Monitor
Making the health sector work for patients

Review of multi-year national tariff cycles

www.gov.uk/monitor

Introduction

The choice and design of the NHS payment system is crucial to the way that healthcare is provided to patients. The frequency with which we publish the national tariff payment system[1] for NHS-funded services is a key factor in the overall design and has been considered as part of the development work on reforming the payment system for NHS services.

The current approach (based on the method previously used by the Department of Health) of reviewing and potentially re-setting prices and rules on an annual basis may not be yielding the best balance between: a) creating incentives to improve efficiency and quality of care; b) providing confidence for the sector to innovate, plan and invest for the longer term; and c) securing value for money for the taxpayer and for patients.

We have heard through our engagement with stakeholders over the past 12−18 months that the annual cycle has contributed to volatility in prices and made it difficult for providers and commissioners to plan effectively. Feedback indicates that a longer cycle may enable greater predictability of income and expenditure and hence facilitate longer term and more effective planning, though this needs to be balanced against the risk of locking in prices that potentially no longer reflect efficient costs.

Monitor and NHS England are therefore reviewing the cycle duration of the national tariff payment system and establishing an evidence base to inform our approach on this important issue.

As part of establishing our evidence base, Monitor commissioned and worked with NHS England on an independent review by FTI Consulting to gather evidence for, and to assess, the potential benefits, costs, risks and opportunities of alternative cycle durations. FTI was also asked to consider the optimal design of the national tariff cycle with regard to the ability to make adjustments to prices and/or rules within a cycle and to recommend a transition path to move from the current to an optimal cycle duration.

To underpin their approach, we asked FTI to consider evidence and learning (where applicable) from other regulated sectors and health economies, feedback from stakeholders, and to build their analysis using a transparent assessment framework based on sound regulatory principles.

It should be noted that FTI did not consider the details of the current legislation governing the national tariff (the pricing provisions of the Health and Social Care Act

[1] The national tariff payment system (sometimes abbreviated to the ‘national tariff’) covers nationally specified currencies, nationally determined prices and rules for locally determined prices.

2012), and have not limited their recommendations to what may be deliverable within that legislation. This will be one of the issues to be considered as we continue our review of the cycle duration for the payment system. Monitor is publishing the review for transparency and information purposes only – we are not seeking stakeholder views at this stage. We aim to provide the sector with visibility of the evidence base early on because any change to the duration of the cycle is likely to constitute a significant shift for the sector. It would therefore take time to develop and fully implement proposals (subject to sector engagement) and this may require a period of transition.

Key findings and implications

The in-depth report (including the executive summary) of FTI's approach to determining the optimal duration for the national tariff payment system and their recommendations on multi-year cycles follows this cover note.

The key findings and recommendations from the review are as follows:[2]

- A three-year national tariff duration provides the best balance of risks and opportunities associated with a longer duration, primarily driven by the fact that:
    - opportunities for innovation, reconfiguration and efficiency discoveries increase with length of the national tariff cycle
    - an increase in duration to two years is unlikely to yield significant benefits and
    - net benefits begin to diminish with durations beyond three years since other constraints begin to increase rapidly, eg the potential compounding impact of locking in nationally determined prices that no longer reflect efficient levels of cost.
- The duration of other cycles (eg contracting and cost collection cycles) is not expected to constrain the ability to move to a three-year national tariff cycle.
- Any in-cycle adjustments should be used to distribute risk efficiently between providers and commissioners and should be 'mechanistic' (eg prices adjusted annually for general inflation).[3]

[2] It is possible that implementing the recommendations of the review would require a change to the 2012 Act. Monitor and NHS England will be giving this issue further consideration.

[3] FTI has made a practical assumption about the need for in-cycle adjustments for the purposes of their recommendations, but this did not consider whether in-cycle adjustments could be delivered under the current legislation.

31 March 2014

Review of multi-year tariff cycles

Ref: T-PRI-1113-094

CRITICAL THINKING AT THE CRITICAL TIME™

FTI CONSULTING™

Table of contents

Executive summary

The 2012 Health and Social Care Act (the "2012 Act") granted joint responsibility to Monitor and NHS England for setting a "national tariff". This national tariff specifies a set of health care services and the prices that should be paid for these services. As such, it forms a major part of the NHS payment system and a key element of the overall framework under which providers of healthcare services contract with commissioners of these services. The national tariff also sets out a large range of rules which are used to inform contracting between providers and commissioners. Monitor published its first national tariff, applying to the 2014/15 fiscal year, in December 2013.

The current cycle for setting the national tariff is annual – as it was before the 2012 Act, when the Department of Health was the body responsible for the predecessor system ('Payment by Results'). This annual cycle has created a number of identified problems – in particular, it leads to changes in prices from year to year that make it more difficult for providers and commissioners to plan against.

In this context, Monitor (in partnership with NHS England) commissioned FTI Consulting to consider whether the duration of the national tariff should be extended beyond its current annual cycle and, if so, by how long. This report presents our findings and recommendations.

Our overall conclusion and recommendation is that the current annual national tariff cycle should be extended to three years' duration. We recommend neither less nor more than three years for two principal reasons.

First, a national tariff cycle duration of three years will give providers greater certainty over future revenue streams, encouraging investment in reconfiguration and redesign of services. This will in turn lead to improved quality and/or efficiency to the benefit of patients. Given the amount of resources commissioned under the auspices of the national tariff (worth some £70 billion per annum), it would only take a very small increase in investment as a result of this improved certainty to deliver very material benefits to patients. We found a two year tariff cycle would be too short to provide enough additional certainty to improve levels of investment.

Second, there are costs to keeping the national tariff stable for longer than three years. In particular, "locking down" the national tariff for a longer duration creates a risk that clinical developments cannot readily be incorporated in to the payment system – which would be potentially detrimental to patients. Also, there is a risk that, over a longer duration, the prices set in the tariff deviate from a reasonable assessment of the actual costs of providing those services. This deviation might be because the price was set incorrectly from the outset of the national tariff cycle or because the costs of providing the services change markedly over the national tariff cycle. In turn, this would create a risk that providers are either over- or under-reimbursed for providing a service, a risk which increases with the duration of the tariff cycle. Either outcome would represent a misallocation of scarce resources and therefore be detrimental to patients. We found that the benefits of extending the tariff cycle to four years rather than three were marginal. However, the risks of prices deviating significantly from the underlying costs of provision over four years were material, which argued in favour of a three year cycle.

In addition to our two principal reasons for recommending a three-year tariff noted above, another consideration is that any extension to the duration of the tariff has the potential to reduce the overall regulatory burden on the sector. While second order relative to, say, the benefits from improved efficiency, clearly if the national tariff is produced less frequently there will be lower administration costs. This applies to both those that are incurred centrally (by Monitor and NHS England in developing the tariff) and by providers and commissioners who need to follow the tariff.

Our report outlines a framework that we developed to consider how best to strike a balance between these costs and benefits. We drew on a large range of sources to inform our judgement. We consulted over 20 stakeholders in individual interviews and conducted a workshop attended by over 15 participants in the sector as well as regular liaison with the project sponsors Monitor and NHS England. In addition we drew on expertise from outside of the sector to see whether any lessons learned in regulation more generally might be relevant.

In forming our conclusions we have, by necessity, made a number of assumptions. The most significant assumption is that the national tariff is set in a manner that is independent of the overall level of funding to the sector. This is consistent with the principles that Monitor stated in the *2014/15 National Tariff Payment System*: that prices would be set by reference to the efficient cost of provision.

Were this assumption not to be valid, then our conclusions would change: we would suggest that the national tariff cycle duration be explicitly linked to the duration of the funding cycle. However, we would, in passing, note that if this were to be the case the rationale for the national tariff would be much weaker: in particular, national prices that are subject to change because of changes in the overall level of funding would no longer serve the purpose of providing a credible investment signal to providers, and nor would commissioners receive appropriate signals on how best to deploy their finite resources. Rather, the national tariff would simply be a system for allocating a budget.

One other critical assumption is that national prices continue to be set for a unit of activity (as was the case in the 14/15 national tariff). Were this to change, for example moving to fixed "capacity" payments, then under our analysis an even longer national tariff cycle would be appropriate. This is because providers would have even greater certainty over future revenue streams (as the amount of revenue received for a particular service would be fixed rather than related to the volume of activity).

While we have recommended a three year duration for the national tariff cycle, we have also recommended that there is an approach to adjusting the tariff each year to allow for increases in input costs (such as staff wages) that might reasonably be expected in the year but is difficult to predict significantly in advance. This approach is similar to that adopted in other regulated sectors and, so long as the methodology used to do this is set out explicitly at the time the national tariff is set, we do not believe that it will undermine the benefits of a longer duration tariff that we have identified.

Finally, we were asked to consider whether it would be sensible to incorporate a transition path to a longer cycle for national tariffs – that is, implementing a two-year national tariff cycle before moving to a three-year cycle. However, as the benefits of a two year cycle appear minimal, we would recommend that directly adopting a three year tariff cycle as soon as possible is the most likely approach to deliver the most benefits to patients.

1 Introduction

Under the 2012 Health and Social Care Act (the "2012 Act"), Monitor and NHS England have joint responsibility for the national tariff. The national tariff is a major part of the NHS payment system and is a key element of the overall framework under which providers and commissioners contract. Monitor published its first national tariff, applying to the 2014/15 fiscal year, in December 2013[1].

The current cycle for setting the national tariff is annual – an approach based on the method previously used by the Department of Health. This annual cycle has created a number of identified problems – in particular, it leads to changes in prices from year to year that make it difficult for providers and commissioners to plan against.

In this context, Monitor and NHS England are currently developing their joint long term pricing strategy and an input to this long term pricing strategy will be a view as to whether the duration of the national tariff should be extended beyond one year, and, if so, by how long. Monitor has asked us to make an independent assessment of this. This report, together with a summary slide pack, presents our findings.

Our approach consists of four main elements:

- First, we assess the current (yearly) cycle of the national tariff and the strengths and weaknesses of that approach, in light of stakeholder feedback.
- Second, we develop and implement a framework to assess the merits of moving to a different (longer) national tariff cycle, where cycle lengths potentially vary according to type of health care services provided.
- Third, we provide recommendations on the optimum duration of the national tariff cycle (including within-cycle adjustments).
- Fourth, we recommend a transition path.

This report has been prepared by reference to Monitor's invitation to tender dated 15 November 2013 and FTI Consulting's subsequent tender dated 28 November 2013.

[1] This document was entitled the "*2014/15 National Tariff Payment System*".

1.1 Sources of information

In the course of developing this report, we have spoken to a number of stakeholders, including clinicians, practitioners, and personnel within Monitor and NHS England. On the understanding this report may be published, we have not referenced statements to individuals. Where we have considered verbatim quotes would be useful to illustrate certain viewpoints, we have highlighted such quotes in red text.

Except where indicated, we have not sought to establish the reliability of any sources or verified the information provided. No representation or warranty of any kind (whether express or implied) is given by us to any person as to the accuracy or completeness of this report.

This project has been jointly steered by Monitor and NHS England. The views expressed to our project team by Monitor and NHS England have therefore guided the development of this project. However, unless stated otherwise, the opinions and judgments stated in this report are our own.

1.2 Restrictions

This report has been prepared for Monitor for the purpose described in this introduction. We understand Monitor and NHS England may draw upon our analysis and recommendations for the purposes of a wider stakeholder engagement process, and that this report may be published.

FTI Consulting accepts no liability or duty of care to any person other than Monitor for the content of this report and disclaims all responsibility for the consequences of any person acting or refraining to act in reliance on this report or for any decisions made or not made which are based upon the report.

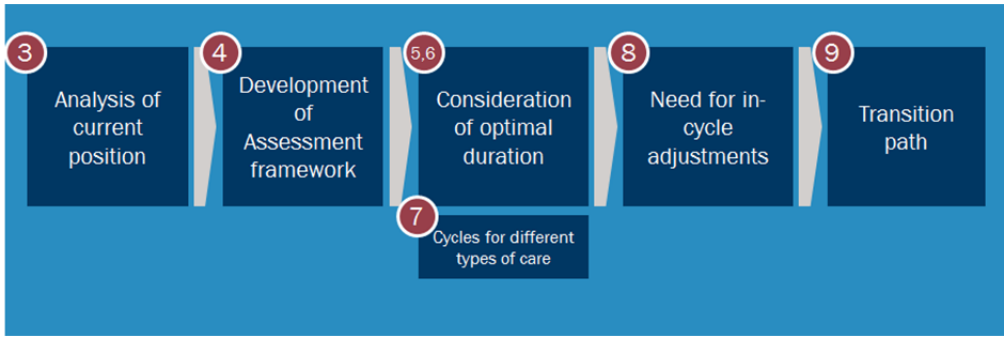
This report contains references to Monitor and NHS England's views on various matters and policy development. Nothing in this report (including but not limited to our conclusions) should be construed to represent policy of either Monitor or NHS England.

1.3 Structure of this report

In **Section 2** of this report, we set out the relevant background to our analysis of cycle duration, with particular reference to the context of the wider payment system in which the national tariff operates.

The remaining sections contain, in turn, the six 'building blocks' of our analysis, which are summarised in Figure 1-1 below, and then subsequently described.

Figure 1-1: Building blocks of analysis



In **Section 3**, we summarise the feedback Monitor and NHS England have received in the past 18 months relating to the national tariff cycle duration.

In **Section 4**, we describe our framework for assessing the optimal duration of the national tariff cycle.

In **Sections 5 and 6**, we apply our assessment framework to determine the optimal national tariff cycle.

In **Section 7**, we discuss how our framework could be applied to assess optimal cycles for different areas of care, and provide an indicative set of conclusions on the theoretically optimal cycles for five different areas of care.

In **Section 8**, we discuss the background to in-cycle adjustments and use our assessment framework qualitatively to recommend which in-cycle adjustments would be most appropriate.

In **Section 9**, we discuss possible transition paths to move from the current annual cycle to our recommended national tariff cycle duration.

More detailed supporting reference material is provided in appendices:

- **Appendix 1** is a Gantt chart showing how the national tariff cycle interacts with other parts of the payment system.
- In **Appendix 2** we summarise the approach taken to regulatory cycle duration analysis in other regulated sectors.
- In **Appendix 3** we briefly describe, at a high level, the health care payment systems used in other jurisdictions, and explain the approach taken to pricing cycle durations in those other jurisdictions.

2 Background

Monitor recognises there are potential benefits and opportunities to setting national tariff cycles for a longer duration than the current annual approach. However, such a move would not be without costs and risks. In this report, we assess the benefits of different durations of national tariff cycles and balance these against the costs and risks of those durations to provide a recommendation of the optimal duration of national tariff cycles.

Before making this assessment, we considered it important to understand the context in which the national tariff operates. Therefore, in this section, we set out:

- a summary of the content of the national tariff;
- a high-level review of how a longer national tariff cycle could affect contracting behaviours; and
- a high-level review of how a national tariff cycle of a longer duration could interact with other parts of the payment system, in particular funding cycles.

2.1 The content of the national tariff

Monitor and published its first national tariff, the *2014/15 National Tariff Payment System*, in December 2013. This was published pursuant to the 2012 Act, which provides that the national tariff should include:

- a set of specified health care services (referred to as 'currencies');
- a set of associated prices (together with an explanation of the methods for determining those prices); and
- a suite of rules applying both nationally and locally, which determine (among other things) when and how the currencies and prices may be changed.

For the purposes of this report we have assumed that a "national tariff" incorporates all of these elements, and is subject to a formal statutory consultation process. The cycle "duration" we discuss in this document refers to the length of time between formally consulted national tariffs. However, as we discuss further in Section 8, there are various components of the national tariff which it may be appropriate to adjust on a more frequent basis (subject to legal considerations).

2.2 Contracting

The national tariff is one of a number of factors that influence contracting decisions made by commissioners and providers. For example, prices for services for which there is a national price should not, in principle, depart from national tariff prices; and some locally-set prices should also be set by reference to the overall price level determined in the national tariff[2].

In this subsection, we set out how a longer national tariff cycle could improve contracting behaviours, to the benefit of patients. We also describe some of the factors that seem likely to inhibit more effective contracting, cognisant of the fact that the current (annual) national tariff cycle is likely to be just one of the barriers to doing so.

2.2.1 More effective contracting

Two major aspirations for the health sector are increased operational efficiency and more rapid changes in the patterns of care, particularly in light of demographic trends, the increased prevalence of long term conditions, and the fiscal pressure facing the NHS.

In this context, a potential major enabler of change will be **more innovative and sophisticated contracting behaviours between providers and commissioners** – ensuring that the right outcomes are being incentivised, that providers are fairly reimbursed and that the contract reflects the best way to organise services locally. For example:

- in some local health economies, major service reconfiguration may be the best way to achieve better care for patients;
- in other local health economies, particular regional population factors may require providers and commissioners to re-consider how services are bundled together and paid for; and
- in a different group of local health economies, the immediate focus may be more on improving the operational efficiency of a provider, in which case clarity and discipline around national prices is especially important to signal efficient resource costs.

We therefore recognise contracting behaviours as one of the key potential enablers of (and a potential barrier to) the twin aims of better and more sustainable care. At the very least, it would be highly undesirable if the current approach to setting national tariffs on an annual cycle became a major barrier to achieving the required changes.

---

2 See Rule 2 under Section 7.4.1 of the 2014/15 National Tariff Payment System.

In respect of contracting behaviour, our hypotheses – that we have tested with stakeholders, to broad agreement – are that:

- more effective contracting generally requires longer contract lengths – to set the right incentives and to encourage collaboration and investment (for example, one stakeholder comment was *"For major service reconfiguration to take place sites are looking for longer contracts so they can recoup their investments and make up on losses likely to occur in the earlier years"*); and
- a longer national tariff cycle would encourage longer contracting, through greater certainty in both national tariff prices and national tariff rules.

We also note that NHS England's *Standard Contract* now explicitly gives providers and commissioners the flexibility to set the contract duration as they see fit (rather than, as in previous years, having a 'default' contract duration of one year)

2.2.2 Contracting in practice

The extent to which the national tariff in practice drives contracting behaviour is variable.

On the one hand, currencies set out in the national tariff are generally reflected in contracts, and the overall price changes determined by the national tariff are (as well as driving national price updates) used as the "*main approach*" for determining local prices[3].

On the other hand, there are still significant barriers to more effective contracting, such as:

- the pressure on local commissioners to balance budgets on a strictly annual basis;
- a deficit in some commissioners' contracting capabilities;
- lack of consistently good quality information; and

[3] *Local price setting and contracting practices for NHS services without a nationally mandated price - a research paper*, Monitor, 24 September 2013. This paper focused on services without national prices, rather than contracting in general. However, based on our team's experience at Monitor, as well as the interviews we have conducted for this work, we consider the main conclusions can broadly read across to contracting more generally.

- the propensity for in-year contract renegotiation and variable enforcement practices[4].

Of course, a longer national tariff cycle is no panacea – we consider it should be viewed only as an ***enabler*** **of change**. Many stakeholders have told us that most effective change could come about if other cycles such as commissioner funding cycles are longer term as well. For example, if CCGs have unpredictability in their future budgets, then additional certainty in prices is incrementally less beneficial than would be the case if budgets were more predictable.

2.3 The national tariff in the context of the NHS payment system

The national tariff is a significant part, but not the entirety of, the NHS payment system which governs how health care services are paid for. In this subsection, we set out how the national tariff interacts with:

- the funding flows and financial 'envelope' determining the overall NHS budget; and
- other operational cycles used in the payment system.

Our conclusion is that, assuming that the national tariff is set *independently* of the overall funding envelope (as discussed in Subsection 2.3.1 below), there is no operational impediment to a longer national tariff cycle duration.

2.3.1 Funding flows

The funding available for NHS health care within a fiscal year is a function of government tax income and political/fiscal decisions, and set out in Treasury Spending Reviews ("TSRs"). NHS England allocates a portion of this funding to CCGs, based on a formula derived by an independent body which takes account of a number of different factors such as local deprivation and population size. At present, neither the TSR cycle nor the commissioner allocation cycle[5] are fixed in duration.

---

4 This point is particularly important, since it serves to weaken the incentives and signals embedded in existing contracts. Monitor's research report illustrates a set of financial levers – both 'in-contract' and 'out-of-contract' – used by providers to manage income, and used by commissioners to manage budgets (although we understand the latter is more prevalent).

5 The most recent CCG allocation was published in December 2013, and covers 2014/15 and 2015/16. The end of this period will coincide with the end of the recently published TSR period. Allocation cycles generally vary between 1 and 3 years, depending (in part) on the phasing of the TSRs. We understand that NHS England's approach is to not allocate £ values beyond the current TSR (since the total amount available to allocate beyond that point would not be formally decided).

One key issue is whether the national tariff is *dependent* on the overall "financial envelope" – that is, the overall level of NHS or CCG funding in a given year, or is *independent* of this. Broadly, the main difference between the approaches is that:

- the *independent* approach in principle leads to greater credibility, clearer signals and better decision-making; but
- the *dependent* approach in principle allows more flexibility and means the regulatory rules can be more in tune with the budget position.

Under the *dependent* approach, the limit for national tariff cycle duration would necessarily be whichever duration the commissioner allocation cycle is set for – which is currently variable. Under current conditions, therefore, it would not be possible to have a fixed and predictable national tariff cycle under this approach (this may change if in the future NHS England's overall budget was set on a fixed cycle.) Indeed, we would observe that under this approach the pricing regime would lose one of its main purposes: that of providing a credible signal to participants in the sector to ensure that resources are allocated efficienctly and investment decisions are taken on the basis of signals in the pricing structure.

However, our working hypothesis is that Monitor adopts the *independent* approach, based on Monitor's stated principles that prices should *"reflect efficient costs"*[6] (as opposed to being determined by reference to available funding). If this approach applies to the national tariff then by extension the national tariff cycle (including, but not limited to the prices) should not be constrained by funding cycles.

We recognise that under this *independent* approach, there could be a practical tension between the national tariff and the overall budget available to purchase services. However, we have identified some factors which may mitigate this risk:

- In the worst financial crisis in the UK since the NHS was founded, NHS funding was not cut in real terms (but was instead kept constant in real terms). On this basis, there is apparently very strong political will for not cutting the budget in real terms, and all else being equal, this implies there is some degree of certainty around the overall budget envelope.
- NHS England recognises that large swings in CCG budgets are sub-optimal. To this end, CCGs are allocated a budget based on a 'glide path' towards their theoretical allocation. Again, all else being equal, this implies some degree of certainty in commissioner allocations.

6 2014/15 National Tariff Payment System, Subsection 5.1.1.

- The national tariff provides for and encourages a significant amount of flexibility in contracting – if, for example, in a local health economy the national tariff currency and/or price for a given service is not serving the best interests of patients, the CCGs in collaboration with providers have the freedom to vary either.

As noted in Subsection 2.2 above, we recognise that more predictability in the national tariff itself will not obviate the problems of predictability elsewhere in the system.

2.3.2 Operational cycles

The national tariff is itself operationally dependent on some other cycles. We have discussed above how the TSR and commissioner allocation cycles affect the amount of funding available, and how the national tariff is used in contracting.

However, in assessing the optimal national tariff cycle duration, we wanted to first understand if there were any other limiting factors which might constrain extending the duration of the national tariff cycle. To do this, we have reviewed at a high level how the different elements of the payment system interact with one another and in Appendix 1 we show this in a Gantt chart[7].

The operational cycles we discuss in this subsection are:

- Cost collection and analyses;
- OPCS/ICD updates;
- The *Mandate*; and
- NHS England's planning guidance.

We discuss each below and indicate the implications of a longer national tariff cycle duration.

Cost collection and analyses would still continue on an annual cycle, since this data is used for purposes other than solely the national tariff. As we discuss in this report, one benefit of a longer national tariff cycle duration is that Monitor and NHS England will have more time to analyse cost data for each national tariff.

[7] This analysis is largely based on conversations with people working in different areas of the NHS payment system.

OPCS[8] and ICD[9] codes apply to procedures and diagnoses respectively, and have recently been updated in alternative years. These updates are undertaken to reflect changing clinical practice in the coding of patient care. This information is used for clinical purposes but is also used to group activity into the Health Resource Groups[10] ("HRGs") used as the basis for payment. All else being equal, it would be preferable to update these annually. However, the question of whether these codes could be updated (for national tariff purposes) annually under a multi-year national tariff cycle depends on whether the updates would change the 'specification' of currencies. Any change to the 'specification' of services would in principle require a formal consultation, under the 2012 Act.

The *Mandate* is issued by the Secretary of State to NHS England, setting out ambitions for how the NHS can improve its strategic direction, and a number of policies for NHS England to implement over varying timescales. It is a multi-year document, with rolling objectives which are "refreshed" each year. Our understanding is that a key impact of the *Mandate* on the national tariff is reflected via a cost uplift (referred to as "service development")[11]. As we discuss in this report, we consider that a multi-year national tariff cycle could include annual cost uplift adjustments, and "service development" is one component. The national tariff could therefore be set on a longer timescale even although the *Mandate* may be refreshed on an annual basis.

8 OPCS-4 is an abbreviation for the Office of Population, Censuses and Surveys Classification of Surgical Operations and Procedures (4th revision). This statistical classification translates operations and surgical procedures into codes

9 ICD refers to the World Health Organization's International Classification of Diseases. ICD updates, which are annual, appear to be ratified at international conferences each October – but the suggested implementation date varies

10 HRGs are groupings of clinically similar treatments which use common levels of health care resources.

11 See 2014/15 National Tariff Payment System, Section 5.3.4.

NHS England's **planning guidance** is provided to "*help local clinicians deliver more responsive health services, focused on improving outcomes for patients, addressing local priorities and meeting the rights people have under the NHS Constitution*"[12] and is more closely linked to the national tariff. The most recent guidance – published in December 2013 and entitled "*Everybody counts*" - applies to the period 2014/15 to 2018/19. Despite this, we understand that NHS England's intention is to refresh this guidance on an annual basis. The planning guidance and the national tariff to some degree reflect each other. For example, the latest planning guidance includes material relating to local variations which were an innovation of the national tariff published around the same time. The planning guidance could continue to be annually refreshed under a longer national tariff cycle, but if refreshed during a national tariff cycle there may have to be additional checks to ensure compatibility with the national tariff.

2.4 Summary of background

Before discussing stakeholder feedback in Section 3, it may be useful to reiterate some of the key points from this background section:

- The national tariff encompasses currencies, prices and rules. The scope of this project is the entirety of the national tariff, recognising that many of the benefits from more stability in pricing apply also to currencies and rules.
- Contracting is an extremely important part of the payment system – regulatory change is not meaningful unless it is reflected in decisions made by providers and commissioners working in local health economies.
- A longer national tariff cycle duration will, in our view (and as supported by stakeholder feedback as described below) remove one of the barriers to more effective long term contracting.
- Although strictly outside the scope of this report, our strong view is that for national tariff prices and rules to be credible and meaningful, they need to be set in an independent manner.

12 http://www.england.nhs.uk/everyonecounts/

3 Summary of stakeholder views on national tariff cycle durations

Stakeholders' views on the current national tariff cycle, as well as their views on the costs and benefits of different national tariff cycles, have informed our work.

The principal sources we have drawn upon are:

- We have independently spoken to various providers, commissioners, stakeholders and regulatory thought leaders[13].
- We conducted a one-day workshop on this topic in February 2014. This was attended by a mix of providers and commissioners from a variety of local health economies.
- Responses to the document *Integrated Care and Support: Our Shared Commitment*, which was published in May 2013 by NHS England, Monitor and other national partners[14].
- Responses to the *Tariff Engagement Document* ("TED") published by Monitor in June 2013. These responses were collated either from the web survey that Monitor released alongside the TED, from regional workshops that were conducted in the summer of 2013[15].

In general, we found wide-ranging support for a multi-year national tariff. Some stakeholders we spoke to were sceptical that a longer national tariff cycle would lead to significant benefits, at least without other changes to the system – but no stakeholders considered there would be significant net drawbacks to extending the national tariff duration.

Taken in the round, the main themes we observed from stakeholders are:

- Providers and commissioners generally aspire to engage in longer term contracting, and more confidence and certainty in prices and rules will help.

---

13 We have not attempted to replicate a formal consultation process for this work, but our stakeholder engagement has been broad-based and captured a full range of stakeholder views.

14 This paper proposes a definition of integrated care as "*person-centred, co-ordinated care*" and sets out a shared ambition for making integrated care the norm across NHS and social care services over the next five to ten years. We have had sight of the emailed responses to this document as well as a summary feedback paper produced for Monitor's internal purposes.

15 Further information on the engagement process is provided in Annex 1B of the Consultation Notice.

- Stability is welcomed – both in prices and currency structure.
- Annual contracting processes have a high transaction cost, and various contractual tools and levers are employed which reduce the power of price signals.
- Medical innovation should be appropriately reflected in the national tariff (but that does not constrain the duration to one year).

We summarise each below.

3.1 Providers and commissioners generally aspire to engage in longer term contracting, and more confidence in prices and rules will help

Service redesign and reconfiguration work takes a significant amount of time (due to public consultation processes, management processes, asset divestments and staff redeployment, for example) and it is in this context that stakeholders appear to be seeking more certainty around the national tariff (including its rules and guidance, as well as national prices themselves).

For example:

- *"future consideration should be given to developing longer term (2-3 year) tariffs to provide more certainty in planning… Short termism encourages the use of non recurrent money and outcomes that are sub-optimal because of the lack of certainty, continuity and ability to invest recurrently in something"*
- *"…want to see longer term price stability to inform strategic planning between commissioners and providers"*
- *"greater certainty over price will support more confident business decisions, including disinvestment"*.
- *"predictability of prices and payments is important to enable appropriate planning and to provide the certainty required for longer term investment decisions"*

- *"…the pricing system needs to offer greater certainty, particularly where significant capital investment requirements are indicated. In making an offer to an acute provider for the provision of a range of services which include capital investment which might require to be depreciated over 7-10 years (or in the case of premises, longer), it creates commercial tension if the pricing model for that service quickly becomes undermined by year on year tariff changes which bear no real relationship to the commercial offering originally acceptable under tender, or to the costs of delivery. Organisation then risk becoming involved in iterative negotiations which are not conducive to mature supplier management relationships and therefore do not incentivise proactive and collaborative work to deliver savings, because of the risk that iterative changes to tariff will undermine any other benefits which could be offered".* (emphasis added)
- *"the NHS will only be able to secure long term solid investment where both "private sector" and "social" investors are able to develop strong business cases based on a high level of confidence in the fairness and stability of payment systems"* (emphasis added)

Stakeholders have also alerted us to two further trends in the health care sector which suggest even greater benefits of certainty:

- Increasingly, health care needs to be more capital intensive, particularly around IT investment, but also in building up human capital (training and developing staff with particular leadership and coordination skills). This requires a greater degree of certainty.
- Health care requires a minimum scale to be efficient and safe. As well as having implications for service redesign and reconfiguration, this means that entrants to the market are even more likely to require a greater degree of certainty of income to make their (large) investments viable.

3.2 Stability is welcomed – both in prices and currency structure

In recent years, there has been significant variation in the national prices of some currencies from year to year. Stakeholder feedback was broadly that this variability made it difficult to plan ahead, both for commissioners and providers. This theme was particularly prevalent in responses to Monitor's Tariff Engagement Document. Stakeholders spoke of *"the need for stability"* and commented that *"large swings in prices make planning difficult"*.

We understand the volatility seen in national prices is primarily artificial - that is, reflecting data quality and processing issues more than underlying changes in the relative resource costs of different services. One CCG stated that the current system leads to *"substantial year on year variations in individual tariffs which is destabilising to providers and commissioners"*.

A further view – broadly shared, but more prevalent in our discussions with CCGs – was that, as well as stability in *prices*, stakeholders wanted more stability in *currencies*. Absent any price concerns, the ability to compare activity between years on a constant basis both to assess performance over time and for benchmarking with other providers/commissioners is seen as valuable. One CCG mentioned that currently they would like to be able to perform more meaningful *"apples with apples"* comparisons.

3.3 Annual contracting process has a high transaction cost, partly due to national tariff updates

In order to be effective and deliver the best outcomes for patients, contracts need to be carefully developed. Annual updates to the national tariff put significant strain on contracting parties and in particular hampers their ability to focus on redesign work. One CCG said that *"redesign work is tortuous on a 1 year cycle"*.

The ability to spread this work over a longer period allows more scope for innovation when redesigning contracts as there is more time available for design, as well as more time to assess the effectiveness of an agreed contract before starting on the next one. One stakeholder said that the annual cycle *"forces organisations to focus on their principle contractual negotiations, with little time available to enable such local service change and agreement of varying payment approaches to be achieved."*

3.4 Medical innovation should be appropriately reflected in the national tariff (but that does not constrain the duration to one year)

Most stakeholders agreed the need to reflect clinical advances would define a natural limit to the national tariff cycle duration – a comment echoed at our workshop was *"how long is too long?"* and that *"any multi-year strategy should not be a block to innovation"*.

Stakeholders said that, whilst it is important to reflect clinical development in the national tariff, in reality such development does happen slowly (e.g. several years for new drugs to cross necessary regulatory thresholds). One CCG explicitly stated that three years would be a *"sensible time frame"* to retain a specific set of HRGs for, but that five years (for example) would be *"pushing it"*.

4 Our framework for assessing the optimal national tariff cycle

In this section we explain the framework we have developed to consider the merits of varying the duration of the national tariff. Our overarching approach has been to consider the ultimate impact on patients of different national tariff cycle durations.

This section is structured as follows:

- First, we set out our assumptions.
- Second, we provide an overview of the framework we have used and introduce the factors we have taken into account.
- Thirds, we describe the final form of the framework.

4.1 Assumptions

Before developing a framework to assess the optimal national tariff cycle duration, we considered two questions:

- What assumptions should we make about the payment system and the national tariff?
- What was the range of durations to assess?

4.1.1 Starting assumptions

As would be expected, the starting point for our assumptions is that the national tariff and the health care sector retain (at least broadly) the same characteristics they have now. Some of these characteristics are covered in Section 3 of this report.

However, we also recognise that the national tariff and payment system itself is in a state of flux, with a number of changes having been made in recent years (such as changes deriving from the 2012 Act) and further changes being planned or consulted on for the future.

To ensure that our analysis is flexible, we have considered two scenarios: a "*current*" scenario and a "*stylised*" scenario[16]. These are illustrated in Table 4-1 below.

[16] The "stylised" scenario is not intended to represent a specific prediction or recommendation.

Table 4-1: Comparison of the "Current" and "Stylised" scenarios

	Case 1 – "Current"	Case 2 – "Stylised"
Nature of sector	Mostly public sector providers, reflecting current configuration	Greater mixed economy of providers
National tariff enforcement	Less rigorously enforced – prices are not fully passed through	Fully enforced and reflected in contracting – therefore, price signals are fully meaningful
Commissioner budgeting	Commissioners budget on an annual cycle	Some ability to flex expenditure across years
In-cycle adjustments	As a starting point for both scenarios, we assume that an annual adjustment to prices could be made to reflect cost uplift factors (i.e. providers' exogenous input costs) and efficiency factors (determined *ex ante*) – this reflects typical "RPI-X" approach seen in other regulated sectors.	
Commissioner allocation	Continue to reflect a target allocation formula based on population and regional factors.	
Local variations and local modifications	Continue as set out in the 2014/15 National Tariff Payment System	
Clinical development	Constant rate of change in clinical drugs/procedures (i.e. no overall "big bang" or "step change" in drugs/procedures although the settings may change).	

In addition to the two scenarios above, we also recognise that there may be different payment systems under consideration. Whilst the national tariff currently primarily reflects an activity-based payment system, this may not remain the case for all areas of care. We therefore consider both activity-based and non-activity-based[17] pricing systems.

For present purposes, the essential difference between the payment system types is that, under a non-activity-based system, both providers and commissioners have more *certainty* over their future income and expenditure because payment is independent of volume of patients.

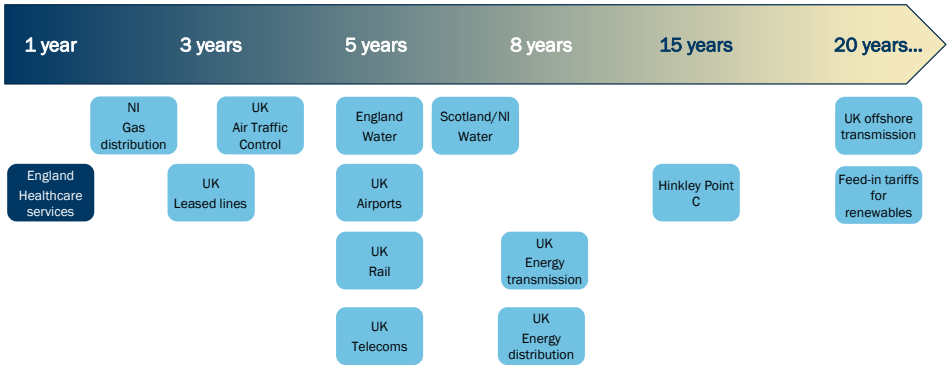
17 This could include, for example, capacity- or capitation-based systems.

4.1.2 Range of durations to assess

In applying an assessment framework, we considered it was first necessary to establish a range of possible cycle durations to examine. By way of illustration, clearly a 30-year national tariff cycle would be inappropriate, and it would not be helpful or informative to perform an in-depth analysis of such a long national tariff cycle duration.

To establish an appropriate range, we looked at control periods used in a number of other regulated industries, particularly in the UK and Ireland. This is summarised in Figure 4-1 below.

Figure 4-1: Regulatory control periods in other industries



Generally, ranges of between two and fifteen years are used in other regulated industries. However, compared to health care, other regulated sectors are more stable, and are more heavily reliant on large physical capital investments. With this in mind, we consider 7 years is an appropriate upper limit for our assessment.

4.2 Overview of framework

In this subsection, we describe our framework, which comprises:

- a set of nine factors we use to assess the benefits and costs of different national tariff cycle durations;
- an assessment of the profile of each factor – e.g. how the net cost/benefit to patient based on the factor changes as the national tariff cycle duration is increased; and
- the impact of each factor, which determines how it is weighted in our assessment.

4.2.1 The nine factors

The framework we have developed uses nine "factors" – potential costs or benefits which are each, in principle, sensitive to national tariff duration. These factors have been drawn from a combination of regulatory practice, economic principles and stakeholder feedback. These factors are summarised in Table 4-2 below.

Table 4-2: Assessment framework factors

		Factor	Description
Driving **efficiency** and **quality** in the system	[1]	**Greater quality care through service redesign/ reconfiguration**	Incentives for providers and local health economies to invest in service redesign and reconfiguration
	[2]	**Efficiency discoveries**	Providers and regulator may have better information on true efficient costs, at the end of the cycle
	[3]	**Pricing risk**	Risk of prices set being too low for providers or too high for commissioners; long duration means this will be *'wronger for longer'*
	[4]	**Surpluses accrued by regulated firm**	Surpluses made by firms due to greater efficiency can be seen as a 'cost' if extracted for shareholders or under-utilised for reinvestment
	[5]	**Flexibility of system**	Clinical/ technical developments may need to be reflected in the national tariff
Payment system development	[6]	**Headroom for more substantive changes**	Constraints on senior management time / lengthy consultations
	[7]	**Regulatory work-flow**	Less frequent but more in-depth price controls result in 'lumpy' resource burdens for regulators
	[8]	**Provider/ commissioner regulatory burden**	Production and interpretation of national tariff entails resource costs and complexity for contracting processes
	[9]	**Credibility of system**	The national tariff needs credibility to work, since it ultimately feeds into individual (usually bilateral) contracts

As illustrated in the table above, each of the factors generally fall into one of two groups:

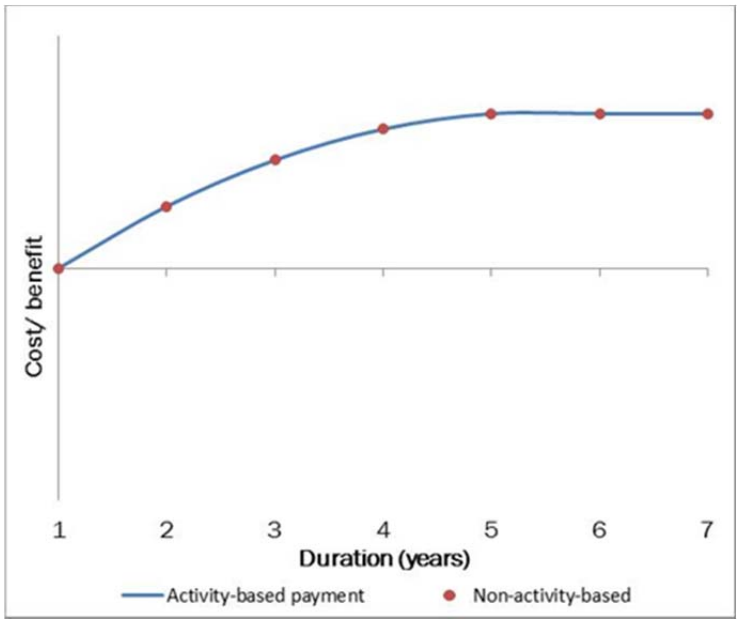
- **Driving efficiency and quality in the system**: factors which primarily affect commissioners' and providers' incentives and ability to procure and provide services.
- **Payment system development**: factors which primarily affect the ability of all stakeholders to comply with and develop the payment system.

We discuss the individual factors in more detail in Section 5 below. We recognise, given the complexity of the system, that the nine factors cannot be considered completely in isolation of one another –there may be some degree of overlap between factors, and individual effects may compound.

4.2.2 Profiles

For each factor, we suggest a "profile" which illustrates how the benefit (or cost) of that factor changes with increasing national tariff cycle duration. As an example, considering the regulatory burden, intuitively the costs would rise in proportion to the national tariff frequency. Hence, for this factor, the benefits to patients would be greater the longer the duration of the national tariff cycle as the regulatory cost of updating the national tariff would be incurred less frequently. This is illustrated in Figure 4-2 below.

Figure 4-2: Factor profile illustration



4.2.3 Weightings

For each factor we also suggest a "weight", which represents our judgment as to the impact of that factor in the context of the health care payment system. We have assigned weights along a scale of: "very low", "low", medium", "high" and "very high", as illustrated in Figure 4-3 below.

Figure 4-3: Factor weighting illustration

In principle a more complex weighting system could be devised, but on the evidence base available, we consider this would introduce spurious accuracy (adding complexity without necessarily coming to a more accurate conclusion).

4.3 Final form of the framework

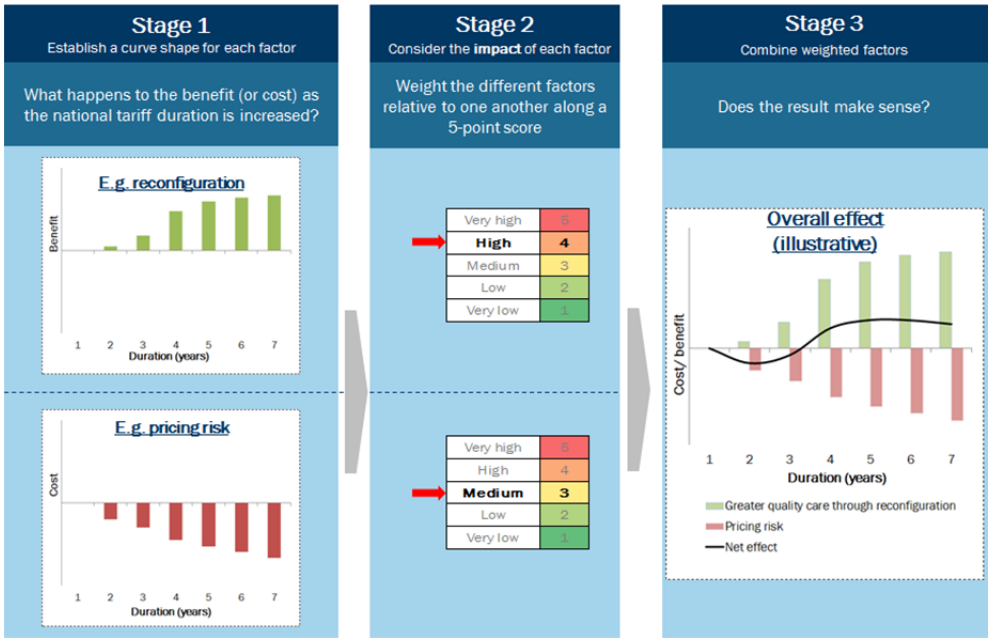
Given the components of the framework set out above, we now explain:

- how the weightings and profiles are combined; and
- how the framework incorporates the different scenarios described in Subsection 4.1.2 above.

4.3.1 Combining the weightings and profiles

The profiles (as described in Subsection 4.2.2) and the weights (as described in Subsection 4.2.3) are added together to produce an overall weighted average profile across all nine factors. This is illustrated in Figure 4-4 below, showing a stylised analysis with only two factors.

Figure 4-4: Illustrative example of application of framework



Our assessment framework requires judgement to be applied in forming the profiles and weightings for each factor. However, the main advantage of this framework is that the judgments made are transparent.

4.3.2 Applying the combinations of scenarios

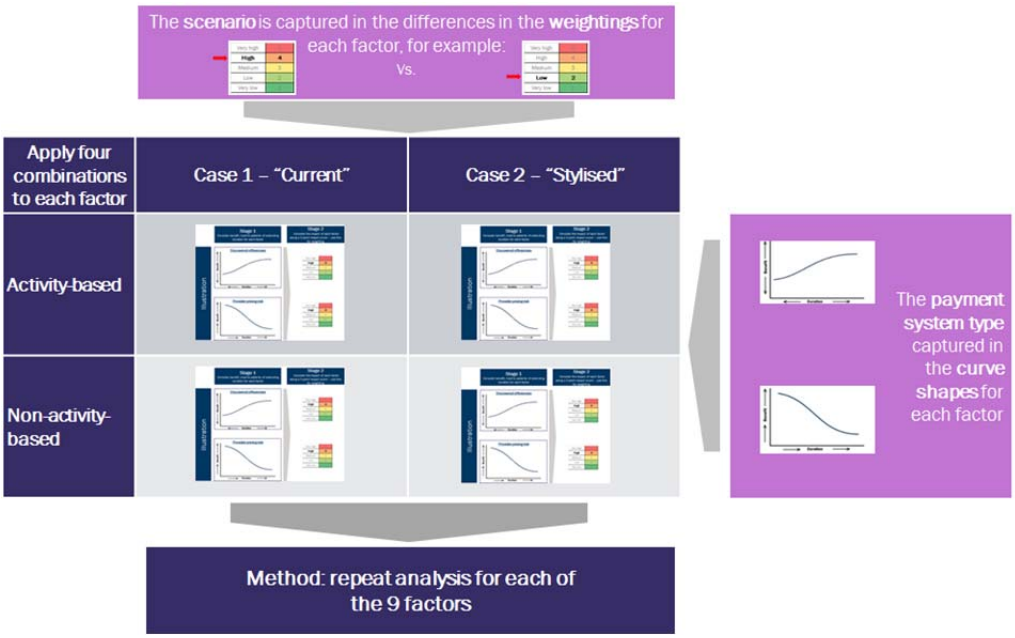
We have assessed each of the profiles and weightings in the light of different assumptions about (i) the scenario to apply and (ii) the type of payment system applied.

There are different methods for doing this, but for our purposes:

- We have reflected the impact of different scenarios by altering the weightings attached to different factors. For example, any given factor might be considered to have more or less of an impact, depending on whether you assume a "current" or "stylised" scenario.
- We have reflected the impact of different payment system types by altering the profiles of some of the factors.

This is illustrated in Figure 4-5 below.

Figure 4-5: Applying the combinations of scenarios



5 Application of our framework

In the previous section, we introduced our assessment framework and explained our approach involves assessing each factor independently of each other. In this section, we apply that framework, assessing each factor in turn. We then present our conclusions and cross-check those conclusions with sector feedback and sensitivity analysis.

In this subsection, we explain each factor and the rationale for the weights and profiles we have applied. The factors are:

- Greater quality care through service redesign/reconfiguration
- Efficiency discoveries
- Pricing risk
- Surpluses accrued by regulated firm
- Flexibility of the system to clinical development
- Headroom for more substantive changes
- Regulatory workflow
- Provider/commissioner regulatory burden
- Credibility of the system

For each factor, we explain our views on the profiles and weightings.

5.1 Factor 1 – Greater quality care through service redesign/reconfiguration

In principle, more price stability over a longer time period increases the incentives for organisations to make investments that are beneficial in the longer term (especially when those investments might have a short-term cost). This is because there is greater certainty regarding the revenue that would return from the investment. In the health care sector, such investments might be service redesign (i.e. new ways of organising delivery of care) or reconfiguration (i.e. new ways of organising provision of services) or a combination of both. The investment costs in the context of the health sector may also include significant management resource incurred in setting up new ways of working.

5.1.1 Profile of benefits/costs

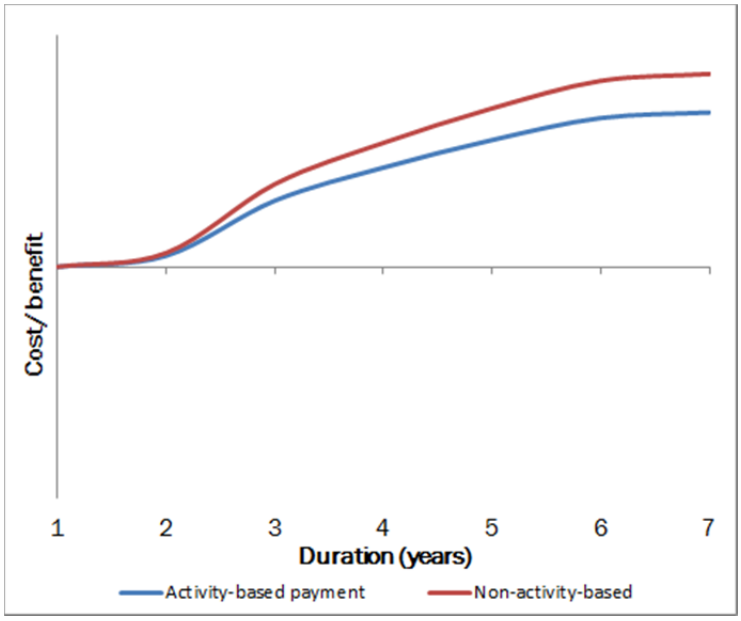
We expect that, in general, this incentive increases with the length of the duration as further stability is provided. The curve is somewhat S-shaped since:

- small duration increases are not very effective as typically redesign and reconfiguration will take a significant amount of time and therefore some price certainty will be required for a longer period of time; and
- in the longer term, the effect diminishes, since other uncertainties are likely to apply over a longer period.

One consideration is whether price is set for a unit of activity (e.g. activity based) or in a lump sum (e.g. non-activity-based payment). If the latter, the incentive strength of setting payment for a longer time frame is likely to be greater as revenue is more certain (this is because the total revenue, and not just the price per unit of activity, is fixed).

This is illustrated in the figures throughout this section: the profiles for activity-based systems are shown with blue lines and the profiles for non-activity-based systems are shown in red lines.

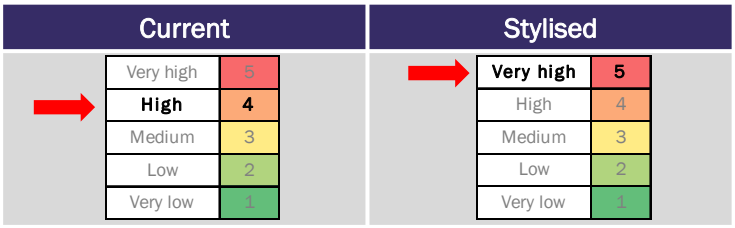
Figure 5-1a: Greater quality care through service redesign/reconfiguration



5.1.2 Assessment of impact

In terms of impact, we see this factor as very important in the context of the progress towards more integrated and higher quality care. Given the scale of the sector, even small improvements can have a huge overall impact. We also consider that the impact of extending the tariff duration will be higher yet in the stylised case, reflecting both the greater credibility of the national tariff and the (assumed) ability of CCGs to flex some spending across years (which means greater scope for making upfront investments in service redesign and reconfiguration).

Figure 5-1b: Greater quality care through service redesign/reconfiguration



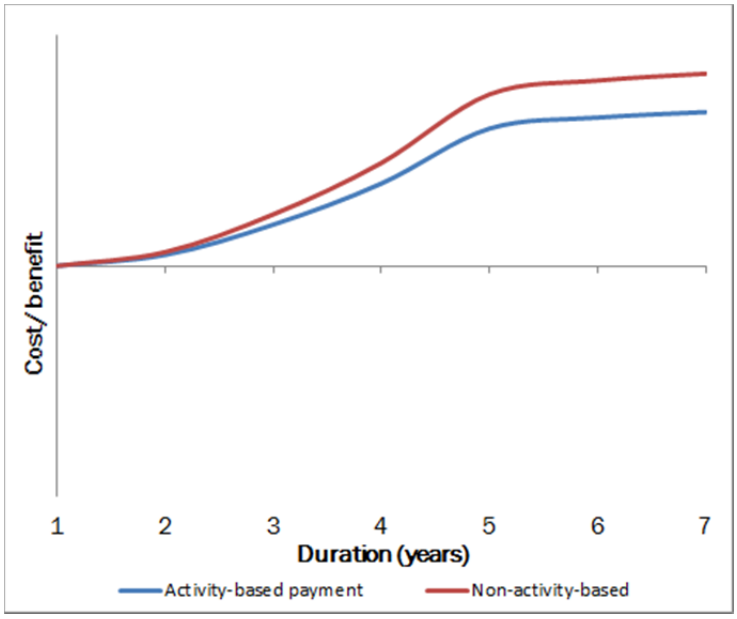
5.2 Factor 2 – Efficiency discoveries

A standard feature of regulation in other sectors is that by extending the period over which revenue is fixed, the regulated company has greater incentives to invest in new practices and ways of working (this is predicated on the existence of a motive for the regulated company to minimise losses/ maximise surpluses) .That means a reduction in the cost of provision – which enhances profits over that period. At the end of the cycle, by fixing prices for a longer duration, providers have a greater incentive to become more efficient. This "reveals" to the regulator (in this case, Monitor) better information of what providers' true efficient costs are, and consequently the baseline costs for the next period can be set lower than would otherwise be the case. The benefit from this factor therefore arises from the relatively lower prices applicable in the next period.

5.2.1 Profile of benefits/costs

The opportunities to discover efficiencies increase with the tariff duration, but the benefit of each additional year diminishes as the available efficiencies will be limited. We consider that the incentives to discover efficiency gains would likely be higher under a non-activity-based system, as providers would be incentivised to find way of reducing volumes as well as price (while retaining quality and appropriate access to care)

Figure 5-2a: Efficiency discoveries



5.2.2 Assessment of impact

We think that the impact of this factor is potentially high, but pragmatically will be limited by the ability of providers to identify and implement efficiency savings. Further, the true benefits only accrue in the following cycles. This factor is more significant when providers have a greater incentive to retain surplus profits, such as in our stylised case.

Figure 5-2b: Efficiency discoveries

5.3 Factor 3 – Pricing risk

Setting national tariff prices for longer durations perpetuates the pricing decisions that are made at the beginning of the cycle. This increases the following risks:

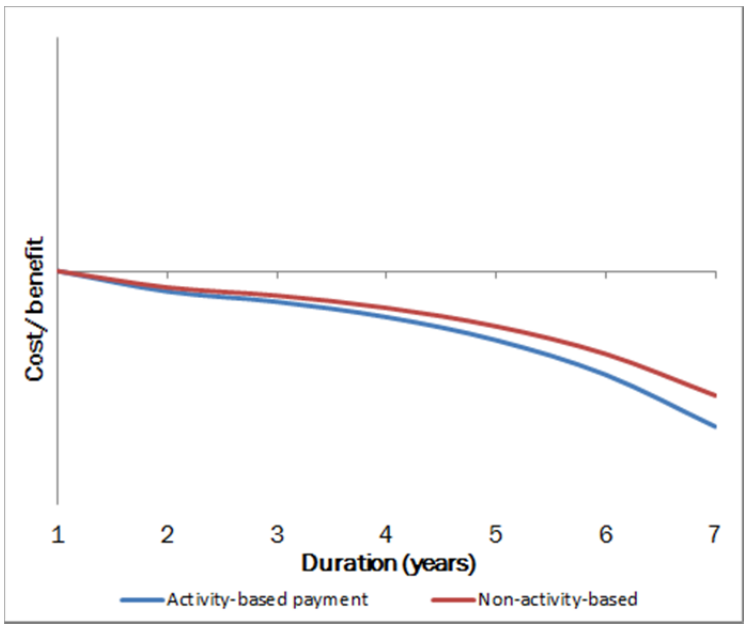
- CCGs (and patients) are at risk from prices being too high, meaning they may not be able to purchase sufficient services for their local populations;

- providers not being able to meet efficiency targets set ex ante (general pricing level); and
- providers weighted toward under-reimbursed services could be at risk if there is less (or no) opportunity to correct the national prices (specific pricing levels).

5.3.1 Profile of benefits/costs

This risk can be characterised as increasing somewhat exponentially: the effects of forecasting errors or providers missing efficiency targets increases over time. Activity-based payments may be more risky, since there is a further natural compounding effect – an under-reimbursed service is more likely to be over-purchased by CCGs.

Figure 5-3a: Pricing risk



5.3.2 Assessment of impact

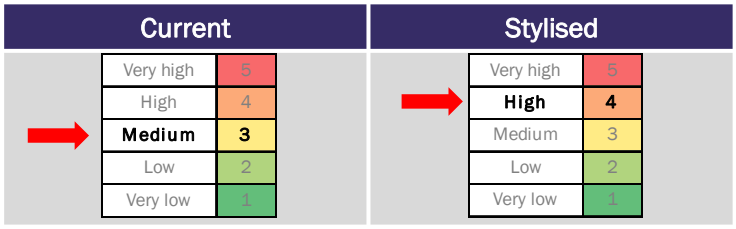
This factor is very important in the context of greater financial pressure in the system. This factor is difficult to weight:

- on the one hand, many stakeholders consider that many services are over- or under- reimbursed by the current national prices. We heard in our stakeholder workshop that crystallising the current pricing structures carries a real risk that prices will be *"wronger for longer"*.

- on the other hand, we should not necessarily extrapolate current conditions – in future, under a longer national tariff cycle, Monitor will have more time to collect and analyse provider cost data – this, and further development in costing generally, means the current deficiencies in pricing may not persist indefinitely.

This factor becomes even more important when the national tariff prices are fully enforced and those price signals are meaningful, leading to a higher weight in our stylised case.

Figure 5-3b: Pricing risk



5.4 Factor 4 – Surpluses accrued by regulated firm

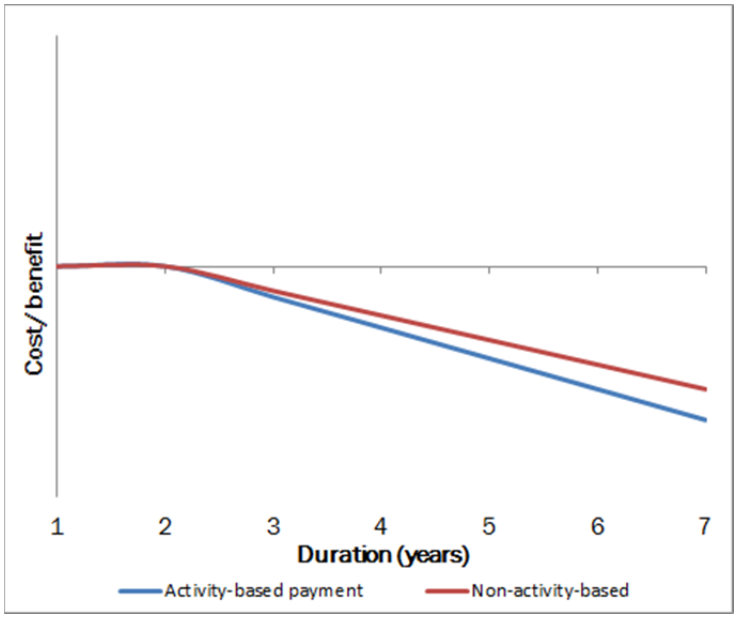
In typical regulated industries, a 'cost' of a longer control period is that firms exceeding efficiency targets can make excess profits at the expense of consumers. Indeed, this approach is at the heart of incentives-based regulation. The health care sector is distinctive as most providers cannot extract profits in the same way as typical firms (i.e. to shareholders). However, we consider this is still a potential risk associated with a longer national tariff cycle duration.

5.4.1 Profile of benefits/costs

We note that however long the cycle is, it is generally understood that in the last year of any cycle, the motive for profits is reduced. This is because the regulated firm is aware that any efficiency savings made will only be enjoyed for a year, and subsequently would feed in to a price reduction for the next period (assuming the regulator incorporates this information into prices in the next cycle).

This means, for example, that a two-year period offers no more benefits than a one-year period. Beyond that, the 'cost' increases linearly, reflecting potentially accumulating profits/surpluses. There is less risk in a non-activity-based system as the revenue is fixed (whereas for an activity-based system, there is a risk that revenues and costs diverge for growing volumes).

Figure 5-4a: Surpluses accrued by regulated firm



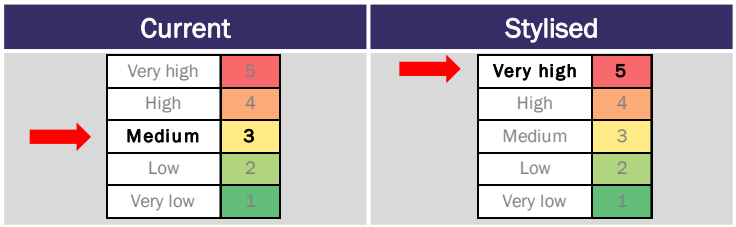
5.4.2 Assessment of impact

Presently there are weak profit motives in the health sector as currently arranged (i.e. no extraction of profits etc.). We also heard from our stakeholder feedback that *"building up surplus for service redesign /invest to save transformation… would be a benefit in not-for-profit providers."* As a result we would weight this a medium impact factor under current conditions.

However, under a stylised scenario where there is potentially a greater number of for-profit providers, excess profits would potentially be used to fund shareholder returns – which, on this basis of this factor alone, would be costly to patients[18].

[18] Note the benefits of the incentives driving this behaviour are captured elsewhere in the framework (principally, the "efficiency discoveries" factor).

Figure 5-4b: Surpluses accrued by regulated firm



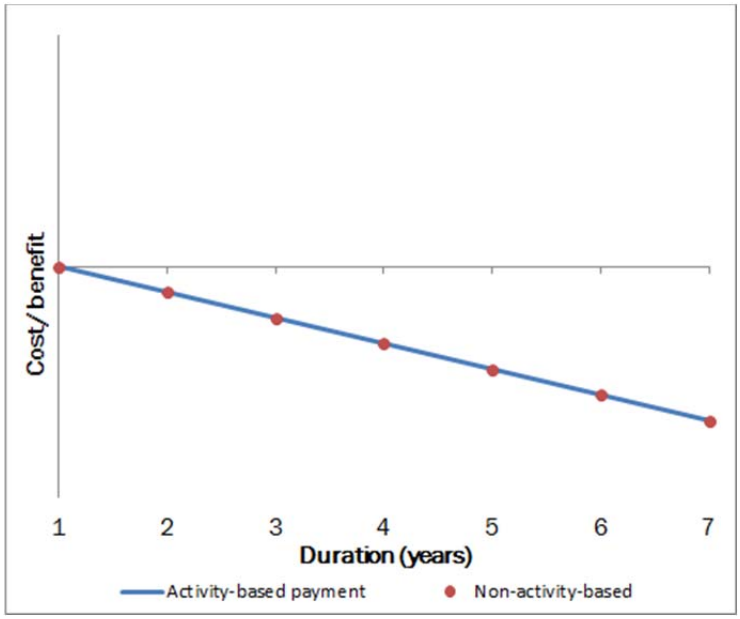
5.5 Factor 5 – Flexibility of the system to clinical development

The most recent national tariff incorporates currency updates on a yearly basis, primarily to support clinical development and ensure that the currency structure reflects recent practice as accurately as possible.

5.5.1 Profile of benefits/costs

Clinical development does not follow a strictly linear development path, and is often naturally irregular – that is, periods of stability punctuated by changes. However, this pattern cannot be modelled here in an informative way, and in aggregate over the whole system, we consider it reasonable to assume a constant rate of development. As a result, the profile is linear – with each increasing year of cycle duration, the national tariff could in principle diverge further from latest clinical developments. In this way, increasing the duration of the national tariff cycle is costly to patients when considering this factor in isolation.

Figure 5-5a: Flexibility of the system to clinical development



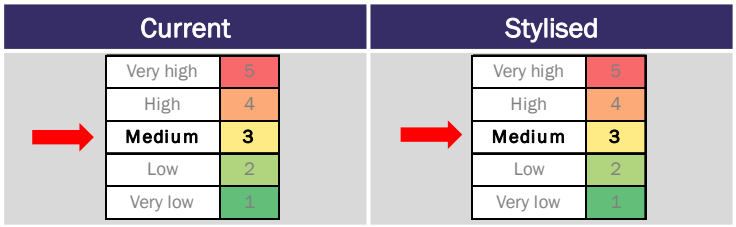
5.5.2 Assessment of impact

There is a need for the national tariff to stay clinically relevant. However:

- the scope of design change is actually fairly small each year in comparison to the total number of services /currencies /procedures represented; and
- in any case, newer procedures are and can continue to be priced locally.

Under a longer national tariff cycle, changes to currencies would be implemented at less frequent intervals (we discuss the possibility of in-cycle adjustments to HRGs in Section 8). One potential countervailing advantage of this is that evidence on the costs and prices for new services can be built up before implementation in the national price list.

Figure 5-5b: Flexibility of the system to clinical development



5.6 Factor 6 – Headroom for more substantive changes

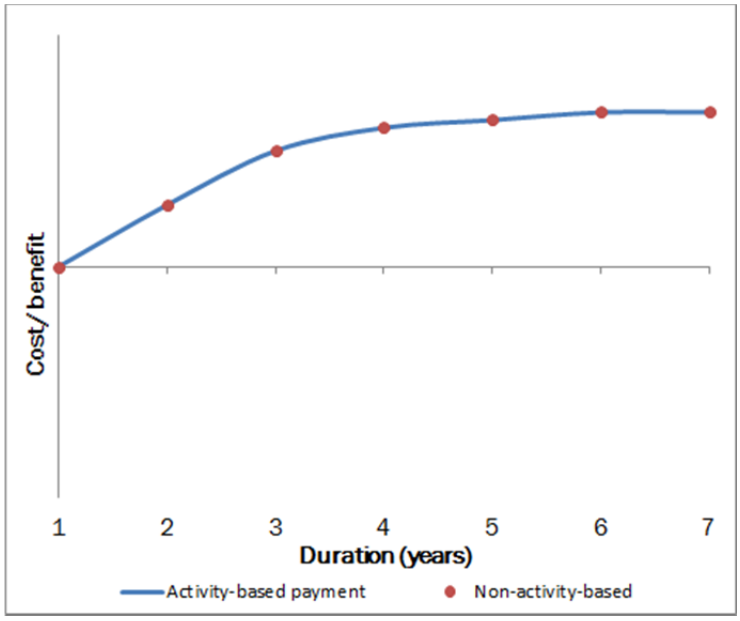
In principle, a longer national tariff cycle duration means that all stakeholders (but in particular, Monitor and NHS England) could devote more senior management time and resources to agreeing the future direction of the payment system. It also means that there is more data available on which Monitor and NHS England can base their decisions.

5.6.1 Profile of benefits/costs

Our assessment of this factor is based on discussions with Monitor and the fact that national tariffs take around 18 months to develop, even without significant changes. A two-year national tariff provides some space and at least removes the overlap between development of sequential national tariffs. However, a three-year national tariff cycle would provide a significant additional benefit through:

- additional time and resource to consider more significant changes; and
- the ability to detail the effect of the previous years' national tariff before completing development of the next.

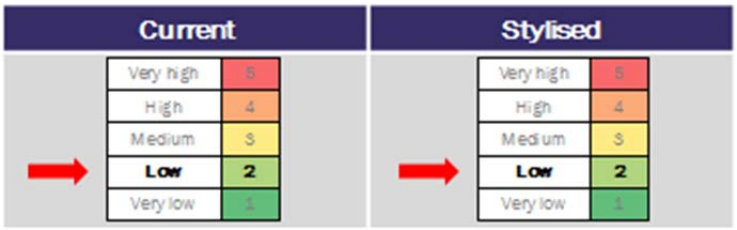
Figure 5-6a: Headroom for more substantive changes



5.6.2 Assessment of impact

With more time, resources and data, there is potential for Monitor and NHS England to make better decisions. Monitor already has a distinct pricing strategy team that is developing longer term policies. However, making more substantive (and beneficial) changes to the health sector requires a long lead-time given the engagement consultations, governance arrangements and senior management time required.

Figure 5-6b: Headroom for more substantive changes



5.7 Factor 7 – Regulatory workflow

There is a significant number of staff at both Monitor and NHS England whose primary function is to develop and implement the national tariff. Clearly, any change to the national tariff cycle would impact on workflow.

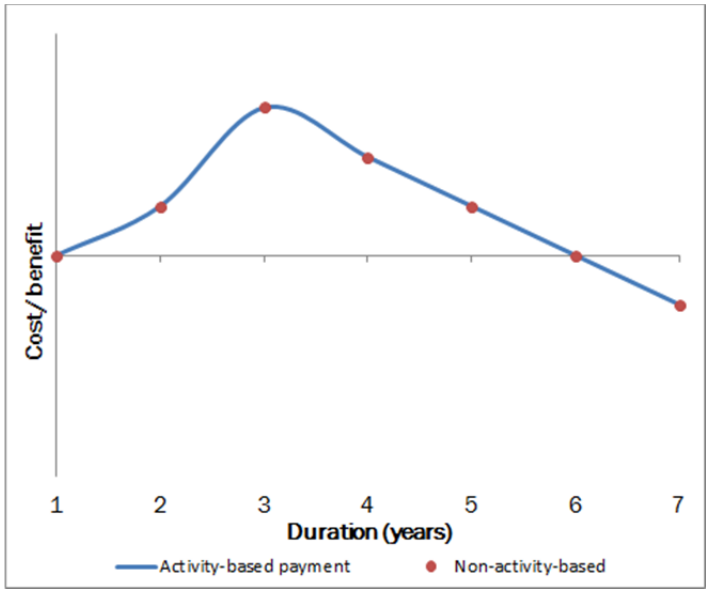
5.7.1 Profile of benefits/costs

In theory, the resources that would be freed up from national tariff production on a yearly basis could be diverted towards more in-depth development and analysis (see "Factor 6 – Headroom for more substantive changes").

However, evidence from other regulated industries is that a longer regulatory duration introduces a highly variable workload – around the time between cycles, temporary staff/consultants/contractors need to be found, and further, there is often a degree of skills atrophy within the regulator during the operation of the cycle.

This variable workload factor represents a countervailing effect, acting in the opposite direction to the benefits of freeing up staff for more in-depth development and analysis.

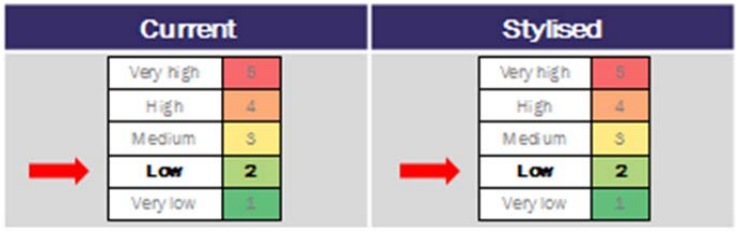
Figure 5-7a: Regulatory workflow



5.7.2 Assessment of impact

While this could offer some benefits over an annual national tariff cycle, the benefits are likely to be minor in comparison to the other factors considered.

Figure 5-7b: Regulatory workflow



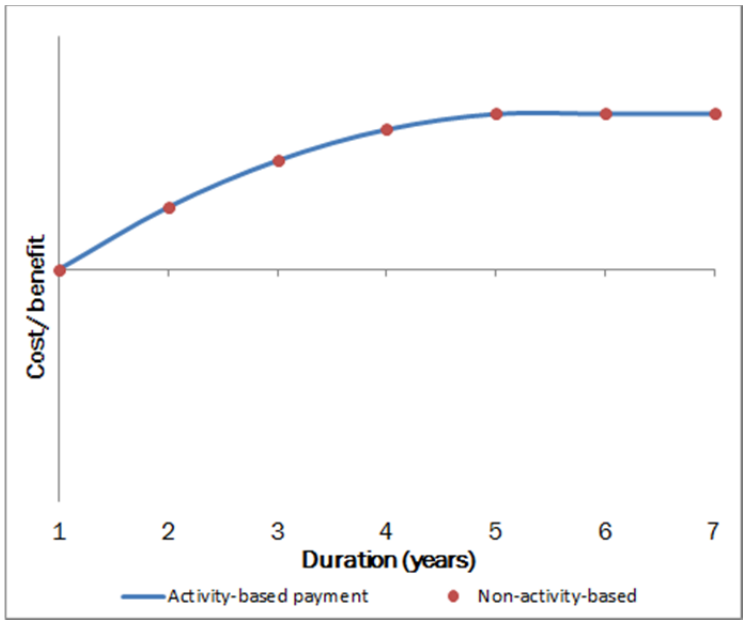
5.8 Factor 8 – Provider/commissioner regulatory burden

There are costs incurred in the health sector as a whole in interpreting and applying the national tariff each year. One of the potential benefits of a longer national tariff cycle is that those costs would not be incurred so frequently, and as such resources could be better used.

5.8.1 Profile of benefits/costs

The regulatory burden reduces as national tariff duration increases, but the benefit diminishes due to the need to manage in-cycle adjustments.

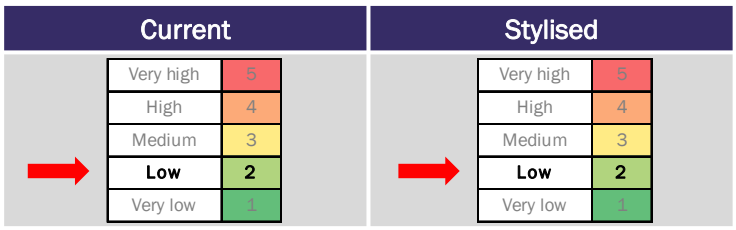
Figure 5-8a: Provider/commissioner regulatory burden



5.8.2 Assessment of impact

Although contracting will still occur regularly (often annually), there would be less new national tariff material to interpret and understand each year. While this would have the possibility of producing cost savings, these are likely to be somewhat limited. The greater benefit of a longer national tariff duration comes from the greater ease with which both providers and commissioners can examine trends over time.

Figure 5-8b: Provider/commissioner regulatory burden



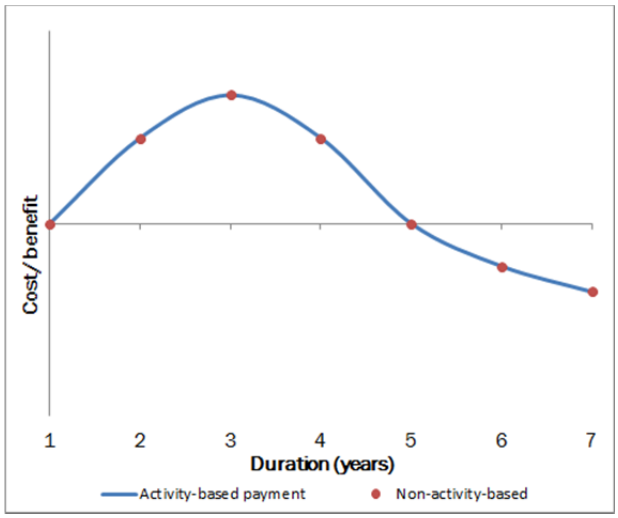
5.9 Factor 9 – Credibility of the system

Monitor and NHS England want to enhance the credibility of the NHS payment system. This will be necessary to enable the national tariff to be more fully reflected in contracting and to enable some of the benefits described above. All else being equal, longer duration controls send stronger signals to stakeholders, as long as the control itself is seen as credible.

5.9.1 Profile of benefits/costs

As noted above, longer duration controls send stronger signals to stakeholders. However, this has to be balanced against the fact that the national tariff is still in the process of gaining credibility with stakeholders – a national tariff spanning too far into the future would be less credible. Based on our stakeholder feedback, in our judgment national tariff cycles of four years and above would start to appear less credible.

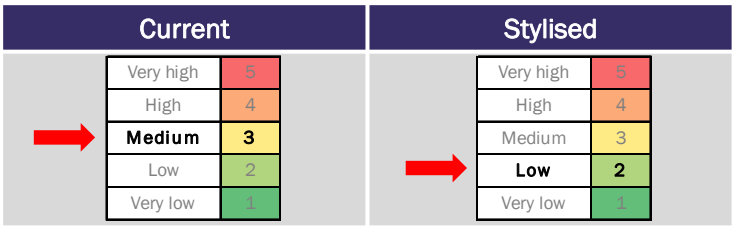
Figure 5-9a: Credibility of the system



5.9.2 Assessment of impact

The national tariff needs credibility to work, since it ultimately feeds into individual (usually bilateral) contracts between independent parties. The stylised scenario assumes greater enforcement of the national tariff, so the individual incremental effect of this factor would be less important.

Figure 5-9b: Credibility of the system

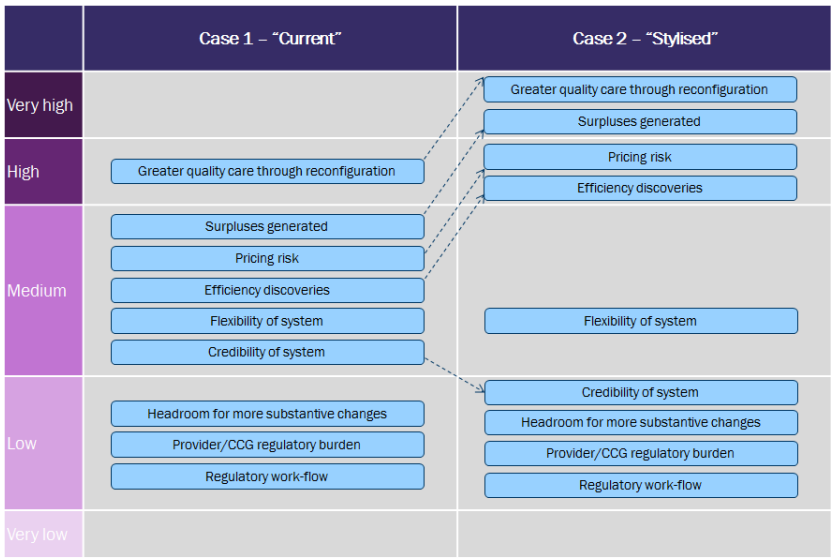


6 Conclusions on the optimal national tariff cycle duration

As described in Section 4, and noted for each of the factors set out in Section 5, we have assessed each factor under two different scenarios – "current" and "stylised".

Figure 6-1 below summarises how each of the factors is weighted under each scenario, and the changes between scenarios are highlighted.

Figure 6-1: Summary of factor weightings



As can be seen in Figure 6-1, factors relating to efficiency and quality generally become more important under the "*stylised*" scenario. Broadly, this simply reflects the fact that under our "stylised" scenario the national tariff itself is assumed to have a greater impact on contracting decisions made by providers and commissioners.

As a result of the above, our conclusions are slightly different under the two scenarios. Therefore, in this section, we set out:

- our conclusions under "*Current*" conditions; and
- our conclusions under "*Stylised*" conditions.

We also explain how he have cross-checked our conclusions by reference to stakeholder feedback and sensitivity analysis.

6.1 Conclusions under the "Current" scenario

To generate our conclusions, we have mathematically combined our assessment of each of the factors (as per Section 5) using the method described in Section 4. Figure 6-2 below shows the output of this process. For this chart (and other similar charts in this report):

- We have assessed the results under both an activity-based payment system and a hypothetical non-activity-based system (shown in blue and red respectively)[19].
- The net benefit of each different national tariff cycle duration is shown relative to a one-year cycle.
- The cycle duration with highest overall net benefit is highlighted.

Figure 6-2: Conclusions under the "Current" scenario

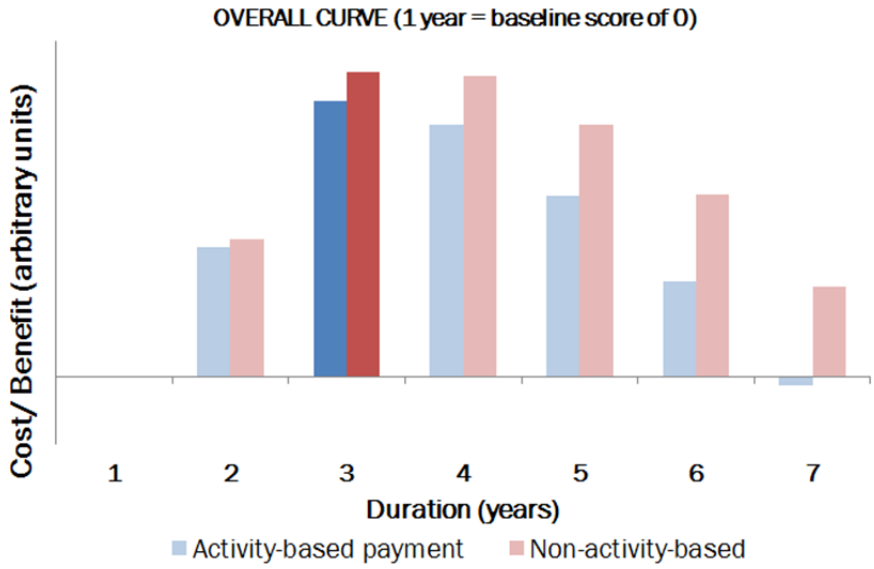


Figure 6-2 shows that, under our assessment framework as described, 3 years is the optimal national tariff duration under current conditions, for both activity-based payment systems and non-activity-based payment systems. Figure 6-2 also shows that the benefits of a 3-year cycle are considerably higher than a 2-year cycle, but, by contrast, a 4-year cycle offers net benefits nearly as great as a 3-year cycle.

As previously noted, our assessment is based on nine individual factors with associated profiles and weightings.

[19] The relative sizes of the red and blue bars should not be interpreted as a recommendation of the relative merits of either system – it is just an artefact of the modelling process.

However, it is instructive to reiterate the main factors driving this result:

- Under this scenario, the main factors driving a longer national tariff cycle are related to the scope for greater quality and more efficient services through service redesign and reconfiguration.
- The main countervailing factors (i.e. constraining the result to three years rather than a longer duration) are the flexibility of the national tariff to clinical development, the credibility of the system and pricing risk.

6.2 Conclusions under the "Stylised" scenario

Our stylised conditions are intended to illustrate the results under a scenario where the national tariff is more fully enforced and there is a greater mixed economy of providers. The aggregate effect of the curves and weightings under this scenario is shown in Figure 6-3 below.

Figure 6-3: Conclusions under the "Stylised" scenario

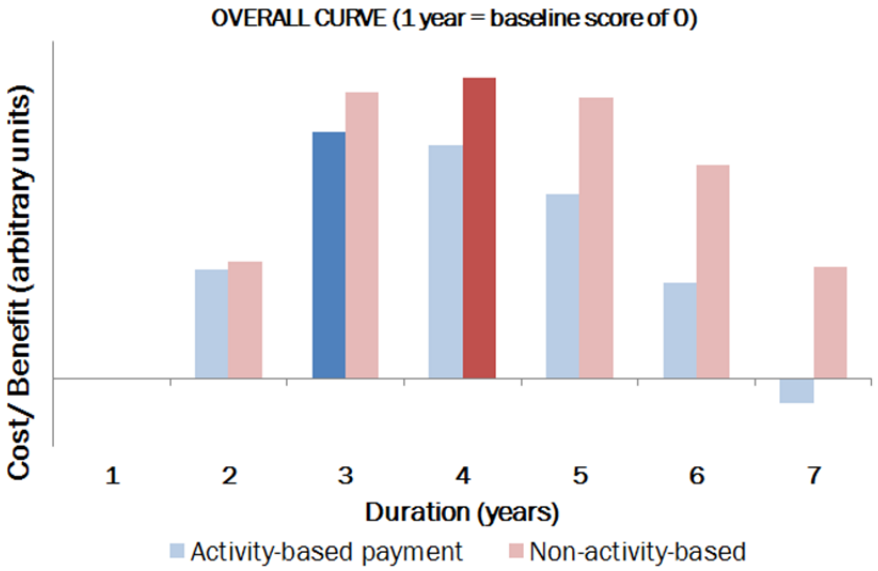


Figure 6-3 shows that under our assessment framework as described:

- three years remains the optimal national tariff duration for activity-based payment systems; but
- for non-activity-based payment systems a longer national tariff cycle of four years may be more appropriate.

For activity-based payment systems, the main factors driving the result are similar to those described under Subsection 6.1 above.

For non-activity-based system, the result is primarily driven by:

- even stronger incentives for service redesign, reconfiguration and efficiency discoveries in the "stylised" scenario (on account of even greater revenue certainty); and
- the main countervailing factor (i.e. constraining the result to four years rather than a longer duration) is the risk of excess profits (sometimes referred to as 'economic rents') being extracted, which would have an adverse impact on patients.

6.3 Cross-check and sensitivity analysis

We have cross-checked our conclusions by reference to two main sources:

- feedback from stakeholders;
- comparison with other sectors; and
- sensitivity analysis.

In this subsection, we also explain why the health care pricing cycles in other jurisdictions are typically annual, and the implication this has for our conclusions.

6.3.1 Cross check with sector views

Monitor and NHS England have heard from many stakeholders that the current one-year national tariff cycle is problematic for a number of reasons (for example, due to the volatility of prices). In our engagement with stakeholders for this project, the majority of stakeholders considered a longer national tariff cycle would be beneficial. This validates our conclusion that the national tariff cycle should be longer than the current annual cycle (under any of our scenarios).

An equally important consideration is whether our conclusions make sense in the light of stakeholder concerns about excessive cycle lengths – the question of *"how long is too long?"* was asked more than once. As our project developed, we were able to form an initial conclusion of three years, and tested this with stakeholders. The general consensus was that this would be an appropriate length (although a wider-ranging survey would be needed to validate this).

6.3.2 Comparison with other sectors

In our view, a useful objective reference point is the regulatory cycle lengths seen in other industries – generally ranging from five years to ten years. In this context, our central recommendation of a 3 year national tariff cycle is reasonable, given that the health care sector, compared to other typically regulated industries, has:

- less powerful profit incentives;

- less stability;
- less demand for intensive capital investment; and
- a greater need to change the 'product' on a continual basis.

Our recommendation of a three-year cycle is therefore validated by sector feedback and comparison with other regulated sectors: put simply, one year is too short and five years is too long.

6.3.3 Sensitivity analysis

We have tested how sensitive our conclusions are to our assessment of the weights to apply to each of the nine factors identified. Generally, our results are robust to minor changes in weightings or profiles for different factors – this is a standard sensitivity analysis test.

However, an alternative type of sensitivity analysis involved seeing what analytical components have to change in order to result in a completely different conclusion. Below, we illustrate two alternative sets of assessments that would arrive at different conclusions[20].

This is illustrated in Figure 6-4 below, which shows three columns:

- the **middle** column is a summary of the weightings we have assessed;
- the **left-hand** column shows weightings that could be changed to result in a **two-year** recommended cycle; and
- the **right-hand** column shows weightings that could be changed to result in a **four-year** recommended cycle.

20 We appreciate that there a number of scenarios which we could choose in order to generate a different answer. These are not intended to be the next best alternatives or alternative scenarios that we think are justifiable, but to be illustrative of the sort of changes we would have to make to our beliefs in order to modify our conclusions.

Figure 6-4: Sensitivity analysis ("*current*" conditions, activity-based system)

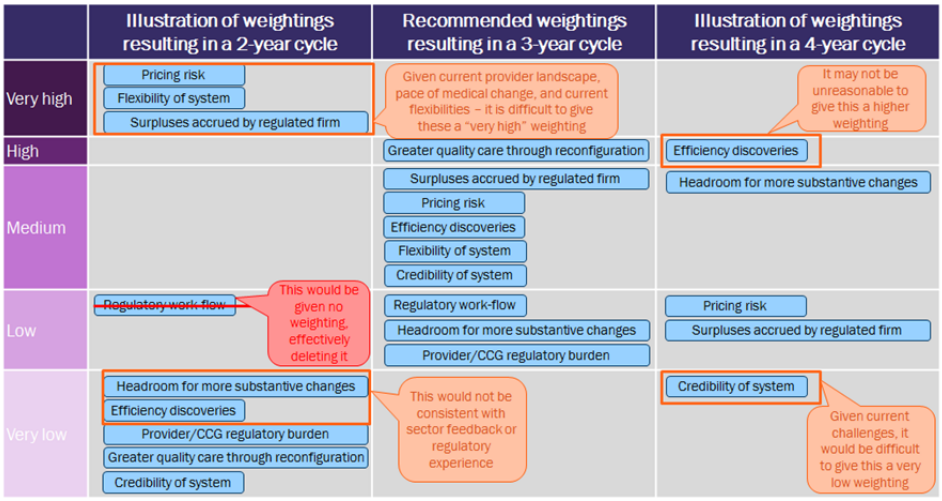


Figure 6-4 shows that:

- To result in a **two-year cycle**, almost all of the 9 factors would need to be changed, including several changing up or down two levels and one being deleted altogether. In particular, we would need to consider that there were very few benefits available from efficiency discoveries and that the flexibility of the system to clinical development was significantly more important than achieving greater quality care through service redesign/reconfiguration. This would be at odds with the broad thrust of feedback from the sector.
- fewer weightings would need to change to result in a conclusion that a national tariff cycle of **four years** is optimal. The main change which would, in our view, be difficult to support is the proposition that the flexibility of the system should be given a very low weighting. It does not seem reasonable, in light of the feedback that we received, that this is the case.

The above would appear to validate our conclusions that a three-year cycle is optimal. We also note that our sensitivity analysis suggests that a four-year cycle would in fact be preferable to a two-year cycle.

6.3.4 International comparisons

We have examined the regulatory cycles of health care payment systems in other jurisdictions, at a high level (our review is set out in Appendix 3).

We found that the majority of health care payment systems operating in other countries studied operate on a one-year cycle. This gives pause for thought, in the context of our central recommendation of three years. However, for each jurisdiction we examined, the approach was different than the 'independent' approach explained in Section 2. In particular, in **France**, **Germany** and **Australia**, prices are explicitly linked to the overall budget available.

There are other differences in other jurisdictions. For example:

- In **Finland**, DRG prices are used as billing instruments only – providers bear no responsibility for financial loss, as their deficits are covered automatically by the local municipality (ultimate purchaser of services).
- In **Ireland** and the **Netherlands**, provider payments are ultimately not driven by activity. The majority of provider payments are covered by fixed budgets and a DRG system is only used to reflect some additional complex services.
- In **Sweden**, **New Zealand** and **Spain**, the formal payment system covers regional payment flows only.

Further, as we note in Section 2, the national tariff consists of more than just a set of prices. Annual updates observed in other jurisdiction generally apply to prices only (rather than currency specifications and associated rules, or equivalent) and are thus more analogous to a multi-year national tariff cycle with automatic annual price adjustments[21].

[21] The use of in-cycle adjustments such as annual price adjustments are discussed in more detail in Section 8.

7 Consideration of different cycles for different areas of care

The national tariff encompasses many different types of health care services and settings. We understand Monitor and NHS England are currently investigating whether and how to 'segment' the national tariff into different areas of care. For this reason, our analysis in this section can only be read as indicative – a more detailed review may be required at if at any point the different areas are clearly defined and used in practice.

The factors described in Section 5 may be assessed differently, according to context, which may imply different optimal durations for different types of services. In this section we set out an assessment framework for assessing this, and provide some initial indicative conclusions.

This section is structured as follows:

- We describe the delineation of areas of care we adopt for the purposes of this work.
- We describe an assessment framework for determining the optimal duration for different types of services.
- We present some illustrative conclusions based on an initial judgment on how the factors apply to different services.
- We note the feasibility barriers to applying different national tariff cycles to different areas of care.

7.1 Delineation of areas of care

For present purposes, we rely on 5 of the areas outlined as priorities for "Transformational Change" in NHS England's *"Everyone Counts" 2014/15 Planning Guidance*. This is not necessarily intended to represent mutually exclusive areas of care, but is a useful delineation for the purposes of this work[22].

[22] We note other delineations do exist e.g. CQC 's *Essential Standards* (March 2010) lists 28 "service types".

The five areas are listed in Table 7-1 below.

Table 7-1: Five areas of care

Area of care	Description and NHS England priorities
Primary care	**Wider primary care, provided at scale:** • Access to a broader range of services provided in homes and in their communities • Centred on pivotal and expanded role for general practice to co-ordinate and deliver comprehensive care in collaboration with community services and expert clinicians • New models of primary care that provide more proactive, holistic and responsive services for local communities, particularly for frail older people and those with complex health needs
Urgent and emergency care	**Access to the highest quality urgent and emergency care:** • Patients treated as close to home as possible • Major specialised services offered in between 40 and 70 major emergency centres, supported by other emergency centres and urgent care facilities • NHS 111 services will be rolled out to cover the whole of England
Elective care	**A step-change in the productivity of elective care:** • Centres that can deliver high quality treatment, treating adequate numbers to be expert, and with the most modern equipment available • Need to review processes for routine planned admissions for patients for less complex treatments
Specialist care	**Specialised services concentrated in centres of excellence:** • Specialised services for less common disorders need to be concentrated in centres of excellence where we know that the highest quality can be delivered • Maximising quality, effectiveness and efficiency means working at volume and connecting actively to research and teaching
Integrated care	**'Year of Care' /integrated approaches:** • Senior clinician taking responsibility (through a personal relationship) for active coordination of the full range of support from lifestyle help to acute care

Source: "Everyone Counts" 2014/15 Planning Guidance.

7.2 Approach to determining durations for different areas of care

We have applied the same overarching framework to determine the optimal durations for different areas of care. For clarity, we focus on four factors which we consider would vary most across different areas of care:

- greater quality care through service redesign/reconfiguration;
- efficiency discoveries;
- surpluses accrued; and
- headroom for more substantive changes.

In Table 7-2 below we set out how the weightings for each of these factors may vary, relative to the weightings given for the national tariff 'as a whole' (as set out in Section 5 above).

Table 7-2: Different areas of care - illustrative

	Greater quality care through reconfiguration	Efficiency discoveries	Surpluses accrued by regulated firm	Headroom for more substantive changes
Primary care	Relatively **lower** e.g. - configuration on local rather than national scale	Relatively **lower** e.g. - focus on GPs' expanded role rather than efficiency	Relatively **higher** e.g. - GPs independent providers	Neutral
Urgent and emergency care	Relatively **higher** e.g. - configuration on national rather than local scale	Relatively **higher** e.g. - area of high spend and requirement for capacity	Relatively **lower** e.g. - low probability of independent entry	Relatively **higher** e.g. - area of high spend and requirement for capacity
Elective care	Neutral	Relatively **higher** e.g. - high volumes nationwide and cost variability	Relatively **higher** e.g. - high volume of independent providers and perception of 'skimming'	Neutral
Specialist care	Neutral	Relatively **lower** e.g. - less scope for economies of scale	Relatively **lower** e.g. - low probability of independent entry	Neutral
Integrated care	Relatively **higher** e.g. - configuration on national rather than local scale	Neutral	Neutral	Relatively **higher** e.g. - area of continual development; assessment of local approaches

At this stage, the matrix should be considered only as a framework with which to explore this further: significant clinical input will be required at a later stage if and when the different areas of care are defined and established.

The broad response from our stakeholder workshop was that there is some merit in considering 'segmentation' in this way, particularly if some types of care were to be reimbursed differently (e.g. using capitation payments).

Further work may also need to reflect other factors such as the cost structure of different areas (e.g. fixed vs variable costs); scope for decommissioning capacity; and rate of technological innovation expected.

7.3 Illustrative conclusions

For each of the areas of care shown above, we have modified the weightings following the matrix shown in Table 7-2. The outcome of this application is shown in Table 7-3 below.

Table 7-3: Illustrative conclusions – national tariff cycles for different areas of care

		Conclusions	Primarily driven by...
Current conditions	Activity-based	• 3 years seems the optimal duration for **all segments** • ...except **emergency care** where there is a **marginally** higher net benefit under a 4 year cycle	• Emergency care will potentially benefit more from large-scale service redesign and reconfiguration...
	Non-activity-based	• 3 years seems the optimal duration for **primary care** and **specialist care**... • 4 years would be optimal for **emergency care**, **elective care** and **integrated care**	• Result is primarily driven by our input assumption that for primary care and specialist care there are relatively fewer benefits available from service redesign/ reconfiguration and efficiency gains (although we stress this is only relative to other areas of care)
Stylised conditions	Activity-based	• 3 years seems the optimal duration for **all segments** • ...except **emergency care** where there is a higher net benefit under a 4 year cycle	• Emergency care will potentially benefit more from large-scale service redesign and reconfiguration...
	Non-activity-based	• 4 years for specialist care, integrated care and **primary care**... • but 3 years seems optimal for **primary care**... • and 5 years for **emergency care**	• Result is primarily driven by our input assumption that for primary care and specialist care there are relatively fewer benefits available from service redesign/ reconfiguration and efficiency gains

As shown in Table 7-3, our overall indicative conclusions are that:

- under current conditions, it would be best to implement a **three-year national tariff cycle for most areas of care**; but
- national tariff cycles longer than three years may be optimal for **some areas** in the future (such as emergency care), especially if non-activity-based payment systems were implemented. As an example, if emergency care providers were reimbursed according to capacity, then a national tariff cycle of five years may be even better suited to the large-scale reconfiguration required than three years.

7.4 Feasibility of differential cycle durations

It is evident that having different national tariff cycle durations for different areas of care could offer some benefits: in particular it would allow for more flexibility in determining a tariff length that would balance effective long term planning and investment with technological/clinical change appropriately for different areas of care.

However, these benefits need to be considered against the costs, risks and practical implications of introducing differential cycle durations at this stage. These include:

- It may add significant complexity to the system (and perhaps negate many of the benefits of increasing the cycle length overall). For example, many providers offer services that span different types of care, and they would have to cope with multiple cycles.
- There would also be increased complexity for Monitor and NHS England – for example, multiple "national tariffs" may have to be produced, potentially across varying timescales.
- It may be confusing, and potentially could undermine the concept of a single holistic national tariff, which has implications for credibility. In practical terms it would also be more difficult for Monitor and NHS England to develop a holistic and aligned national tariff with multiple cycles running concurrently. (One potential mitigation, explored in our workshop, was having cycles that were integer multiples of each other – for example, 3-year and 6-year cycles – giving the opportunity to 'sync' at least every 6 years).
- Consultation and engagement processes may be less efficient.

Despite the challenges listed above, we heard from stakeholders at our workshop that it would not be impossible to implement: one stakeholder said *"the national tariff is already as complex as it can be"* and that having different cycles for different areas of care would be *"a complication, but not insurmountable"*. However, in our judgment we would consider that having multiple cycles running concurrently introduces significant complexity which would have to be very carefully considered against any theoretical benefit.

8 Consideration of in-cycle adjustments

In most regulated sectors, a drawback of longer price control periods is that participants are potentially exposed to 'shocks' if the price control regime is insufficiently flexible to changes which are extreme or unanticipated at the time the price control is set, or if the initial prices are inappropriate. There is a regulatory precedent for in-cycle adjustments which ultimately allocate the potential upside/downside risks of such changes.

Further, for the health care sector, there is also a need to consider whether any adjustments can be incorporated to reflect systemic 'shocks' (e.g. influenza outbreaks) or rapid clinical changes.

In this section, we consider the types of in-cycle adjustments that may be applicable, and assess each. We again use our nine factors to assess the merits of each potential in-cycle adjustment. To assess which in-cycle adjustments may be appropriate under a three-year national tariff, we have also considered in particular:

- the extent to which the existing structure of the payment system already mitigates some risks; and
- cost of implementation – some approaches (especially those that require detailed regulatory review) are relatively costly to deliver.

The adjustments we consider are:

- Revenue drivers
- Ex ante agreement of cost pass through items
- Exempted items
- Income adjusting events
- Updating HRG design

8.1 Revenue drivers

In some regulatory regimes, (pre-agreed) metrics can be used to measure the total demand for a provider's services, and the provider can be entitled to recover more revenue to reflect the marginal costs of delivering service volumes above pre-agreed metric thresholds. In our view, this is less appropriate for an activity-based payment system, which already compensates the provider for on the basis of activity.

Ultimately, the volume/revenue relationship for a provider will be determined by the contracting form between commissioners and providers. As such, we do not recommend introducing an additional adjustment mechanism.

8.2 Ex ante agreement of cost pass through items

In some regulatory regimes, prices reflect (either in full or in part) expected input costs, such that the average firm's exposure to variability in those costs is reduced or removed.

In recent years, the national tariff (alternatively its predecessor 'Payment by Results') has reflected providers' exogenous cost increases – either via the use of updated reference costs, or a general cost uplift factor, or both.

The cost uplift factor used in the 2014/15 National Tariff Payment System is analogous to the "RPI" uplift typically applied in other regulated sectors. This in itself is a form of cost pass through, although an important distinction is that providers are reimbursed for *expected* input cost increases rather than *actual* input cost increases (there is currently no specific method for adjusting prices to reflect the fact that outturn cost increases may differ to anticipated cost increases).

As in other regulated industries with regulatory control periods in excess of one year, it seems appropriate to increase prices in line with a measure of inflation if they are to be set over multiple years. This is consistent with Monitor's and NHS England's expectation that "*adjusting prices for expected changes in costs will be an ongoing feature of the national tariff, regardless of the specific methods used to set prices in the future*"[23].

This would mean setting out, at the beginning of the cycle, the exact process for determining the cost uplift factors, and then applying this same methodology each year[24].

The efficiency factor schedule would have to be stated in advance, covering the whole national tariff cycle, so providers know the schedule of real price adjustments they would have to manage. The efficiency factor would not necessarily have to be the same each year – for example, it may reflect the notion that greater savings are more likely to arise later in the cycle. In this sense, the application of the efficiency factor would not technically be an 'in-cycle adjustment' since there it is set out at the beginning of the cycle.

---

23 2014/15 National Tariff Payment System, Subsection 5.3.

24 For completeness, we note this may include a methodology for reflecting the impact of the *Mandate* each year.

In Table 8-1 below we summarise our assessment of this in-cycle adjustment, by reference to our assessment framework.

Table 8-1: Ex ante agreement of cost pass through items

Factor	Impact
Greater quality care through reconfiguration	Allows providers to plan in 'real' terms and focus on making operational efficiency improvements
Efficiency discoveries	Allows providers to plan in 'real' terms – so efficiency factor applied is more transparent
Provider pricing risk	Decreases risk to providers as they are not exposed (in aggregate) to changing input costs they have no control over
Profits gained by regulated firm	Directional impact depending on cost outturn vs. expectation
Flexibility of system	N/A
Headroom for more substantive changes	N/A
Regulatory work-flow	Monitor and NHS England would need to calculate and apply a cost uplift factor each year
Provider/ commissioner regulatory burden	Monitor has already set a precedent of consulting on a methodology for this calculation (in advance of calculating final number)
Credibility of system	Prices set in nominal terms are likely to diverge further from real cost levels over time, increasing disconnect of national tariff

We consider that overall it would be beneficial to retain a cost uplift factor as a 'cost pass through' adjustment. This is because:

- it ensures providers can focus on real efficiency gains;
- it is consistent with the principle that prices reflect efficient costs; and
- there is already a precedent for this in the national tariff (for 2014/15, the document consulted on specified a method for updating the cost uplift factors but did not specify all of the figures).

8.3 Exempted items

In some regulatory regimes, certain services are excluded altogether from the pricing regime.

The national tariff already has a number of features analogous to this, for example:

- high cost drugs devices and procedures list (where rare, unusual or highly variable costs are captured separately);
- local variations – currencies and/or prices negotiated locally; and
- local modifications – exceptionally high specific exogenous costs identified by a provider can be 'passed through'.

It may be appropriate to update the high cost drugs devices and procedures list annually. In Table 8-2 below we summarise our assessment of this in-cycle adjustment, by reference to our assessment framework.

Table 8-2: Exempted items: updates to high cost drugs devices and procedures list

Factor	Impact
Greater quality care through reconfiguration	N/A
Efficiency discoveries	N/A
Provider pricing risk	Minor impact for vast majority of providers
Profits gained by regulated firm	Minor impact for vast majority of providers
Flexibility of system	More responsive to identified procedures – reduces reliance on local negotiation
Headroom for more substantive changes	N/A
Regulatory work-flow	Monitor and NHS England required to update this on annual basis
Provider/ commissioner regulatory burden	Monitor and NHS England required to update this on annual basis – assuming it can be done without full consultation
Credibility of system	N/A

Overall, we consider that the existing features of the national tariff are able to identify adequately specific items which may not be best dealt with via national prices. However, there may be a case for updating the set of 'high cost' items on a more frequent basis.

8.4 Income adjusting events

Income adjusting events (IAEs) refer to ex post payments made to providers to compensate for extreme or unanticipated events or changes in circumstances. There can be a spectrum of pre-agreed details: ranging from a decision-making framework to a detailed list of events that might invoke a claim.

Income adjusting events are very time-consuming and costly for both the regulator and the stakeholders in the sector to which it applies. For example, the equivalent process in the water sector can take up to a year to complete, including:

- the preparation of the original submission (potentially several months);
- the regulator's subsequent investigation and draft decision (approximately 2 months);
- further submissions from the applicant and the regulator's final determination (approximately 2 to 4 weeks); and
- potentially, an appeal to the Competition Commission (3-6 months).

Certain aspects of the health care sector may make this process yet more cumbersome:

- Whilst the majority of regulated sectors have a small number of large monopoly/oligopoly providers, the health care sector includes a great many more potential applicants. As providers would in principle claim separately, the logistical problem of having to deal with a great number of different claims is likely to offset the benefits of the process.
- The national tariff contains a large number of services for which an IAE could be claimed. By comparison, most regulated sectors have only one or a small number of prices which could possibly change. Again, the scale of implementing an IAE mechanism seems to a significant hindrance.

In Table 8-3 below we summarise our assessment of this in-cycle adjustment, by reference to our assessment framework.

Table 8-3: Income adjusting events

Factor	Impact
Greater quality care through reconfiguration	No impact; potentially diverts management resources
Efficiency discoveries	N/A
Provider pricing risk	Could potentially reduce pricing risk if extraordinary events can be reflected in pricing
Profits gained by regulated firm	N/A
Flexibility of system	N/A
Headroom for more substantive changes	N/A
Regulatory work-flow	N/A
Provider/ commissioner regulatory burden	Extremely burdensome for all parties, and Monitor in particular – the scope is large (compared to say local modification applications)
Credibility of system	Uncertain: potentially makes national prices less meaningful, however, a regulatory system with no adjustments for extreme events may not seem credible

Overall, we would not recommend the national tariff includes a framework for income adjusting events, for the following reasons:

- the regulatory burden is high (especially in view of proliferation of providers);
- there are regulatory mechanisms in place for financially distressed providers;
- the method of adjusting prices via the cost uplift factor means that prices should, in theory, be more tailored to providers' cost pressures, reducing the demand for other mechanisms. For example, the majority of provider costs are personnel costs and this is reflected in the cost uplift factors; and
- the national tariff includes 'local modifications' which in principle can provide for increased income for providers in special economic circumstances; and commissioners can share risk through risk-pooling schemes.

Notwithstanding the above, in our experience it is difficult to preclude absolutely the possibility of additional reimbursement mechanisms operating 'outside' of the national tariff, such as the winter pressures funding provided in 2013[25].

8.5 Clinical/technological updates – updating HRG design in-cycle

The HRG design incorporated within a national tariff reflects clinical classification systems and clinical best practice. HRG design is therefore an integral component of the national tariff which we understand could not be altered without formal statutory consultation. It is not clear to us (and it is not within our expertise to opine on) whether Monitor could consult on HRG updates in isolation. On this basis, HRG designs could not be updated as in-cycle adjustments.

Nonetheless, it is worth exploring whether in principle the HRG design should continue to be updated annually; or whether it could be updated only at the beginning of a new cycle (for example, only every three years). This is one area where stakeholders have different opinions.

CCGs we engaged with were broadly in favour of not updating the HRG design annually:

- CCGs generally noted that, whilst it is important to reflect clinical development in the national tariff, such development is not rapid (e.g. several years for new drugs to cross necessary regulatory thresholds). One CCG explicitly stated that three years would be a *"sensible time frame"* over which to update the HRG design, but that five years (for example) would be *"pushing it"*.
- CCGs generally agreed the resources applied to understanding, interpreting and implementing coding changes each year diverted attention from larger-scale redesign work: one went so far as to say *"Redesign work is tortuous on a 1 year cycle"*.
- All CCGs we engaged with agreed that the current annual updates to the HRG design make it extremely difficult to analyse trends and identify patterns. Keeping the HRG design stable over (some) fiscal years would allow *"apples with apples"* comparisons to be drawn in a more effective way.

By contrast, providers were apparently more positive about incorporating the flexibility to update the HRG design in-cycle, e.g.: *"flexibility for coding/recording improvements would be potentially useful to build in"*.

25 http://www.england.nhs.uk/wp-content/uploads/2013/11/150mill-ease-wntr-pres.pdf

On balance, at this stage we would not recommend updating the HRG design in-cycle[26]. The primary reason for this conclusion is that the national tariff already provides for alternative means of incorporating clinical development, through local price-setting and local variations (and in any case, many services are contracted "off-tariff"). Further:

- In practical terms, we do not see a longer HRG update cycle as impeding necessary clinical progress.
- We understand Monitor wishes to build up an evidence base over time of how services are bundled and priced locally – and in this context, a more stable 'base' HRG design could actually help.
- Based on experience members of our team have had with the 2014/15 national tariff, it is difficult to change HRGs in isolation – there is a 'water bed' effect as moving activity in and out of even a single HRG can have an impact on numerous other HRGs.

[26] As noted in Subsection 2.3.2, if ICD/OPCS codes can be updated as a separate process (i.e. not impinging on currency definition) then these updates could continue to occur annually.

9 Consideration of a 'transition path'

Although the current regulatory regime is relatively new (*the 2014/15 National Tariff Payment System* is the first national tariff published by Monitor), the 'Payment by Results' (i.e. activity-based) system has substantially been operating since 2005/06[27] and this has consistently been an annual cycle. We also understand from Monitor that the next national tariff, applying for 2015/16, will be a one-year national tariff.

In this section, we consider what form of 'transition path' may be appropriate, to move from the current annual cycle to the primary recommendation of this report that a single three-year national tariff should be implemented. In our view the two main choices are:

- moving straight to a three-year cycle without a transition path (this could be referred to as a "Big Bang" approach); or
- a pre-agreed target duration that is reached over a number of price control periods (this is the approach adopted for changes to the system operator incentive scheme – in that it has recently been extended to a 2 year scheme with the view to extending it to 4 years after that). Practically, this would mean a two-year cycle from 2016/17 with a three-year cycle thereafter.

There are a number of factors to take into consideration in making this judgement.

- A two-year cycle might have some net benefit over a one-year cycle, although our analysis suggests the benefits are much greater with a cycle of three years or more. There is a risk that moving to a two-year cycle will create a negative stakeholder perception if it is not of sufficient length to help incentivise changes in behaviour.
- However, we are also aware that currently Monitor and NHS England are currently considering significant developmental changes to the national tariff. In this context, the risks of a longer national tariff cycle are heightened.

[27] Payment by Results was introduced in phases. See *Payment by Results* (King's Fund, 2012), Table 4.

If the national tariff was largely stable, then we would unambiguously recommend the "big bang" approach, since the benefits of a three-year cycle would, in our judgment, outweigh the transition risks. Given the scale of the potential change in the payment system more generally, the optimal transition approach may be largely determined by the progress Monitor and NHS England make over the next 18 months in developing the 2016/17 national tariff.

However, on balance, given the significant benefits of a three-year national tariff cycle (as compared to a two-year cycle) and the various flexibilities in the system, our recommendation at this point in time would be to move straight to a three-year national tariff from 2016/17[28]. Discussions we have had with regulatory thought-leaders indicate that a large (and often overlooked) risk that regulators face is the risk of being too conservative – costs are incurred in implementing change without the attendant benefits.

[28] As described in Section 7, our analysis does suggest there could be some areas of care that could benefit from cycles in excess of three years – in this sense, a single three-year cycle itself can be viewed as a 'stepping stone'

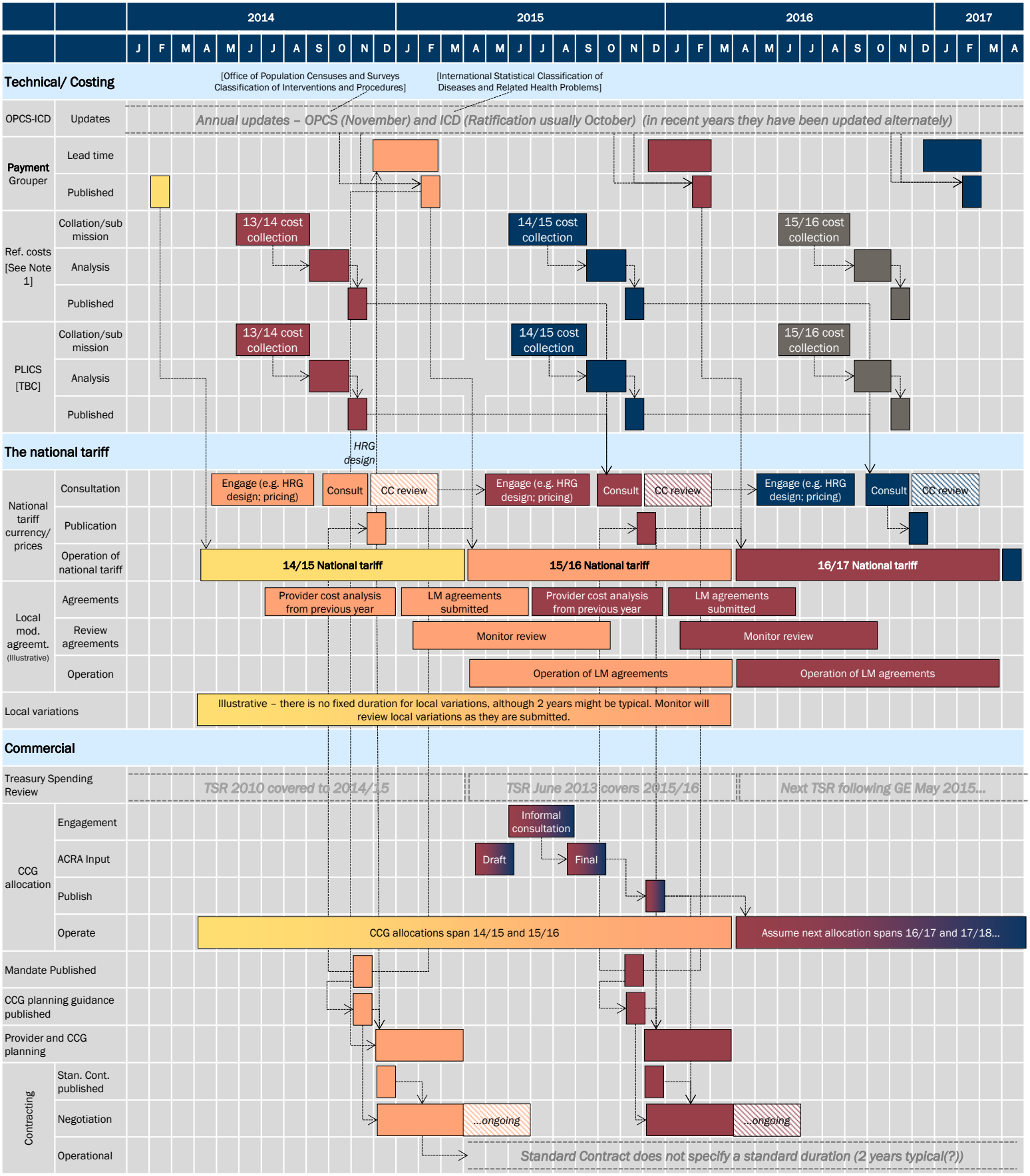
Appendix 1 Gantt chart of payment system cycles

Overleaf, we present a Gantt chart of payment system cycles.

Illustration of payment system cycles

Note: for clarity, not all linkages/elements are shown.

KEY: 14/15 | 15/16 | 16/17 | 17/18 | 18/19+



Note 1: Currently there is a lag between Reference Costs collection and the application of those costs in the national tariff. Based on past experience:

- Costs are incurred in 2013/14
- After these costs are collated and analysed, they are likely to be published in November 2014
- The next available formal consultation falls in October 2015, and relates to the 2016/17 national tariff.
- As such there is a three-year lag, since costs in 2013/14 ultimately impact the national tariff for 2016/17.

The timescale for cost collection, analysis and publication may change in the future

Appendix 2 Comparisons with other regulated sectors

In this appendix, we first provide a general background to regulatory pricing in other more 'traditionally' regulated sectors.

We then summarise the factors that regulators in the UK and abroad have considered when making decisions about the durations of price control cycles, by reference to a number of different sectors. In summary, we have identified no instances of a regulator assessing the optimal regulatory cycle duration in a systematic way from first principles. The most comprehensive process we have identified is that undertaken by Ofgem in the context of its "RPI-X@20" review, which was a comprehensive assessment of the state of the RPI-X regime twenty years after its introduction. In this context a regulatory cycle was lengthened from five years to eight years after the regulator judged this would provide net benefits to consumers due to longer term price stability and reduced regulatory burdens.

A2.1 Background to traditional regulatory pricing

Over the last three decades, policy makers across the globe have wrestled with the problem of how to deliver higher quality and lower cost goods and services to consumers in sectors of the economy where historically there has been limited or no competition. In some industries, the desire to introduce competition has led to significant restructuring. For example, the telecommunication sector has been restructured so that some, but not all, parts of the sector compete with each other.

In those parts of the sector where it has been considered difficult to introduce competition and monopoly provision of a good or service persists, policy makers have developed regulatory regimes with the aim of delivering higher quality goods and services at a lower cost. As is well known from economic theory, a monopoly provider of a good or service will, absent any restriction and if it seeks to maximise profits, have an incentive to restrict production below the level that would occur in a competitive market. This has the effect of raising the price it charges for the good or service which in turn is detrimental to the consumers of that good or service (known as a dead-weight loss).

To prevent this occurring, a typical approach to regulation will involve a regulator restricting the amount of revenue that a monopoly business may recover from customers (or alternatively capping prices). In so doing, customers are protected from the monopoly providers' tendency to create higher prices through restriction of output.

In the 1970s in the US, regulators used a concept of cost-plus regulation in which monopoly providers were allowed to recover their costs plus a suitable margin. Faced with this incentive, regulated businesses set about trying to persuade the entities that regulated them to raise the costs they should be allowed to recover. That is, by regulating a monopoly business, it no longer faced an incentive to be efficient – instead it faced an incentive to raise its costs so it could recover a greater amount of revenue.

These early approaches to regulation failed to recognise that there is an **asymmetry of information** between the regulated business and the regulator. In theory, the regulated firm knows and understands its costs and the potential for efficiency far better than the regulator that sets the amount of revenue (or the price) that the regulated business is allowed to charge its customers. Therefore, a regulated business faces a powerful incentive to convince the regulator that the efficient costs of the business are higher than they might otherwise be.

The problem of asymmetric information between regulated business and regulator was considered in the 1980s in the UK during the period of privatisation. Policy makers searched for better ways to regulate newly created private sector monopoly businesses (such as the telecoms, water, gas and electricity networks) than the US approach of cost-plus regulation.

Stephen Littlechild, at the time a Treasury economist, developed the concept of price or revenue cap regulation[29]. This type of regulation recognises that there is an asymmetry of information between regulated and regulator, but financially incentivises the regulated business to reveal the information to the regulator over the longer run. It does this by guaranteeing the revenue (or price) that the company might earn for a set period of time, *irrespective of the actual costs that the regulated business incurs over that period*[30]*.* Hence, during this period (known as a price control period) the regulated business is incentivised to lower its costs to earn a greater level of profit. In so doing, it reveals to the regulator the efficient costs of delivering the good or service. This, in turn, allows the regulator to reset prices for the following price control period on the basis of the information revealed to it by the regulator.

29 It was first applied to British Telecom in 1983 and extended to gas electricity and water sectors over the course of the decade. See *The Regulation of privatized monopolies in the United Kingdom,* M. E. Beesley and S. C. Littlechild, *The RAND Journal of Economics*, Vol. 20, No. 3 (Autumn, 1989), pp. 454-472.

30 This is in real terms i.e. inflation is allowed for in the price/revenue set.

Under this framework, the duration of the control period is recognised to be critical: set it too short and the regulated business does not have sufficient incentive to reveal to the regulator the efficiencies that are available in the business; set it too long and then consumers suffer as the monopoly business earns greater profits than it should have done. In the UK context, five years was initially judged to be the appropriate duration for most regulatory schemes. This has recently been extended to eight years in the energy sector. However, for some areas of regulation the control period is only of one or two years[31] and in others, it has been considered whether a regime of up to ten years might be appropriate[32].

Of course, there have been many refinements to the price control regime as issues have arisen with the way in which it operates, the incentives that it creates and the costs that it imposes on the system (as an example, it is recognised that firms' incentives to reveal their true level of efficient costs diminish towards the end of the control period). Nonetheless, at the highest level, this form of regulation has operated successfully in many sectors of the UK economy for over 20 years and has been exported to regulated sectors across the globe.

A2.2 Energy (UK)

A2.2.1 RIIO decision[33]

In 2009, Ofgem began a comprehensive review of its regulatory price setting, which included a consultation over the length of the cycle. After consultation, the cycle length was increased from 5 to 8 years. The main benefits stated for this change were:

- companies would make different decisions, to the benefit of customers, given the longer term certainty in prices; and
- there would be a lower regulatory burden.

Ofgem also noted that provision of annual adjustments and a mid-period review (only to reflect fundamental changes in requirements put on companies, with no changes to mechanisms) would mitigate the problems of increased uncertainty.

---

31 For example, the system operator price control period has only recently been extended to a two year price control – having formerly been only of a one-year duration.

32 For example, the original intention in the water sector was that price control periods would be of 10 years duration and this was written in to the licence. However, in fact control periods have only ever been of five years.

33 RIIO Decision, Chapter 5.

Specific concerns were raised regarding:

- whether the impact on longer term decision making would be marginal, and so be outweighed by the increased risk; and
- the narrow scope of factors to be considered at the mid-period review. The concern was that the mid-period review would need to be expanded to make the price control "*viable*", which could ultimately result in an effective review period of 4/5 years.

Ofgem came to the conclusion that "*these concerns can be mitigated through careful design of automatic adjustment mechanisms (e.g. inflation indexation), uncertainty mechanisms and a clear articulation of how the mid-period review of outputs will work*".

A2.2.2 Ofgem research paper

To inform the discussions summarised above, Ofgem commissioned a short paper identifying some of the costs and benefits of longer price controls. This considered the effects of extending the control period, from 5 to 10 years. Below, we summarise the costs and benefits identified (we do not necessarily agree with the conclusions):

- Long term planning - gives companies a financial stake in controlling costs in the long term. This could include:
  - activity planning;
  - anticipation of customer needs (forecasting); and
  - innovation in delivery.
- Regulatory cost – less work could be required overall, although more intensive may be required at the time of each price control and there may be greater demands for ongoing monitoring.
- Regulatory work-flow – a longer control period would mean lower demands on the regulator followed by very intense periods of work, which could be hard to manage. It could also present problems regarding staff and knowledge retention. It could, however allow for easier assessment if multiple controls were to be used, as these could be staggered.
- Regulatory risk – a longer control period reduces the exposure to the risk that the regulator makes significant changes to the revenue set or the rate setting mechanism(s) (the 'rules of the game').
- Adaptability – with respect to the companies' regulatory requirements and on the nature of the price control process.

- Financial risk – unforeseen changes in costs which result in companies which either cannot finance their activities or receive large ("windfall") profits.
- Credibility - as the length increases, it is less believable that the control will be 're-opened' before the full term.
- Misalignment of costs and regulatory prices – this increases with time, however, it was considered that this could be mitigated through risk sharing (or other) arrangements.
- Cost of capital – the effect is unclear as the increased length of price certainty (and regulatory certainty) is balanced against the increased risk of costs varying against forecast costs (no conclusion reached).
- Benchmarking – where the price control includes a comparison of a company's costs to its competitors[34] it exposes the company to the risk that their costs will be high relative to the other operators. This may provide an incentive for companies to plan over a longer term than the price control (making the length of the control less important). Additionally, a longer price control results in less frequent benchmarking, which could reduce the pressure on companies to reduce costs.
- Frequency of incentive distortions – companies make different decisions near the end of the control period (such as delaying investment, to have the cost included in the next control). These would not be eliminated, but would be less frequent.
- Efficient split between operating and capital expenditure – a longer control period may increase incentives for capital expenditure, which may/may not be the optimal action.
- Step changes in prices – could result in larger changes in prices during a review under longer control periods.
- Lag of rewards – this only applies if there are rewards/penalties for hitting/missing targets which are assessed at the end of the control period.

[34] For example, by specifying that each operator must move towards the lowest cost operator, and that the movement is dependent on the distance from that lowest cost.

A2.3 Water (UK)

A2.3.1 2015-20 price control framework[35]

Ofwat issued a consultation which considered potential changes to the framework and approach to setting prices for 2015-20. While this did not suggest changing the length of the price control (from 5 years) it did include some references to the ways in which Ofwat have tried to mitigate the risks of a longer price control. We summarise these below.

Examples of methods which Ofwat is currently using include: interim determinations (price reviews for material unexpected changes), cost indexation, including demand factors in the control (e.g. volume delivered), engagement with customers (to balance short term priorities and long term needs) and incentivising specific long term activities (e.g. environmental improvements).

Ofwat also put forward the option of having 'shorter' price controls (5 years in this case) but targets which span multiple price controls. There would then be milestones (at each price control for instance) where progress is assessed and rewarded/penalised.

A2.3.2 PR09[36]

In advance of the price review in 2009 (PR09), Ofwat issued a consultation questioning whether they should change their price control from the current 5 year duration. Ofwat then summarised the responses they had received when they gave their decision.

A 5 year duration was retained, primarily because it was a well understood system and because Ofwat ultimately didn't see enough benefit in changing to offset the perception of regulatory risk.

However, it was suggested that the review should be based on a 25 year business plan. This would push companies to plan for the long term and allow the regulator to reward good forward planning (or penalise a lack of/poor planning).

A2.4 Electricity/Gas (Northern Ireland)

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries.

35 Ofwat – Setting price controls for 2015-20, pages 42-44.

36 Ofwat – A sustainable water industry to PR09 and beyond, pages 12-13

On 3 December 2012, the Utility Regulator consulted on its overall approach[37], and noted:

> *"The optimum duration of a price control is a matter of judgement that needs to balance, the advantage of allowing as much time as possible to plan and deliver the service and also take account of the external drivers and constraints that inform the overall level of charging that is possible."*

In this initial consultation, the Utility Regulator stated it was "*minded to produce a full price control in 2013 which would cover the standard five year price control period*". This five-year price control originally considered was conditional upon 're-openers' due to information constraints (i.e. lack of detailed information from providers).

On 20 December 2013, the Utility Regulator published its price control proposals for two gas distribution companies for the period 2014-16[38]. This final determination included a short discussion on the appropriate duration. The main factors that appear to have been considered were:

- the need for allowing the licensees sufficient time to plan and deliver their services; and
- the requirement for new and material information about operating and financial conditions to be factored into the allowed revenues or tariffs of the companies. This is linked to uncertainty about the future evolution of the retail market as competition emerges.

In this particular case, the duration was heavily influenced by the fact that the information available to the regulator was not of a sufficiently high quality to allow confidence in cost forecasting over extended periods – in addition, there was a risk that the information could be materially wrong[39].

A2.5 Telecoms - leased lines (UK)

Ofcom is the communications regulator for the UK, covering "*TV and radio sectors, fixed line telecoms, mobiles, postal services, plus the airwaves over which wireless devices operate*"[40].

---

37 http://www.uregni.gov.uk/uploads/publications/2012-12-03_GD14_Price_Control_Scope_v10.pdf.

38 http://www.uregni.gov.uk/uploads/publications/2013-12-20_GD14_Price_Control_for_NI_GDNs_2014-2016_Final_Determination.pdf.

39 We note this was in the context of a price control where providers were protected against inflation via an (RPI-based) cost adjustment.

40 http://www.ofcom.org.uk/about/

In 2009 Ofcom released its conclusions, following a consultation, regarding whether and how to implement a price control on some of the services supplied by BT.

Ofcom decided to impose a three year price control. The justification for this was [41]:

> *"This duration will provide stability in the market and maintain incentives on BT to achieve efficiency savings. This is in keeping with other charge controls that have been implemented in the telecommunications sector in the UK."*

The four factors which Ofcom stated in coming to its conclusion were[42]:

- Efficiency incentives – A longer price control provides BT with more time to retain the higher profits from reducing costs further than the efficiency target in the price control. This produces a greater incentive to reduce costs.
- Cost saving – A longer price control increases the delay before customers can enjoy the reduced prices caused by cost savings (for the same reasons as above).
- Price certainty – Longer price certainty aids decision making for BT, as well as for customers and potential competitors as they choose which provider to use (or to invest in their own infrastructure).
- Forecasting errors – The longer the duration, the greater the uncertainty in the forecasts.

Ofcom originally suggested that the duration should be four years, in order to best balance regulatory objectives. The responses to the consultation broadly agreed with this, although some called for a mid-period (2 year) review to deal with a particular technological change[43]. The term agreed was only reduced to 3 years in order to harmonise with another related regulatory cycle[44].

A2.6 Rail operations (UK)

The Office of Rail Regulation (ORR) is the independent safety and economic regulator for Britain's railways[45].

---

41 Ofcom – Leased Lines Charge Control, page 2.

42 Ofcom – Leased Lines Charge Control, page 32-33.

43 Ofcom rejected this suggestion on the grounds that the problem put forward was not the main source of uncertainty, and that uncertainty could be dealt with using other mechanisms (page 33).

44 Ofcom – Leased Lines Charge Control, page 31-33.

45 http://www.rail-reg.gov.uk/server/show/nav.75

The ORR decided to keep the 5 year duration for its price review in 2008 (PR08) to balance the uncertainty of forecasting some cost drivers, and the incentives to invest for the long term. There was some (limited) discussion related to the reasons for this decision, but all of the factors considered have already been included above, so have not been repeated here[46].

A2.7 Telecoms (Netherlands)

In 2006 the Netherlands Independent post and Telecommunications authority released a consultation document on a proposed move from a one year cost based tariff for Wholesale "interconnected leased lines", to a multiple year tariff. It set the following criteria on which to assess the design of the tariff[47]:

- Predictability – to allow for better business planning and obtaining the appropriate financing where needed.
- Continuity[48]
  - a distinction between 'originating' and 'terminating' charges, where the latter is not subject to competition (by nature). The differing nature of the two activities means that the control length may also be different; and
  - that the change in tariff length should not cause a reduction in regulatory oversight.
- Cost orientation – that this does not lead to unjustified profits, nor lack of cost coverage. This therefore demands the ability to effectively predict costs for the period chosen.
- Efficiency improvements – allowing companies to benefit from efficiency improvements above those anticipated by the regulator gives an incentive to become more efficient.
- Promote competition – it should not allow for easier exercise of market power.
- Feasibility – the system should not be any more complex than needed, and should be implementable in light of the HR and financial resources available to companies and the regulator.

46 ORR - PR08 – Treatment of risk and uncertainty, pages 9-10.

47 Authority for consumers and markets - Multiple year wholesale tariff system, chapter 2.

48 That is, continuity of approach from previous method.

Appendix 3 International health care comparisons

Health care systems and payment systems vary considerably across different countries. For example, in most European countries, capitation payments are more common, where a fixed amount of funding is provided per patient, irrespective of the care provided.

For the purposes of this project, we have reviewed, at a high level, payment systems from a number of countries around the world, to understand the frequency at which prices are reviewed and the reasons for so doing. This has primarily focussed on European countries in which the payment mechanism is (at least partly) activity-based.

In this appendix, we begin by summarising the results of our review. We then set out some further detail on payment systems applying in different jurisdictions. Finally, we provide some examples of more innovative longer term contracting used in contexts outside of the NHS.

A3.1 Results of our review

Our research confirmed that the difference between health care payment systems are extensive, and there is, in our view, limited comparability with the payment system used for NHS funded health care services in England. One key difference is that in many countries, the prices for services are set explicitly by reference to the available budget, and, as budgets are set on yearly cycles, this means that necessarily the pricing cycle is annual as well. This approach is analogous to the *dependent* approach described in Section 2 above.

Other differences include:

- in some countries there is no purchases/provider split;
- in some countries nationally-set prices are used for intra-regional flows only; and
- the regulatory approach adopted in England is unique – no other country has a similar regulatory regime. Further, the national tariff sets out not only prices but also currencies and rules – which in other jurisdictions are not necessarily updated as frequently as prices.

The results of our review are summarised in Table A3-1 below. Further detail is given in following subsections.

Table A3-1: Overview of health care regulatory pricing cycle durations

Country	Comparability with English system	Duration (years)
Australia	Heavily driven by the budget, as such the frequency of budget variation drives the review frequency	2
Finland	Without the purchaser/provider split (hospitals bear no responsibility for losses) this system is not comparable.	1
France	In practice, the price may not reflect the cost if there are budgetary pressures; therefore budget frequency is a key factor in duration	1
Germany	The lack of independent price setting and the influence of the budget on the prices agreed make this less relevant	1
Ireland	Not really comparable as prices/capitation payments are not used	1
Italy	The differences in available data seems to drive duration, and the tariff is not very informative for prices which limits the applicability	Variable
Netherlands	Remuneration is by a pre-determined budget for some services and bilateral negotiations for others. DRG system is updated more frequently, which may also require more frequent updates to prices	1
New Zealand	Scope of the tariff is limited to inter-district provision, which limits the applicability	1
Norway	The duration is limited to one year by annual changes in scope; systematic changes would be needed for a longer tariff	1
Spain	Scope of the tariff is limited to inter-district provision, which limits applicability	2
Sweden	Scope of the tariff is limited to inter-district provision, which limits applicability	Variable
USA	System similar to that used in England in some respects	1

A3.2 Further detail on the cycle durations in other countries

In the subsections below, we set out some of the key characteristics of the different regulatory systems used by a number of countries and discuss the pricing cycle used.

Unless otherwise stated, our understanding of the system used in each of the following countries is primarily based on two academic studies: one published by the London School of Hygiene and Tropical Medicine and relating to the reimbursement of certain services[49]; and one published by the World Health Organisation ("WHO") regarding DRG use in Europe[50]. Given the scope of this project, we have not been able to execute an in-depth analysis of the healthcare systems used in each country studied – and we recognise that systems are continually changing.

A3.2.1 Australia

The prices (expressed as 'cost weights') are reviewed at least every two years at the state level. The price is calculated as the average cost per DRG, according to cost data submitted by hospitals.

However, the final price set is then subject to the available funds in the state's budget. Therefore the standard price per DRG does not equate to the average cost per DRG but is determined in relation to the budget. This explicit link between the prices and the state health care funding means that prices are not independently set to reflect the cost of provision. This is a significant difference when compared to the NHS payment system.

As a result of the approach taken, the cycle duration is driven by the frequency with which the budget is updated. The Australian budget is currently updated annually but includes a forecast for the next three years' spending[51].

Duration: Two years (but can vary)

Industry structure: Some purchaser-provider split, but not universal

System: DRG payments based on relative cost of diagnoses, and the available budget

Application: Heavily driven by the budget, as such the frequency of budget variation drives the review frequency

49 Reimbursing highly specialised hospital services: the experience of activity-based funding in eight countries, International Health care Comparisons Facility of the London School of Hygiene and Tropical Medicine for the Department of Health, December 2006.

50 Diagnosis related groups in Europe, WHO, 2011.

51 http://www.budget.gov.au/2013-14/content/faq.htm

A3.2.2 Finland

Negotiations between municipalities and hospital districts over the services provided and the prices take place annually. The format of these negotiations differs between districts.

The DRG system is not used for resource allocation but as a billing instrument. Hospital districts use DRG-based prices to charge municipalities for the services they have delivered.

There is no purchaser-provider split in Finland; and hospitals do not bear any responsibility for financial loss, as municipalities cover their deficits. Prices are therefore less meaningful than we understand to be the intention for the NHS payment system.

Duration: 1 year

Industry structure: No purchaser-provider split

System: Prices are determined in order to fit in with a predetermined budget; the prices do not determine activity as there is no purchaser/provider split

Application: Without the purchaser/provider split (hospitals bear no responsibility for losses) this system is not comparable

A3.2.3 France

France operates a national tariff with regional weights, but allowing not more than a 10% difference between regions.

The DRG algorithm and tariffs are updated annually by the Ministry of Health. Prices are initially set by taking the average cost per DRG but are adjusted to reflect the national budget available set by the parliament at times of financial pressure. This limit can lead to a reduction in prices/tariffs in order to constrain the budget[52].

Duration: 1 year

Industry structure: Purchaser-provider split

System: DRG payments based on the average cost and government policy

Application: In practice, the price may not reflect the cost if there are budgetary pressures; therefore budget frequency is a key factor in duration

[52] This occurred in 2006 when the Ministry decreased DRG prices for public and private hospitals by 1% in response to a previous increase in activity of 4% which was not covered by the budget.

A3.2.4 Germany

Prices are set by individual states (although the DRG classification system is uniform across Germany). Prices are determined by developing a base rate per state (the average cost per case) and taking into account the prospective income of regional sickness funds.

The base rates are annually negotiated by representatives of the associations of statutory sickness funds, the association of private health insurers and the German Hospital Association. The base rates were originally hospital-specific, then state-wide and are now converging towards national rates.

Providers are remunerated for an activity by calculating the base rate multiplied by cost weights for each DRG. These are set nationally by the Hospital Remuneration System (InEK) and are updated annually. Capital costs are remunerated separately.

Like the English system, German prices are set centrally but are each adjusted to account for regional differences in the cost of provision. There are however, two key differences:

- Prices agreed are the result of negotiation, instead of being set independently. This considerably changes the dynamic of the price setting process, and suggests that price predictability is not considered to be so important.
- In addition to the cost of provision, the price for each region is adjusted to reflect the local budget available. Both of these differences will mean that the prices agreed may not closely reflect the actual cost of provision.

Duration: 1 year

Industry structure: Purchaser-provider split

System: Negotiated prices, informed by average costs and available budget

Application: The lack of independent price setting and the influence of the budget on the prices agreed make this less relevant

A3.2.5 Ireland

For public services, hospitals are allocated funding as an annual budget. In addition to this, hospitals charge patients for a variety of services according to government specified rules/limits.

Although the cycle is generally one year, a limited number of hospitals have their budgets adjusted for complexity using DRGs (and Ireland's DRG system is based on the Australian system and is updated every four years).

Duration: 1 year

Industry structure: No purchaser-provider split

System: Annual budget, with some scope for complexity adjustment

Application: Not really comparable as prices/capitation payments are not used

A3.2.6 Italy

In Italy price are set regionally but a national tariff determines the maximum prices that can be applied. The national tariff prices reflect funding for operational and capital costs. In practice, however, only limited funds are allocated to capital costs causing providers to fund capital investments using operating revenues.

Regions update the tariff with different frequencies, with the Lombardy region updating the DRG tariff on an (almost) annual basis. Availability of cost data varies between regions. In terms of the tariff duration, this seems to be driven by the availability of data above anything else. This means that the factors determining the duration are quite different to the factors we are considering.

Duration: Variable, driven by available data

Industry structure: Some purchaser-provider split, with full split in Lombardy region

System: National tariff which limits the prices set by individual regions

Application: The differences in available data seems to drive duration, and the tariff is not very informative for prices which limits the applicability

A3.2.7 Netherlands

The tariff in the Netherlands is determined by the Dutch Health Authority (NZa), which bases its decision on information provided by a 'casemix office' which determines DRG allocation and collects costs[53]. The tariffs are updated annually, but there is a 2 year lag (at least) before costs are included in the tariff, which is very similar to the current system in England.

53 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2950296/

The DRGs that the payment system is based on are updated on a rolling basis, with a new set released 1 to 4 times a year[54]. This regularity of updates may be driven by the particular coding system used, which includes around 10 times as many classifications as in other countries.

Health care services are split into two categories: Part A and Part B. There is a national price list for Part A services, while the hospital cost component of Part B services are negotiated by individual hospitals and insurers. Part A services represented around 90% of the total budget (excluding capital costs) when introduced in 2005, but covered just 30% in 2012.

There are no adjustments for regional variation or complexity of care. Hospitals are required to provide cost data and average resource use profiles to a central database, which is used as the basis for prices.

The Part A prices set have two components: an "honorarium" component and a hospital component. The honorarium component consists of a fixed (hourly) fee multiplied by the average resource use of that activity. This is examined each year, and will be updated if necessary. The hospital component is updated annually (or when necessary), and is also based on average resource use and unit costs.

While activity is paid for by insurers through the Part A prices, there is also a budget set for each hospital. Budgets are established annually by the NZa based on fixed and variable costs and a variety of parameters (e.g. population, facilities, and beds).

If the hospital earns above this level then the difference must be paid to the NZa, conversely, any hospitals which do not generate their budgeted earnings will receive the shortfall[55] – as a result, although the prices are applied on a unit activity basis, the relationship between income and activity is complex and hospitals have less incentive to either optimise income or minimise cost.

Duration: 1 year

Industry structure: Purchaser-provider split

System: National tariff defines what 'commissioners' pay for activity, but providers are paid a pre-determined budget

Application: Remuneration is by a pre-determined budget for some services and bilateral negotiations for others. DRG system is updated more frequently, which may also require more frequent updates

54 http://www.dbconderhoud.nl/de-werking/menu-id-297

55 HiT Netherlands, WHO, page 88.

A3.2.8 New Zealand

Activity-based funding is mandatory for patient flows between public hospitals in different health districts. Inter-district flows vary between districts and account for 10-50% of all services provided in hospitals.

The tariffs for this funding are set nationally by the association of district health boards (DHBNZ) in co-operation with the Ministry of Health.

New Zealand Health Information Service calculates cost weights per discharge on an annual basis. The DHBNZ and Health Information Service annually review and update the methodology for activity-based funding. The Ministry of Health uses the cost weighted discharge data to assess trends in performance in the hospital sector.

The same data is also used to determine budgets and to assess hospital performance.

The system used in New Zealand is similar to that used in Australia and a number of European countries, where cost weights are calculated to estimate relative prices. However, the use of these prices is limited to the provision of health care between districts.

District health authorities have 'provider' and 'purchaser' arms. The majority of health care is purchased from the 'provider' arm and from other districts. There is a limited degree of purchasing from independent providers.

Duration: 1 year

Industry structure: Limited purchaser-provider split

System: National tariff applied to inter-district provision, otherwise based on a budget informed by the same data

Application: Scope of the tariff is limited to inter-district provision, which limits the applicability

A3.2.9 Norway

Funds are allocated from the central government to regional health authorities according to activity and using block payments. The share of activity-based funding in total hospital reimbursement is determined by the parliament each year, and regional authorities are expected to use the same proportions when paying hospitals (although there is some scope for regions to use alternative systems).

For most types of care there is no clear purchaser-provider split. While legislation allows for this split, it has generally not been favoured (although this was introduced for nursing care in the early 1990s)

National prices (set as a base rate) are set by the Directorate for Hospitals at the Ministry of Health and reviewed annually based on actual costs provided by just 20 hospitals. Prices are also coordinated with Sweden and Finland.

There are two key influences on hospital remuneration under the Norwegian system. The first is the parliamentary decision concerning the split between activity-based and block payments, which is made annually. This can be expected to have considerable influence on the price setting, as the extent to which the activity-based payments must incorporate capital costs will vary year-on-year.

The second factor is the decision to coordinate prices with Sweden and Finland. This means that there would be a problem if the Norwegian prices were updated less regularly than those in Sweden and Finland.

Duration: 1 year

Industry structure: Limited purchaser-provider split

System: National prices applied to a variable proportion of the budget, and coordinated with Sweden and Finland

Application: The duration is limited to one year by annual changes in scope; systematic changes would be needed for a longer tariff

A3.2.10 Spain

The health service in each region in Spain negotiates its budget with the health department on an annual basis and then uses that budget to negotiate contracts with (mostly) integrated health care providers. The contracts are *"generally prospective volume-contracts with some ex post correction clauses"*[56].

Spanish health care prices are updated every two years, but the price only applies to the provision of some services between districts. The remaining services are remunerated through per capita payments.

Besides the per capita allocations above, the central Government also finances the Health Cohesion Fund, which was created in 2002 and accounts for less than 1 per cent of public health expenditures. The Cohesion Fund aims to ensure equal access to health care by allocating resources to districts that provide care to patients from other districts where certain services are not available (mostly high-technology services). This is remunerated based on activity, where the DRG system (based on the US system) is updated every two years. These prices are based on the American cost weights, which are adapted to reflect cost data from 30 Spanish hospitals.

56 HiT Spain (2010 review), WHO, pages 102-103.

Duration: 2 years

Industry structure: Limited purchaser-provider split

System: Tariff prices apply to inter-district flows only

Application: Scope of the tariff is limited to inter-district provision, which limits applicability

A3.2.11 Sweden

There is no national policy on pricing (including duration) and counties may choose how to pay for hospital care, however, activity-based funding is mandatory for inter-regional flows.

Prices are generally set by the county councils using various different methods of calculation. However, the prices paid are often negotiated with individual hospitals so there is substantial variation even between hospitals in the same county. A small group of county councils use forms of activity based payments.

Duration: Variable

Industry structure: Purchaser-provider split

System: National prices apply to inter-district provision

Application: Scope of the national tariff is limited to inter-district provision, which limits applicability

A3.2.12 USA - Medicare

Medicare includes a prospective payment program which covers around 25% of the Medicare budget. Payments are based on a nationally determined base price, adjusted for a number of factors including geographical price differences and cost weights for each DRG[57].

The system has separate base prices for operating and capital payments, which are both updated annually[58]. A separate (but similar) system is used for outpatient services[59].

57 MedPAC Payment basics – hospital, October 2013, page 1.

58 MedPAC Payment basics – hospital, October 2013, page 3.

59 MedPAC Payment basics – OPD, October 2013, page 1.

The Medicare Payment Advisory Commission currently reviews the payment policies annually. The recommendations provided are split across a number of different types of care, for which decisions vary considerably. In 2013 this including suggesting that an annual cost uplift be replaced with 10 years of scheduled updates[60].

The payment system adopted in the US is in some respects similar to that currently used in England, insofar as an activity based price is determined annually for each HRG (accounting for complexity) and adjusted for geographical price differences (MFF).

Duration: 1 year

Industry structure: Purchaser-provider split

System: National, but not universal, activity based payments adjusted for geography, complexity and hospital-specific factors

Application: In some respects similar to NHS payment system

A3.3 Some examples of more innovative longer term contracting observed in other countries

In this subsection we provide some examples of more innovative longer term contracting used in contexts outside of the NHS. This complements and reinforces our findings from our stakeholder engagement that commissioner and providers aspire to do more longer term contracting, especially when considering service redesign and reconfiguration.

A3.3.1 Alzira (Spain)

The health district of Alzira (which falls under the regional authority of Valencia) has a public-private partnership which operates under a capitation payment system for hospital and primary care[61]. This system was developed to allow a new hospital to be not only built by a private consortium but also include them in the day-to-day running of the hospital.

The payment system has been through two phases. The first was a 10 year agreement (extendable to 15 years) covering specialist medical care. The payment for this was a fixed fee per capita (€204) inflated by the CPI each year. This ran from 1999-2003.

60 MedPAC Fact Sheet, March 2013.

61 Other health districts within Valencia have subsequently also created similar agreements

The second phase is a 15 year contract (extendable to 20 years) which covers the management of hospital and primary care in one department. The payment for this phase is a fixed fee per capita (€379) inflated each year by the annual percentage increase in the health budget.

There is also a limit on profits that can be used to fund shareholder returns - 7.5% of turnover. Profits in excess of this must be reinvested. There are also terms to account for circumstances where patients from outside the district are treated, or where local residents are treated elsewhere.

A3.3.2 Pioneer ACO (USA)

Accountable Care Organisations ("ACOs") are organisations formed of doctors, hospitals and other providers with the intention of providing more coordinated care. The organisation is incentivised to deliver high-quality care efficiently by sharing in the savings made for Medicare i.e. profit sharing.

Centre for Medicare and Medicaid innovation ("CMS") uses care quality measures to ensure that standards of care are maintained. Individual benchmarks are set for each organisation; having met them they can participate in shared savings.

Pioneer ACOs are 32 early adopters of coordinated care, where the organisations take on more risk than other ACOs and receive a larger share of any savings. They must commit to three years, with the option of a fourth or fifth year. In year 3, ACOs who achieve certain levels of saving have the option of moving a (significant) portion of their funding to capitation based payments. By this point ACOs must have developed outcomes-based payment arrangements.

A3.3.3 Alternative quality contract (USA)

Developed by Blue Cross Blue Shield of Massachusetts (an insurance company), the contract is based on a per-patient budget (adjusted annually for inflation and health status) alongside performance incentives based on national quality measures. Providers retain the profits from finding efficiencies which bring costs below budget. The performance incentives can increase revenues by up to 10%, dependent upon achieving certain clinical performance measures.

Providers must sign up to a 5 year contract. Payments are made on a fee-for-service basis with an adjustment relative to the agreed revenue at the end of each year.

- Monitor and NHS England should consider implementing a three-year cycle from 2016/17.

Monitor and NHS England have not yet adopted the recommendations and will be considering them further, as part of the ongoing review of the cycle duration of the national tariff payment system. We intend to develop proposals and seek views on those proposals at a later date, as appropriate.