

From dental contract to system reform: why an incremental approach is needed

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Key points

This article describes the approach taken by NHS England since it took the lead for NHS contract reform in England in March 2021.

Headline findings from contract prototype testing are described.

Key principles taken from general approaches to health policy reform are described which explains why the best approach is to approach reform as incremental change with an emphasis on implementation and a focus on system reform, rather than on just contract reform.

Abstract

Dental contracts are required to simultaneously satisfy three seemingly unreconcilable requirements: access based on need and not ability to pay (equity); minimisation of costs per unit output (efficiency); and paying for it all without breaking the bank (cost). In dentistry, further tensions exist, such as how to incentivise prevention while maintaining optimal efficiency and minimising opportunism, even though the dividing line between what is too much or too little treatment is often blurred. This is a classic type of policy problem which can be understood in terms of the properties of wicked (or stubborn) problems where stakeholders see the problem differently. There is no obvious solution and every attempt at a solution leaves a mark. This means that it is inappropriate to be talking about a new dental contract as the one perfect resolution to a problem which has eluded us since the 1990s, but rather we need to seek a 'better' arrangement achieving an acceptable equilibrium balancing various tensions. These types of policy problems also tend to be a 'cluster of interlocked problems with interdependent solutions'. We need to recognise that while dental contracts can shape system outputs, outputs are also determined by a range of wider system factors, such as culture and team-working, which determine how the system works, what is produced and for whom. Thus, we should be talking about the dental system, rather than dental contract reform. Further lessons from health policy are that the process of reform can be as complex as the content of reforms. Success in reform is dictated more by how the process is applied rather than purely on what contents are formulated, so implementation is key and a staged or incremental approach to reform is advised. This paper outlines the approach to dental system reform taken by NHS England since March 2021.

Why an incremental approach is needed

Charles F. Kettering is known as an American engineer, businessman and inventor of a range of innovations, from electrical air conditioning to cash registers. Before he invented the ignition system, cars were hand cranked. He was a visionary in many ways, leaving us with several pithy adages, including that 'a problem well-stated is a problem half solved'. The point being that as we consider the challenging issues associated with reform of the dental contract,

it is helpful to take a moment to fully explore the nature of the problem itself – for it is by identifying the nature of the problem that the best way to approach addressing it starts to emerge. More of this in a moment.

NHS England took over as lead for dental contract reform in England in March 2021. This article describes some of the work which has taken place since then to inform the first set of contract changes since 2006, as recently announced. It also though, importantly, includes a discussion about the true nature of the problem itself and looks forward. Discussing the nature of the problem is not a novel preoccupation, however. For over 50 years, the processes of identifying problems and conceiving the best way to approach resolving them have been seen to be symbiotic.¹ The two activities go together like right and left shoes. Moreover, for decades, problems have been classified as being either

tame or wicked, with properties attributed to each type – although later work has extended this to include a sub-set of wicked problems (super-wicked problems) where additional characteristics, such as time running out and stakeholders being part of the problem, feature.^{1,2}

Tame problems are ones which are quite easy to define, like a puzzle, where although the problem can be complicated, a solution is relatively easily agreed on and approached in a linear fashion. There is a right or a wrong answer, like the solution to a difficult maths question. But a whole range of public policy issues are not like this at all – whether it be the identification of a location for a new road, modifying school curricula or dealing with crime on the streets.¹ Policy problems are instead classified as 'wicked' problems because they have contradictory and changing requirements; are hard to define and solve

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because different stakeholders see the problem differently; and there are usually no clear solutions.¹ The authors of the original seminal work though were conscious that labelling problems as ‘wicked’ came with a danger of somehow imbuing social policy issues with malicious intent and thus unintentionally personifying particular policy areas as ‘ethically deplorable.’¹ Since this would be inappropriate and an extended explanation with alternative descriptors was offered at the time, including that these types of problems are inherently ‘stubborn’, we will hereafter use the term ‘stubborn problem’ to avoid any potentially emotive connotations associated with a ‘wicked’ label. That does not mean this relegates these policy issues as being those unable to be resolved, but rather, this just sets them apart from tame problems where solutions tend to be relatively linear, clear-cut and unambiguous.

Running through the established characteristics of ‘stubborn’ problems, it is remarkable how quickly and closely this resonates with the policy area of dental contract reform. A revealing characteristic of stubborn problems is that the more you attempt a solution, the more it reveals itself to you. Another characteristic of stubborn problems which resonates with the dental contract reform scenario is that every attempt to find a solution leaves a mark. Whereas a lost chess game is rarely consequential for another chess game or for non-chess-players, for ‘stubborn’ problems, every solution attempted leaves a trace which cannot be undone and impacts future activity, as we know well from the reverberations of various remuneration pilots over the years. Solutions to stubborn problems are also neither right nor wrong but better or worse. In solving a chess problem or a mathematical equation, the problem-solver knows when the job is done as there are criteria that tell when the/a solution has been found.¹ But, for stubborn problems, the end point tends to be more ‘That’s good enough’ or ‘I like this solution’. Formulating dental contracts which satisfies all parties is a classic stubborn problem.

There are many contradictory dimensions to the dental contract conundrum: How do we promote minimally invasive, preventive dentistry while maintaining optimal efficiency? How do we reward improved health outcomes where attribution is difficult because a lot of responsibility for improving health rests with the patient themselves? How do we promote equity in the system so that patients who

are most in need and likely to benefit are prioritised over others, while still recognising that continuity of care is important to both patients and dentists and that compliant, ‘loyal’ patients form the backbone of practices as autonomous business enterprises? There is an associated tension between principles of distributive justice (unequals must be treated unequally) and professional moral obligations to do good (beneficence) to individual patients.³ All within fiscal restraints and with the strain of post-pandemic backlogs which we have in common with healthcare generally.

There is much talk about opportunism in dentistry. This attributes a self-interested motive on parties involved in the contract and a degree of rationality in contractors setting out to exploit loopholes for their own benefit, for example, by cherry picking patients who require the least effort to meet contractual requirements.⁴ Others have put forward a more benign interpretation and point to contract holders acting as ‘captive of the institutional environment in which they exist’ – explaining behaviour as daily activities framed by socially constructed patterns of practices emergent out of a need to meet the many, sometimes conflicting, requirements of the various roles they play.^{5,6,7} These are classic lessons drawn from evidence across healthcare and public policy generally and we should expect them to apply to dentistry too. On the other hand, dentistry has proved especially liable to supplier-induced demand (doing more treatment than is strictly necessary) since the dividing line between what is too much treatment as opposed to appropriate treatment tends to be vague and difficult to determine in individual cases.^{8,9,10,11} Studies have consistently shown dentists increase interventions when fees are attached to procedures^{9,12} and this is a worry, especially in an era of preventive dentistry, where the strategy is to incentivise fewer, not more treatments per patient.

On the other hand, payments attached to activity are said to ensure efficiency in the provision of dental care – or a minimisation of costs per unit output – which is important when funding is tight because more patients can receive care for the same money.¹³ Making sure that at the same time we prioritise access to care based on need and not the ability to pay (equity) presents the third part of the efficiency (generating incentives to reduce costs and improve quantity and quality) versus cost (paying for it all without breaking the bank) versus equity triangle.¹⁴ Reconciling these

three tensions is said to be the ‘overarching bane’ of recent times and this applies not just to dentistry.¹⁴ There is a continual search for a sustainable equilibrium and typical of stubborn problems, as time moves on, the aspects which need to be prioritised, as well as stakeholders views, are subject to change. Anyone who claims to have a simple solution to these issues, presenting this as an obvious, yet overlooked approach has then, in all probability, not fully appreciated the nature of the problem we are dealing with. More likely, they are only articulating a single stakeholder view.

These issues have reverberated around dental policy for decades, extending back to the 1990s and beyond, when there was recognition of the need to move away from a fee-per-item system to better incentivise prevention.¹³ There have been various cycles of piloting over the years but also a struggle to identify a satisfactory alternative system meeting all requirements demanded of it. Although there is not the space here to detail all the various iterations of remuneration alternatives, piloting and findings where various aspects of the problem have been revealed, perhaps the most important given our current situation is data which have been recently generated after three years of prototyping. Prototype remuneration models were divided between a capitation element for which practices were expected to have a minimum number of capitated patients on their list over a 36-month period and an activity element against which practices were expected to deliver a minimum level of activity. The two models tested represented different blends of capitation and activity. As well as capitation and Units of Dental Activity payments, a series of quality indicators (dental quality and outcomes framework [DQOF]) were used and patient satisfaction data collected, although the DQOF was not applied as a contractual mechanism and patient satisfaction responses were only received from one-quarter of patients involved. Piloting of prototypes was led by the Department of Health and Social Care, with analysis by NHS Business Services. Headline findings are that: 1) prototype practices cared for significantly fewer unique patients than comparable practices with non-prototype general dental services (GDS) contracts; 2) using patients exempt from dental charges as an indicator of equity of access, prototypes saw fewer exempt patients than matched comparative practices; 3) prototype activity was lower than non-prototypes, for example, across three activity bands (Band 1, 2 and 3); 4)

record of prevention in prototypes' as indicated by a) reported adherence to *Delivering better oral health* guidance and b) rates of application of fluoride varnish (FV) were not much better or poorer than for non-prototypes (4% FV application for adults in prototype practices versus 3% non-prototypes and 48% FV application for children in prototypes versus 53% non-prototypes). On the other hand, adherence to recommended National Institute for Health and Care Excellence recall periods¹⁵ was more in line in prototype practices with what would be expected based on patients' oral health risk. Finally, data on the clinical effectiveness of the prototype model were inconclusive, since one-quarter of adults and children did not return for a subsequent review of their oral health in prototypes and no control group clinical outcome data for comparable GDS patients were available. This is not an unusual problem for studies in this area.¹⁶

Taken together, prototype findings do not provide the basis of a compelling argument for a national roll-out, particularly taken in the post-pandemic context. It is hard to make a strong case for the model as implemented according to our equity, efficiency and cost criteria. Nevertheless, prototypes do provide us with some important insight into the issues which need to be addressed, for example, although the oral health risk assessment may be sound in principle, the process of implementation and enrolling patients into a new system needs simplifying to make it sustainable and implementation in general needs to be carefully considered as an important ingredient for any successful reform. The latter here is an issue identified not just in the context of prototype work, but in other studies where dental remuneration reform has been trialled.¹⁷ Take, for example, natural experiment data from Scotland on the impact of introducing a financial incentive to stimulate adherence to clinical guidelines, which recommend that all children aged two years and over attending dental practices should receive FV twice per year, irrespective of caries risk.¹⁸ Although rates of FV did increase after introduction of a fee, rates were still significantly lower than recommended guidelines. This is because other factors, not just payment *per se*, define clinical behaviour.¹⁸ On the other hand, applying financial incentives can contribute to reform and even be cost-effective.¹⁹

So, while dental contracts can shape system outputs, outputs are also determined by a range of wider system factors. If we wait until we have devised a 'new dental contract' to fix

all the challenges facing the system, we are likely to be disappointed. There will never be one perfect remuneration solution: a principle synonymic with what we would expect of a stubborn problem – that there is no 'right or wrong' arrangement, only better or worse.²⁰ Some have even argued that the word 'solution' be banned from health reform vocabulary.²¹ Instead, addressing the problem as dental 'system' rather than just dental 'contract' reform is the wisest thing to do. This is not the same as 'giving up' or losing hope – it is just recognition of which strategy is most likely to yield success given the complexity of reform challenges. Yes, it is important to work at better aligning payment and governance mechanisms in a way which maximises strategic aims, but we also need to simultaneously look at supporting the range of other factors, such as culture and team-working, which determine how the system works, what is produced and for whom. Dental 'system reform' recognises that stubborn problems tend to represent 'a cluster of interlocked problems with interdependent solutions' rather than a single identifiable problem,²¹ as most people who have scratched their heads over how to make improvements to dental contracts will know.

Dental services, like the rest of healthcare, demonstrate many of the characteristics of complex systems in that there are many key actors, such as patients, clinicians, professional bodies, commissioners, policymakers and the wider public, each interacting with others in the system and all of which are affected by prevailing social attitudes and norms (ideas about when it is appropriate to seek healthcare, what should be provided and for whom).²² This includes the chairside dyadic relationships between dentist and patients but also the actions and narratives arising across the profession as a whole, represented for example in mainstream media and social media. It is through these interactions or strings of relationships that prevailing culture and context arises and the system is determined.²³ Since we know it is impossible to fully understand and model the complex interactions between the environment, people and organisations, changes to remuneration systems can never be reduced to a set of choices between idealised alternative finance and payment mechanisms.²⁴ Contractual (payment) arrangements represent 'formal rules' of the system but 'informal rules', behavioural norms and shared expectations about ethical behaviour are also instrumental

in affecting outcomes.⁷ Thus, when health service reform is on the cards, the strategy which is most likely to succeed is a sequencing of reforms to avoid the emergence of big gaps between the formal and informal rules and between aspirations for the future and ways to achieve them. This is not about a dragging of the feet but about being sure-footed and is a principle applied in health policy more generally.²⁴ Further lessons from health policy are that the process of reform can be as complex as the content of reforms. Success of reform therefore lies with how the process is applied rather than purely on what contents are formulated.²⁵ An approach including an implementation strategy involving all actors co-constructing the system is therefore key.²⁴

Moving forward

In March 2021, a letter to the profession jointly signed by senior NHS England representatives and a government's minister, heralded a new phase for reform to contractual arrangements for dental practice in England.²⁶ There was a commitment to build on learning from prototyping and develop a revised reform process focused on designing implementable proposals. Six aims were identified as necessary for contractual changes to be viable: 1) be designed with the support of the profession; 2) improve oral health outcomes (or, where sufficient data are not yet available, credibly be on track to do so); 3) increase incentives to undertake preventive dentistry, prioritise evidence-based care for patients with the most needs and reduce incentives to deliver care that is of low clinical value; 4) improve patient access to NHS care, with a specific focus on addressing inequalities, particularly deprivation and ethnicity; 5) demonstrate that patients are not having to pay privately for dental care that was previously commissioned NHS dental care; 6) be affordable within NHS resources made available by government, including taking account of dental charge income. There was a further commitment: that if it was possible to make marginal changes to existing national contractual arrangements, this would be done at the earliest opportunity – which is in line with an incremental approach to reform argued above.

Extensive engagement with different types of actors across the system followed, aimed at mapping the various dimensions of the issues which reforms should address. This involved setting up an Advisory group with

key stakeholders (British Dental Association, College of General Dentistry, Public Health England [now Office for Health Improvement and Disparities], British Society of Dental Hygiene and Therapy, British Dental Action Group representing dental associates, Care Quality Commission, Association of Dental Groups, Health Education England, Healthwatch, a Local Dental Network Chair and a NHS Commissioner. This was complemented by a Technical Working group (TWG) which included a range of both frontline clinicians (including from the prototype model) and academics with expertise in, for example, health economics and public health. To facilitate a wide engagement with frontline actors, a series of ten focus groups involving 76 people were held in the autumn of 2021 and to fully explore a variety of perspectives, we held separate focus groups for providers (contract holders); associates (working as sub-contractors to the contract holder); dental therapists and hygienists; and dental nurses and practice managers. To maximise opportunities for people to be involved in focus groups, invitations were sent to NHS dentists via the online system Compass, with other members of dental teams invited via dental hygiene and therapy, dental nurse and dental manager associations and networks. From the 463 people responding to the call, focus group participants were selected by a random number generator and adjusted to maintain a gender balance and distribution across different areas of the country and dental contracts. We also held other focus groups with members of the public and with commissioners.

People with different roles within the team provided slightly different perspectives. For example, dental nurses described the impact of the pandemic period where they experienced pressures of working in personal protective equipment, additional responsibilities with infection control measures and facing complaints from patients not able to access care. Together with poor career development opportunities in dental practices, nurses felt attracted to better paid and less demanding employment opportunities outside dentistry. While the impact of current remuneration arrangements was explored in full, workforce recruitment, retention and morale issues were found to be multi-dimensional and not always framed around purely financial concerns. For example, clinicians reported feeling isolated from the rest of the NHS workforce on account of providers' independent contractor

status, with impersonal communication ('Dear contractor...' etc) having an impact on not feeling valued. Thus, while structural reforms to the current remuneration arrangements are needed, as outlined by the Health Select Committee in 2008,²⁷ there are many aspects of the system which need to be addressed in parallel, to effectively address the challenges facing the system.

Dental contract reform should therefore be approached in the same way as the process of health reform more generally is understood – as the implementation of multiple policies seeking to achieve system-wide change aligning with policy goals.²⁸ And it must be emphasised again that implementation here cannot be overlooked because it is a key component of success. In fact, implementation is so important that it should be seen as integral to the reform process itself. Instead of a linear approach of setting out changes and then throwing it over the fence to be implemented, we need to recognise that a more cyclical relationship between reform policy and implementation exists. While the deliberation of policy is important and informs implementation; implementation can change outcomes and what the policy is. Reform always involves a 'dynamic interaction between evidence, context and facilitation' and we would do well to recognise that problems with reform are almost always contextual and facilitative.¹⁷

Mark Twain offers us a truism that 'the secret of getting ahead is getting started.' The set of changes recently announced is a significant moment in the history of dental remuneration in the country and meets both the promise of making interim changes to existing contractual arrangements as outlined in the letter to the profession in 2021²⁶ and the principle of an incremental approach to health reform. To bring about these changes, several things have had to be put in place, starting with engagement with dental teams, identifying which changes would be possible and likely to bring about the biggest benefit given our current context, and then, with a next stage of cross-government approval to embed these in regulatory change, putting in place changes to administrative systems and working on approaches to implementation. The set of changes announced have been identified through a process which began with the generation, including by Advisory group members, of a long list of potential interim changes, scrutinised by the TWG against

criteria for feasibility, impact and accord with reform goals and in response to the foremost issues raised in focus groups. This is the first phase of a longer journey in grappling with the stubborn problem of dental contracting, although work on subsequent phases has already begun.

Conclusion

So finally, while talk of 'solving' dental contracting and silver bullets are at odds with the very nature of the problem we grapple with, this does not mean we are without any means to move forwards. In public policy generally, strategies to address stubborn problems involve 'taming' (hiving off components) and/or coping (working collaboratively to incorporate competing problem perspectives and enable 'multiple ways of seeing').²¹ While taming strategies aim to reduce stubborn problems to make them more controllable and manageable, coping strategies follow a more tentative but collaborative path. In practice, dental system reform strategy incorporates both strands. This first stage of reform represents the most significant change to NHS dental contracting for almost 15 years, with the engagement with frontline NHS clinicians fundamental to informing these. As we move forwards with the next stages of reform, focus groups with frontline teams will continue to be key in staying true to this iterative and collaborative path to reform.

Ethics declaration

The authors declare no conflicts of interest.

Author contributions

Rebecca Harris conceived and drafted the paper and is accountable for the work. Rachel Foskett-Tharby contributed to conception, contributed with critical intellectual content, approved the final version and is accountable for the work.

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