, structured around Units of Dental Activity (UDAs). The total funding for primary care NHS dentistry in 2019/20 was c.£3bn. However, total spending for dental services fell by 9% in real terms between 2010/11 and 2019/20. Over the same period income from patient charges increased by 17%.

58. Increases in the rates of CPI inflation since summer 2020 should therefore be seen in the context of already squeezed budgets. However, given there is under-delivery existing with NHS allocated dental contracts (as this IA seeks to address), it is difficult to see additional funding being allocated and overall levels are likely to remain around £3bn for NHS dentistry.

59. The Doctors' and Dentists' Remuneration Board (DDRB) are asked to make a recommendation on the uplift to the pay element of the dental contract. If accepted by ministers, this is combined with an inflation uplift for the expenses element of the contract to give an overall contract uplift.[9]. However, because of the recent high inflation and cost of living, the BDA has asked the DDRB to consider increases in uplift of dental contract values. Ministers are considering the current proposals and the BDA will be consulted once the contract uplift has been agreed. The increased inflation rates will result in further demands to cover staff pay and additional expenses.

60. The main consequences for dentists are:

    a. Impact on dentists' costs. The cost incurred by dentists will increase on energy and utility bills to run the machinery of modern dentistry as well as the sanitary and infection control products needed to run a safe practice. All dental practices will be affected by this, not just NHS dentists. The cost of laboratory time has also increased. The BDA has made an estimate of the increasing cost of providing dental services in table 5 below.

Table 5 – Estimated rise in dental expenses[10]

Expense	Utilities	Lab costs	Fuel	General	Other	Weighted Total
Weighting	4.54	49.6	2.33	15.84	27.69	100
Increase	35%	15%	25%	11.7%	0	11.15%

    b. There is a possibility that these (and further) increases in dental costs could lead to closures of dental practices or a change in the business model from NHS dentistry to providing more private care. This would reduce patient access, particularly for those patients who rely on NHS dental care. This decline in provision of NHS dental services could therefore result in worsening population oral health and an increase in inequalities. There is no reliable way of

[9] DDRB - Doctors' and Dentists' Review Body

[10] Source: Action needed to combat dental inflation (bda.org)

estimating the number of dental practices that will be impacted by increasing cost pressures, though it is likely to fall increasingly on those under-performing practices covered by part (d) of the reforms.

61. This Impact Assessment covers relatively minor changes to the overall NHS dental contract, prior to a wider reform package to be negotiated. NHS England has agreed that the additional costs (from delivering extra UDAs) will be covered within the current funding envelope. The main elements of this package of reforms that impact UDAs and therefore costs are the re-weighting of band 2 treatments and proposed changes to skill mix.

62. Considering these in turn, the re-weighting process should allow dentists to be more fairly remunerated for complicated band 2 work. Although minor, this change is supportive in terms of providing additional remuneration, though benefits for dentists will be eroded by further inflation and it is possible that increasing costs could deter dentists from doing the more complex work this element is designed to address. For skill mix, there is the possibility that dental practices are unable to pay competitive wages for hygienists and technicians, and that they may seek to move to the private sector rather than NHS dentistry, therefore reducing the impact of this element of the reform package. Due to the uncertainty and complexity of this analysis, we have not attempted to model these potential effects.

63. Another element of the reforms that could be affected is the aim to reduce low-value, clinically unnecessary care. Given dental practices are under increasing cost strain, there is more incentive for some to increase the regularity of check-ups to subsidise increased costs. This could undermine the reform's aim of shifting dentists to doing more complex work. The effect of this potential issue has not been analysed. For the other elements of the reform package, the direct impact of inflationary measures (outside the general effects on dentistry) is assumed to be minor.

64. In terms of patient effects, those patients who are not non-exempt will continue to pay patient charges as outlined in Table 1 above. These have remained frozen since 2020, so NHS patients are likely to be shielded from the recent period of higher inflation. However, if patients are unable to access NHS dentistry they are likely to face the higher costs of private care, or become increasingly likely to simply defer care, leading to wider health issues at a later point.

Further analysis of the reform package options and wider impacts

Costs of individual options

65. Table 6 contains the financial variability due to only implementing portions of the contractual change, and also if the level of commissioner activity to recommission UDAs reclaimed from underperforming contracts was reduced.

Table 6 - Financial variability of proposed options

Additional cost net of PCR	Skill mix (£M)	Rebasing (£M)	Band 2 re-weighting (£M)	Cost of Website Update (£M)	Cost of PCR loss (£M)	All changes (£M) [11]
2022/23	0	6	5	0.18	24	35
2023/24	9	6	9	0.17	23	47
2024/25	16	6	9	0.17	22	53
2025/26	22	5	8	0.16	22	57

[11] This total is a sum of the individual components and does not include monies clawed back at the end of the financial year for under-performance as this can't be applied to individual components of the reform. Nor does the total cost account for an interaction or overlap of individual components of the reform. This was modelled by NHSE and resulted in larger overall costs, however DHSC do not have access to the modelling undertaken and therefore this total has not been included in the impact assessment.

2026/27	27	5	8	0.16	21	61
2027/28	26	5	8	0.15	20	59
2028/29	25	5	8	0.14	20	57
2029/30	24	5	7	0.14	19	55
2030/31	23	5	7	0.14	18	54
2031/32	23	4	7	0.13	18	52
Total	**195**	**51**	**76**	**1.5**	**207**	**530**

Impacts on the wider health and care system

66. It is expected that improved patient access through additional UDAs would prevent strain on other areas of the NHS. This would reduce the number of patients presenting at A&E with dental issues, hospital admissions for oral care, and GP appointments relating to dental problems. In 2020-21 60,506 patients presented in A&E with a first diagnosis of dental abscess or dental caries, which was 0.4% of all first diagnoses[12]. It is likely that the pressure on A&E due to dental issues would be reduced with improved patients access from the reform.

67. There is a potential risk that reducing the amount of regular dental check-ups could lead to an increase in missed or delayed diagnoses of mouth cancer and type-2 diabetes, according to a report from The Association of Dental Groups (ADG)[13]. This would therefore place pressure on other NHS services who would pick up the aftermath of these diseases.

[12] Hospital Accident & Emergency Activity 2020-21 - NHS Digital

[13] ADG-Report_The-urgent-need-to-level-up-access_April-2022_V3.pdf (theadg.co.uk)

Consideration of inequalities

68. There are two factors of the proposed changes that will have a positive impact on health inequalities, with others likely to be neutral.

    a. The first is the Band 2 re-weighting. Studies have shown that there is a correlation between deprivation and access to dental care with a disproportionate number of deprived people needing intensive dental care, i.e. 3 or more teeth needing fillings or extractions[14]. The change to reimburse dentists more for these treatments should remove the current disincentive for dentists to provide this care. This should benefit deprived populations to reduce inequality, though data is not available to fully test this assumption.

    b. The second is the re-allocation of UDAs from underperforming contracts. This allows regional NHSE, and in future ICB commissioners, to re-allocate UDAs to areas of highest need. This process will allow for more care to be delivered to populations in most need. We intend to develop access metrics that allow for monitoring of this intended change.

        i. Due to data limitations, it is difficult to determine how many underperforming contracts are held in deprived areas. However, underdelivered contracts will only be re-allocated within ICB areas and to areas of most need as determined by commissioners. Advice from NHSE is that this could include investing under-spent from contracts into improving dental services in deprived areas within the ICB.

        ii. Also, the commissioning of UDAs has been based on historical allocation, so it is possible that there are cases where non-delivery could be due to low dental demand in the area. In such cases under-delivery would not represent inequality.

69. Other factors have not been quantified due to data limitations, however Table 7 shows a distributional analysis across regions for extra UDAs projected to be delivered in 2022/23. The estimated cost of additional UDA that can be delivered by overperforming contracts varies across the country with the lowest in South West (£253m) and highest in the Midlands (£475m). The percentage of extra cost on contracted UDA was lowest in South West (1.6%) and highest in London (4%). Practices that have capacity to deliver these UDAs are spread within ICBs. This means that undelivered UDAs can be re-allocated based on need within the ICB.

Table 7 - Projected cost of additional UDA for 2022/23

Regions	Contracted UDA Financial Value (£m)	Projected cost of UDAs that can be delivered through additional performance (£m)	Additional cost compared to contract value
London	421	17	4.0%
Midlands	475	18	3.8%
North East and Yorkshire	463	17	3.7%
East of England	279	9	3.3%
North West	403	12	3.1%
South East	377	9	2.5%
South West	253	4	1.6%

[14] NHS dental charges and the effect of increases on access - an exploration.pdf (york.ac.uk)
See pages 28 - 34 for analysis on trends in NHS dentistry by CCG deprivation level

Monitoring and Evaluation

70. We currently monitor a number of areas of the dental contract. They include number of UDAs commissioned and delivered, number of dentists providing NHS services, unique patients seen and dentists working patterns and morale. To monitor the changes, we intend to continue monitoring the metrics already seen, but also develop new metrics to specifically monitor changes being made here.

71. The logic model in Annex B identifies areas that would benefit from on-going monitoring, these are outlined in Table 8. For most measures metric development would be possible. However, where the contract change is likely to have an impact on workforce morale, we intend to carry out qualitative work. It is possible the NHS Digital dental working patterns and morale survey could be adapted to enable us to monitor some of these impacts and NHSE are exploring this possibility. In addition to the additional data collections changes need to be made to the FP17 claim form to include the differentiation in band 2 courses of treatment and identification of where a DCP has delivered a course of treatment.

72. There may be initial administrative bottleneck in the flow of data required for monitoring and evaluation, but this is expected to normalise over time.

73. These changes are the first step in a longer process of dental structural reform. We intend to use information gained from the impact of these changes alongside other modelling and information in designing the next stages of this reform process.

74. To better understand the issues around unmet needs, we are currently investigating the commissioning of research on the Impacts of unmet need and "dental deserts". We have taken a bid to the DHSC R&D committee. This has successfully gone through Stage 2 and is expected to be included in an NIHR PRP open competition round in spring 2023. Data from the research will enable us to measure the extent to which the needs are fulfilled through improved dental access following the intervention.

Table 8 – Areas for monitoring and evaluation

Contract change	Measure	Expected direction	Proposed monitoring approach
Increased participation in dental care by DCPs (Skill mix)	Which patients (demographics) have treatment provided by DCPs. It would be undesirable if access to DCPs Vs dentists were not fair for different demographics.	Unbiased access to dentists Vs DCPs	Quantitative analysis
Increased participation in dental care by DCPs (Skill mix)	on-going monitoring	Increased participation	Qualitative work/surveying to understand how this is working within practices
Increased use of risk-based recalls	Unique patients seen	Increase in unique patients seen	Existing metric
Increased use of risk-based recalls	Percentage of courses of treatment in each band	Reduction in Band 1 courses of treatment	Metric using existing data
Increased use of risk-based recalls	Average recall intervals	Reduction in percentage of patients on 6 monthly recalls	Metric using existing data
Band 2 re-weighting/higher needs patients	Percentage of courses of treatment in each band	Increase in complicated band 2 courses of treatment	Metric using existing data

Band 2 re-weighting/higher needs patients	Ratio exempt/non-exempt patients	Increase in fee exempt patients seen	Metric using existing data
Minimum UDA value	Impact on workforce morale	Improved morale	Survey/qualitative work
Minimum UDA value	Impact on UDAs delivered	Uncertain	Metric using existing data
Contractually easier to re-base contracts and allow over performance	More UDAs re-distributed data collection needed from regions/ICBs	Increased number of contracts with UDAs commissioned changing each year	Metric using new data collection
Contractually easier to re-base contracts and allow over performance	Performance against additional 10% over delivery allowed data collection needed from regions/ICBs	We would like to see that where increased performance has been allowed it is delivered	Metric using new data collection
Contractually easier to re-base contracts and allow over performance	Performance against contracted UDAs	Improvement in percentage of commissioned UDAs delivered	Existing metric
Contractually easier to re-base contracts and allow over performance	Unique patients seen	Increase in unique patients seen	Existing metric

Summary and preferred option with description of implementation plan

75. By updating the contracts through statutory instruments, dentists will be more fairly remunerated for complex Band 2 work and will be able to deliver up to 110% of their contract value through the recommissioning of undelivered UDAs. There is evidence that contracts with very low indicative UDA values find recruitment and retention of staff challenging and this could further compound access issues for patients. In applying an uplift to these rates, there is potential to support recruitment and retention in areas where access is challenging, raising the likelihood that more patients in underserved areas can get access to care.
76. To address this issue, the GDS and PDS contracts, the dental regulations and the SFE detail will be updated to reflect the changes, as well as reiterating NICE guidance to dental practices and commissioners.
77. We propose that these amendments are published in November 2022, with better enabling the NHS to manage persistent contract under-performance through re-basing the contract with the dentist to come into effect for the next financial year (April 2023).
78. The other proposals in Dental System Improvements are guidance based and we will work with NHSE to ensure this guidance is reiterated to providers and adhered to.
79. The ongoing operation and enforcement of contracts is in the remit of NHSE and local commissioners.
80. The approach has not been tested in practise; however, the proposed changes have been raised with full engagement from the profession. The improvements have all been refined through negotiation with the BDA and wider dental sector in addition to patient group representatives.

Direct impact and benefits on businesses

81. The main direct cost to businesses should be the impact on underperforming contracts which occur by choice due to the practice's unwillingness to conduct NHS treatments. It is expected that the incentives offered by the reform will increase dentists' willingness to deliver NHS treatment.

82. Similarly, through UDA contract rebasing, businesses who exceed their contracted UDA targets will gain financially from conducting re-allocated UDAs.

83. The package of reform is expected to increase patients access and care. This increased access could potentially attract a move of some patients from private dental to NHS, especially those whose move from the NHS to private were solely due to reduced access and quality care. This could amount to a loss in revenue for private dental businesses. The extent of potential move to NHS dentistry cannot be evaluated at this time due to non-availability of credible data, and the difficulty in modelling patients' behaviour around the reform.

84. The LaingBuisson market report[15] identifies that in recent years there has been growing demand for private dental care, however this is not only due to declining access in NHS dentistry but more on the demand for cosmetic dentistry and facial aesthetics. It is therefore not expected that increased NHS dental access in the reform would attract much movement of private patients back to NHS.

85. It should be noted that the main essence of the reform is to encourage more NHS work, however choice remains with dentists whether to conduct private or NHS dentistry, but they will be incentivised to do more activity under the NHS. We anticipate that the reforms will not lead to a drain or shift from private to NHS and dentists remain able to choose the services they offer on NHS dentistry and what they offer privately.

86. Businesses who have been relying heavily on frequent patients recall in achieving their allocated UDA targets may be concerned about meeting their targets under the new NICE guideline compliance. This UDA loss should incentivise these dentists to do more Band 2 work as part of the band 2 re-weighting element of the reforms. This has not been costed.

87. The current inflation and rising cost of living could also be a factor that would motivate more patients to move from private dentistry to NHS. If that happens it could present some business loss to private dental practices. However as stated earlier, businesses are able to choose to do more of NHS work. Also, the LaingBuisson report shows that cost isn't the only factor driving demand for private dentistry but other factors including cosmetic dentistry and facial aesthetics, therefore patients' movement from private to NHS could be minimal.

88. There could be potential for some movement from NHS to the private sector by patients who may not be satisfied with their allocated recall intervals due to dentists' adherence to the NICE recall guidance. Private businesses will gain from this; however, the numbers of patients are expected to be low.

89. The recent high inflation is likely to increase dentists' operation cost both in private and the NHS. While the private practices would more easily increase the cost of their services, NHS practices are limited to the contract uplift formula agreed between ministers and DDRB[16]. Dentist costs due to inflation has not been modelled.

Sensitivity Analysis

90. The number of extra UDAs that would be generated by the full package of reform has been modelled. Also modelled within the full package is the number of extra UDAs that will be released due to skill-mix and by underperforming contracts through contract rebasing. These have been costed using a UDA rate of £28. Additional patient access that will result from all extra UDAs has also been computed at the rate of 3.08 UDAs per patient seen. This has been included in the sensitivity analysis shown in Annex C.

[15] LaingBuisson report 2017/18 – Dentistry UK Market Report

[16] DDRB - Doctors' and Dentists' Review Body

Annex

Annex A

Table 4c – Breakdown of released UDA's from preferred option – 2022/23 to 2031/32

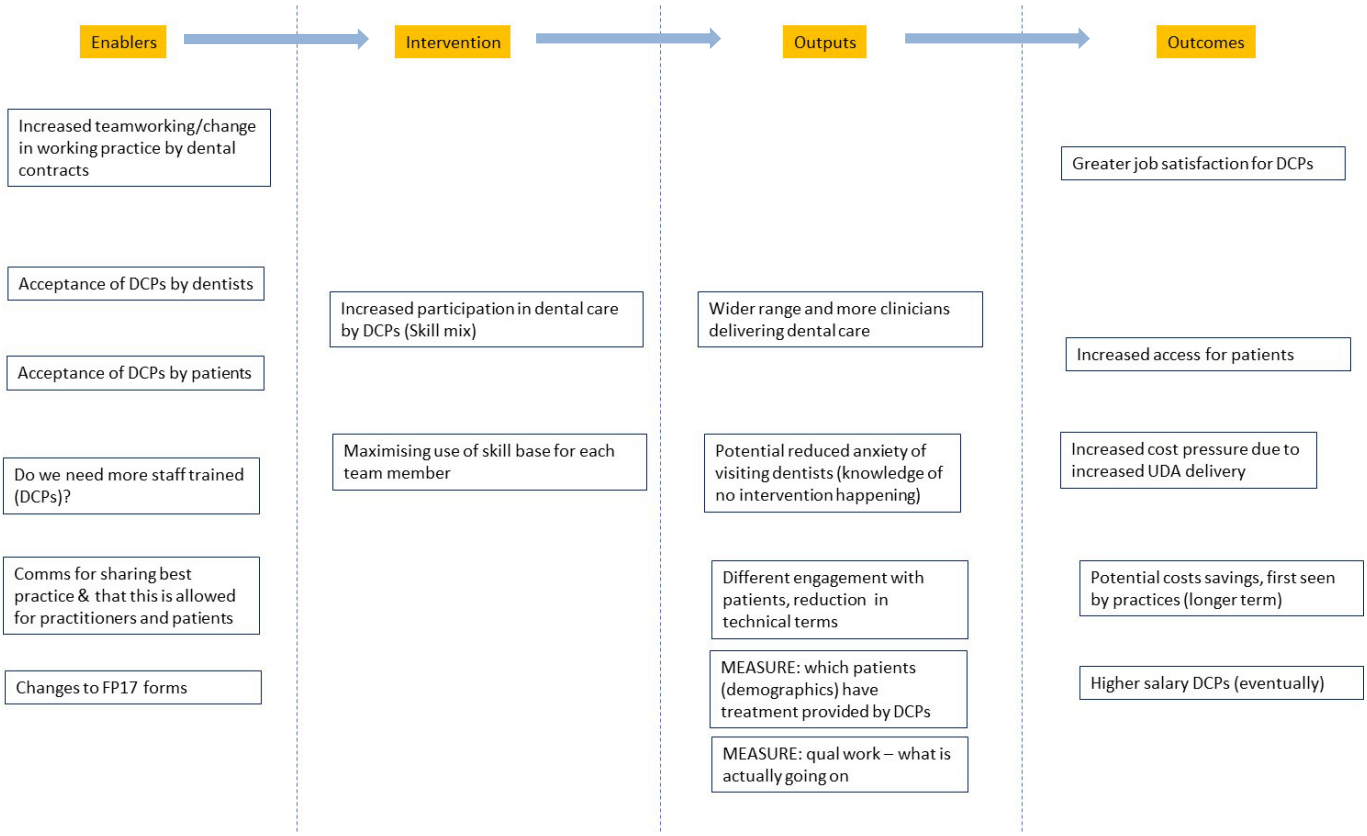
Skill mix, rebasing and band 2 re-weighting	UDAs released by re-basing (cumulative) (M)	Potential UDAs over delivered by contractors (M)	Additional cost at £28 per UDA (£M)	Additional cost net of PCR (£M)	Discounted Cost (£M)	Additional UDAs delivered by contractors (M)
Baseline (2019/20)		-	-	-		
2022/23	-	1.0	£16	£11	£11	0.6
2023/24	-	1.4	£36	£24	£23	1.3
2024/25	1.1	1.8	£48	£32	£30	1.7
2025/26	1.6	2.1	£59	£40	£36	2.1
2026/27	1.9	2.5	£69	£46	£40	2.5
2027/28	2.2	2.5	£69	£46	£39	2.5
2028/29	2.5	2.5	£69	£46	£38	2.5
2029/30	2.9	2.5	£69	£46	£36	2.5
2030/31	3.2	2.5	£69	£46	£35	2.5
2031/32	3.5	2.5	£69	£46	£34	2.5
Total				**£384**	**£322**	**20.5**

Annex B – Logic Model

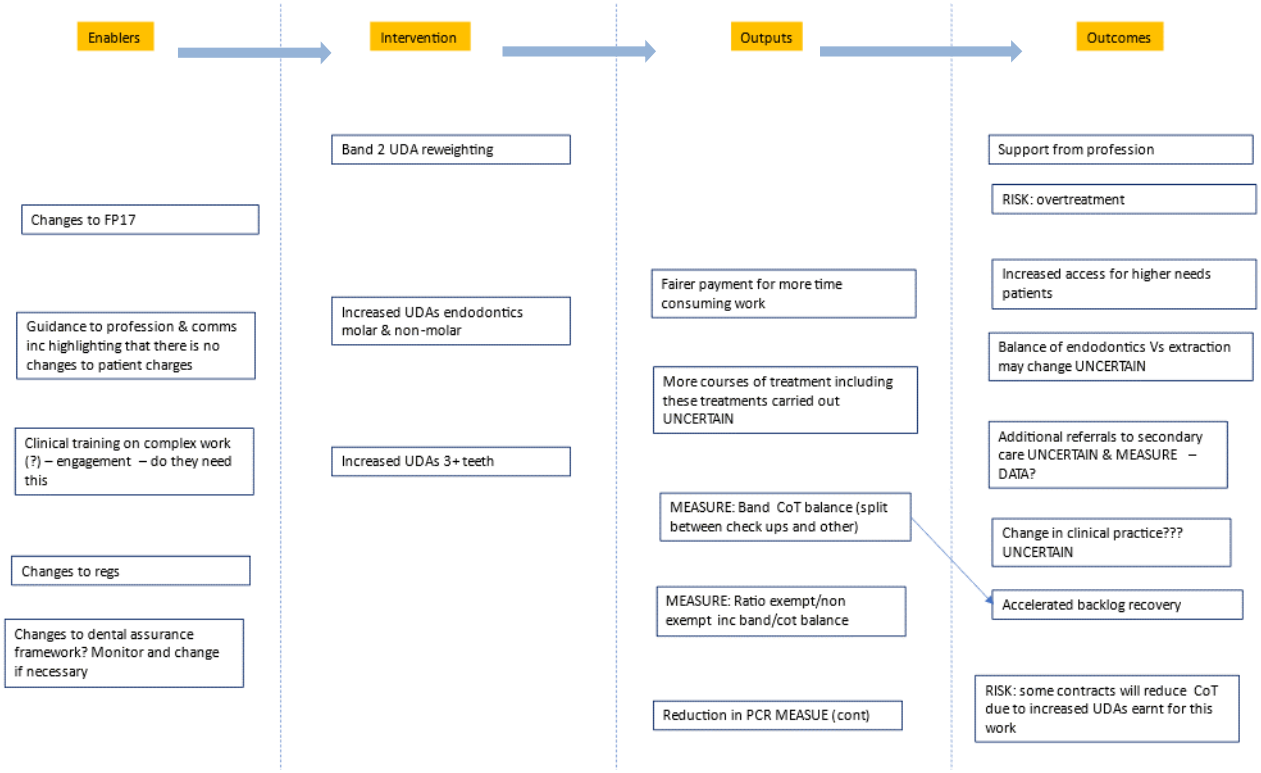
Background assumptions

- Dentists continue to work at the current (or pre covid) activity levels
- The dental funding envelope of currently commissioned UDAs is available to spend

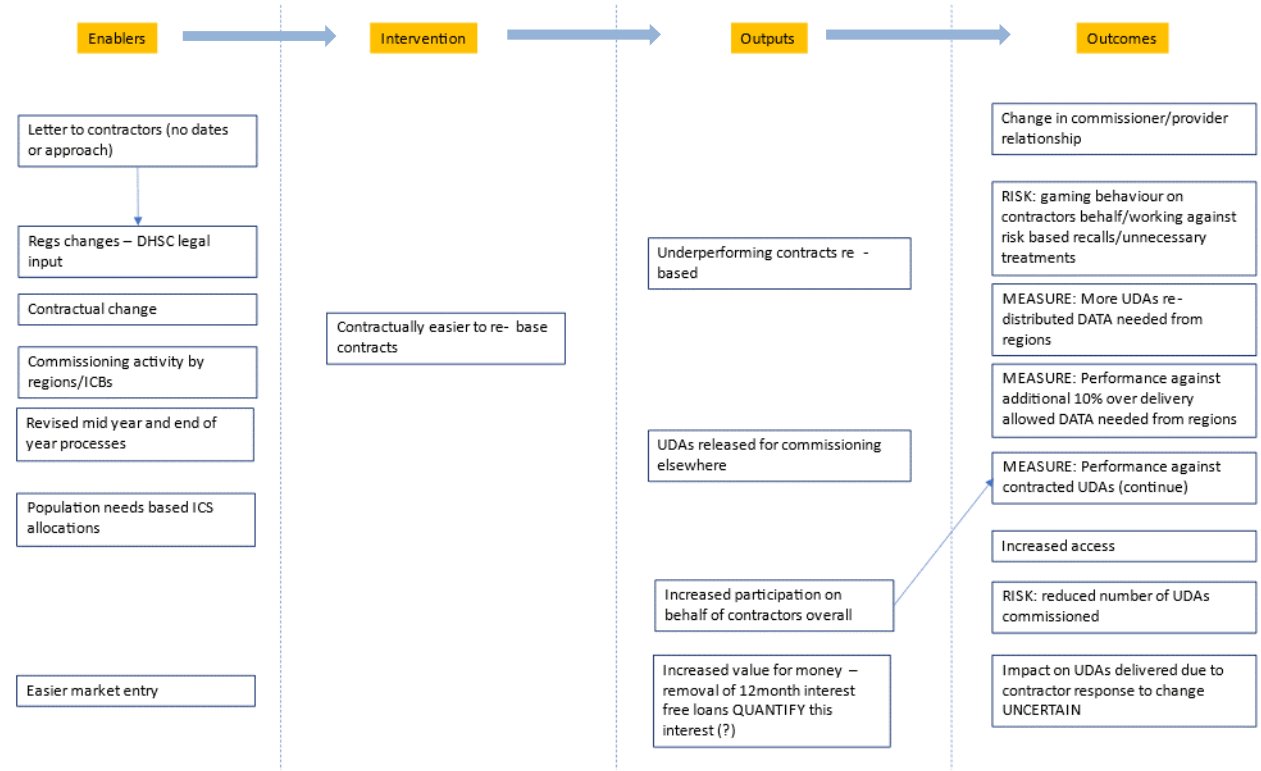
Participation in dental care



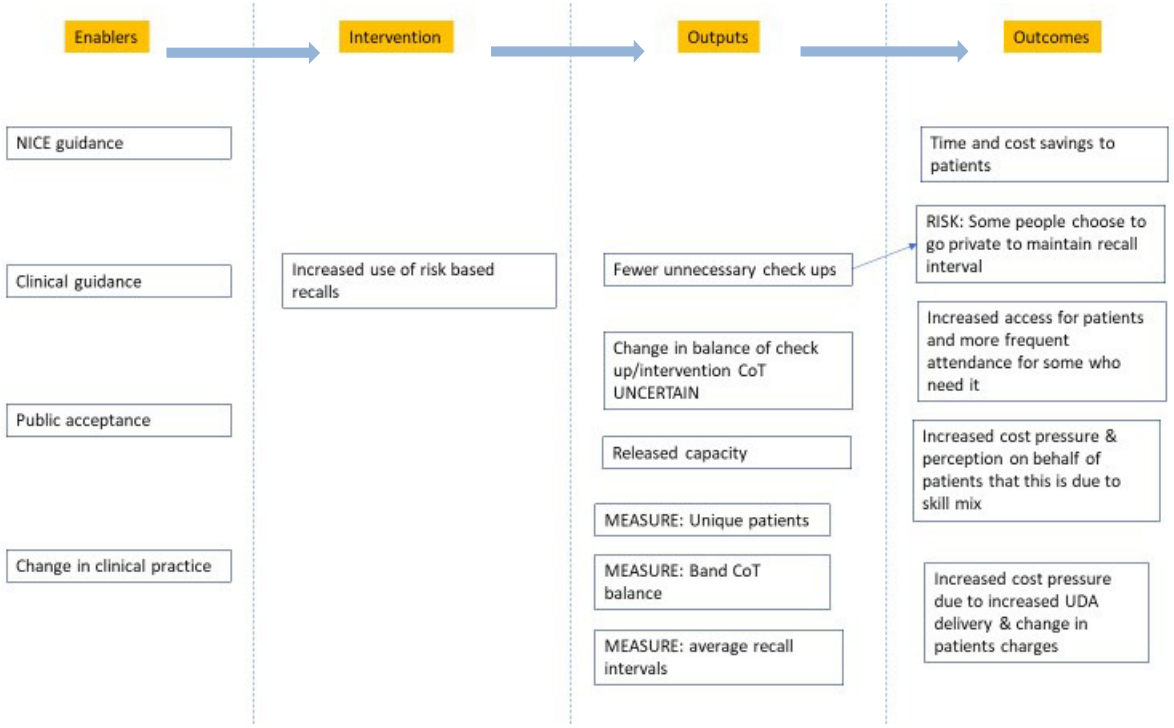
Re-weighting band 2 courses of treatment



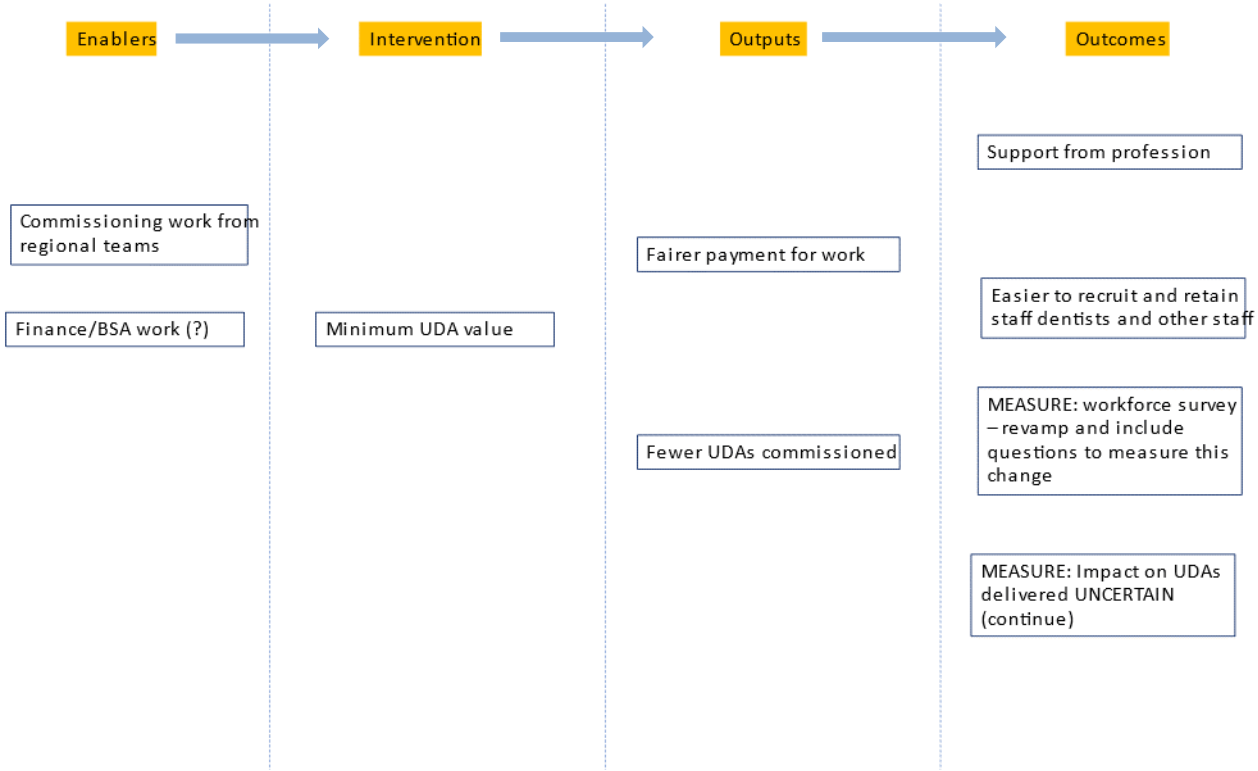
Managing persistent under-performance



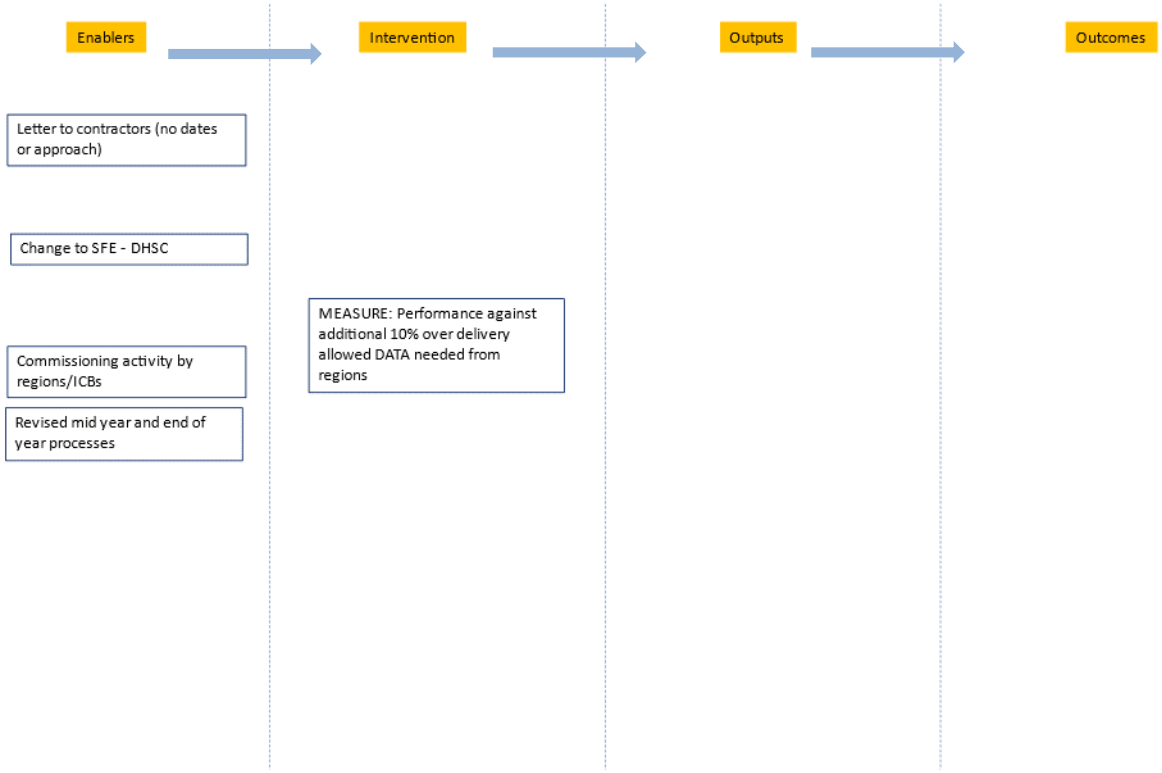
Reducing low-value, clinically unnecessary care – risk-based recall



Uplifting very low UDA rates



Evaluation



Annex C – Sensitivity Analysis

Below is a sensitivity model for extra UDAs expected to be generated by the package of reform. UDA from contracts rebasing has been considered for impact on businesses and patients' groups.

Sensitivity Analysis considerations

Sensitivity analysis has been carried out looking at the possible scenarios that could occur and their possible impact on businesses and patient groups.

- Improvement in the performance of underdelivering contracts means that less UDAs will be available for rebasing. On the other hand, performance drop means that there will be more UDA available to be re-allocated.
- For overperforming contracts, the key success factor would be their ability/capacity to absorb UDAs released by underdelivering contracts.

The performance/capacity balance stated above will depend on the dental practices' response to the various elements in the package of dental reform.

Underperforming contracts (performance)

Reasons to improve delivery –

- less UDAs available for rebasing
- Increased delivery of UDAs in Band 2 re-weighting - highly likely
- Increased workforce due to skill mix - Likely
- Increased drive to deliver, as they would no longer gain the incentive of interest free advance payment - Possible

Reasons for drop in delivery

- With the uplift of UDA rate to £23, the number of UDA in the contract will reduce. This will happen in contracts with a high number of low UDA contracts – negligible

Overperforming contracts (Capacity)

Reasons for capacity increase

- Attracted and motivated by the incentive of getting more UDAs allocated, and if they have capacity to improve - Possible
- Increased workforce due to skill mix - Likely

Reasons for capacity decrease

- With the uplift of UDA rate to £23, the number of UDA in the contract will reduce. This will happen in contracts with a high number of low UDA contracts – negligible
- Increased delivery of UDAs in Band 2 re-weighting will take up many UDAs in a Band 2 course of treatment and result in reduced capacity to take on more UDAs - highly likely

Shown below is an analysis of possible effects that performance changes could have on patient access and costs expected from the reform. Estimated patient access and costs are shown across performance changes incrementing by 5% up to 50%.

At 5% performance change for the skill mix and re-basing reforms over the 10 year period will generate 6.3m patient access costing £306m while 3.3m patient access costing £161m is expected if performance changes by 50%. This means that even the possibility of a wide variation up to 50%, extra patient access will be expected as compared to the 'do nothing' option. As discussed above, the last five years costs are indicative, there is potential for a wider range of benefits in the later years if reforms were to exist beyond the five-year period modelled by NHSE.

Sensitivity Analysis - Number of additional patients and cost on changing performance levels (millions)

			Additional Patient Access and Cost										
Skill mix, rebasing and band 2 reweighting	% Additional UDAs delivered (compared with 2019/20)	Additional UDAs delivered by contractors	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%
Baseline (2019/20)													
2022/23	0.76%	562,696	0.18	0.17	0.16	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.09
2023/24	1.72%	1,277,942	0.41	0.39	0.37	0.35	0.33	0.31	0.29	0.27	0.25	0.23	0.21
2024/25	2.31%	1,715,132	0.56	0.53	0.50	0.47	0.45	0.42	0.39	0.36	0.33	0.31	0.28
2025/26	2.85%	2,109,437	0.68	0.65	0.62	0.58	0.55	0.51	0.48	0.45	0.41	0.38	0.34
2026/27	3.33%	2,468,887	0.80	0.76	0.72	0.68	0.64	0.60	0.56	0.52	0.48	0.44	0.40
2027/28	3.33%	2,468,887	0.80	0.76	0.72	0.68	0.64	0.60	0.56	0.52	0.48	0.44	0.40
2028/29	3.33%	2,468,887	0.80	0.76	0.72	0.68	0.64	0.60	0.56	0.52	0.48	0.44	0.40
2029/30	3.33%	2,468,887	0.80	0.76	0.72	0.68	0.64	0.60	0.56	0.52	0.48	0.44	0.40
2030/31	3.33%	2,468,887	0.80	0.76	0.72	0.68	0.64	0.60	0.56	0.52	0.48	0.44	0.40
2031/32	3.33%	2,468,887	0.80	0.76	0.72	0.68	0.64	0.60	0.56	0.52	0.48	0.44	0.40
Total patient access (m)			**6.6**	**6.3**	**6.0**	**5.7**	**5.3**	**5.0**	**4.7**	**4.3**	**4.0**	**3.7**	**3.3**
Total Cost (discounted) (£m)			**322**	**306**	**290**	**274**	**258**	**242**	**225**	**209**	**193**	**177**	**161**

Summary of Costs

	Total cost (Discounted)		
	Low UDA release (£m)	**Medium UDA release (preferred option) (£m)**	**High UDA release (£m)**
2022/23	32	35	37
2023/24	42	47	51
2024/25	46	53	59
2025/26	50	57	65
2026/27	52	61	70
2027/28	51	59	68
2028/29	49	57	66
2029/30	47	55	64
2030/31	46	54	61
2031/32	44	52	59
Total Cost (Discounted)	**460**	**530**	**601**

Cost Breakdown for the Preferred Option (discounted)

	Cost of All UDA releases (£m)	Cost of Website update (£m)	Cost of PCR loss (£m)	Total cost (£m)
2022/23	11	0.18	24	35
2023/24	23	0.17	23	47
2024/25	30	0.17	22	53
2025/26	36	0.16	22	57
2026/27	40	0.16	21	61
2027/28	39	0.15	20	59
2028/29	38	0.14	20	57
2029/30	36	0.14	19	55
2030/31	35	0.14	18	54
2031/32	34	0.13	18	52
Total Cost (Discounted)	**322**	**1.5**	**207**	**530**

Potential variation to the model

The following error margins were applied to calculate low and high costs scenarios for the model. The margin percentages were determined in discussion with NHSE.

Items Costed	Potential error margin to the Model	Reasons for potential error margin
Skill-mix	25%	Margin of error could vary widely due to workforce issues, limitations due to dentist's estate, acceptability of change and willingness of dentists to deploy the services of other dental professionals
UDA rebasing	15%	We expect that there is likely to be a wide variation in how underperforming practices will respond to the reform. There could be increased drive to achieve target so as to avoid losing UDA
Band 2 Reweighting	5%	We expect error margin to the model in Band 2 re-weighting and adherence to NICE recall guidance
Cost of Website update	5%	We expect the margin of error to be small based on advice from BDA
Cost of PCR loss	5%	We expect small variations in the estimate of PCR loss as this has been modelled using a more re-assuring data