Monitor and NHS England’s review of the marginal rate rule
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Introduction

Hospital urgent and emergency care services care for a wide spectrum of patients. They range from patients with less serious conditions, who need basic treatment or a brief period of supervision before they can be discharged, to patients with life-threatening injuries who need extensive medical procedures and supervised recovery. Patients with less severe conditions may often be more appropriately treated in GP surgeries, community services, or outpatient services rather than in a hospital.

The marginal rate rule was introduced in 2010/11 in response to concerns about growth in the volume of patients being admitted to hospital as emergencies. The rule sets a baseline value for income from emergency admissions for each provider. For emergency admissions above this baseline, the provider receives 30% of the normal price\(^1\). If the baseline has been set appropriately, the number of patients triggering this marginal rate should not be large.

The rule is intended to give acute providers an incentive to collaborate with other parties in the local health economy to manage demand for avoidable emergency admissions and to treat patients in the most appropriate setting. Providers may achieve these aims, for example, by deploying best clinical practice in their A&E departments (such as 7-day consultant cover) and linking with other providers, such as social workers and GPs, to avoid as many preventable emergency admissions as possible.

From 2013/14, commissioners have been required to invest the 70% retained funds in controlling demand for emergency care. This change in the rule was introduced to make sure commissioners use their resources to arrange care in more appropriate settings for patients who might otherwise be admitted to hospital as emergencies.

Several stakeholders have reported problems arising from the rule. Monitor and NHS England have therefore reviewed the rule as part of our work on the 2014/15 national tariff and our long term strategy for the payment of NHS services. The review has included a call for evidence from the sector, analysis of available data and direct engagement with a wide range of stakeholders, including the National Audit Office. Our priority is to ensure the provision of sustainable quality emergency services for patients.

Evidence considered by the review

Evidence considered by the review indicated some problems arising from poor implementation of the rule. The rule may be a contributing factor to financial difficulties for the minority of providers experiencing large increases in emergency

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\(^1\) Activity is measured on a whole-contract basis. A baseline value is calculated from the value of 2008/9 emergency activity according to current tariff, and is determined in local contract negotiations. It can include, for example, activity transferred from another provider. Most best practice tariff activity is excluded from the rule.
activity that have not been accounted for in adjustments to their baseline. We found a lack of transparency about how some Clinical Commissioning Groups (CCGs) are spending the 70% of the funds that they retain. And we heard that some providers could not plan their emergency care cost-effectively because CCGs may set activity levels for urgent and emergency care unrealistically low.

On the other hand, overall, the evidence indicates the rule is holding back growth in avoidable emergency admissions, particularly in patients being admitted for short stays in hospital (less than 48 hours). We have also heard from stakeholders that, where the rule is well implemented, it encourages collaborative and transparent investment in measures to manage demand for urgent and emergency care.

These positive findings would have been outweighed had we found evidence that the rule systematically caused financial difficulties for providers which might affect the quality of patient care. But the large majority of providers appear to be managing with the rule in place.

Additionally, the review heard from many providers about potentially serious issues on the horizon with payments for urgent and emergency services generally. For example, many said that their A&E services are loss-making and supported by cross-subsidies. We take these issues very seriously. At present, detailed information on emergency care costs and revenues is scarce. Trying to unpick cross-subsidies before we fully understand their extent, direction and causes could destabilise providers’ finances. We need more detailed understanding of the costs of urgent and emergency care to develop robust reforms to the payment system that ensure sustainable quality care for patients.

**Conclusions of the review**

For 2014/15 Monitor and NHS England have therefore decided to update the marginal rate rule in the following ways:

- to require baseline adjustment where necessary to account for significant changes in the pattern of emergency admissions faced by providers in some localities; and

- to ensure retained funds from the application of the marginal rate rule are invested transparently and effectively in appropriate demand management and improved discharge schemes.

Full details of these changes can be found in the *2014/15 National Tariff Payment System*.

Over the coming months Monitor and NHS England are, as a priority, gathering and analysing further evidence to underpin reform of the funding for urgent and emergency care generally.
Implementation of the rule has created some problems

The review found evidence of problems arising from how the rule is implemented, rather than problems intrinsic to the rule itself.

Inappropriate baselines for some providers

Since 2008/9, emergency admissions in England have grown by 6.4% overall and 81% of providers have seen an increase in emergency admissions. However, there is significant local variation: the ten providers with the highest increase in emergency admissions have seen an average increase of 31% over the period, while ten providers at the other end of the range have experienced an average decrease in admissions of 12%.

Providers that have experienced particularly sharp rises in emergency admissions may be materially disadvantaged by the rule if local commissioners are not adjusting baselines or activity levels appropriately. This is because some providers may have seen material changes in admissions due to local changes in the demand for or supply of emergency care (transfers of activity between providers within regions appear to be a key factor explaining large increases or decreases in emergency admissions at providers). These providers’ baselines may need adjusting to ensure the rule correctly balances giving providers an incentive to manage demand while ensuring that they receive sufficient income to provide safe and sustainable care.

The marginal rate rule currently allows for such adjustments to the baseline to reflect changes in the local configuration of services and changes to service models. Some commissioners have taken a pragmatic approach to agreeing with their providers adjustments to baseline values based on a joint view of appropriate activity levels. However, in areas where relationships are poor or commissioner funding is constrained, this has not always been the case.

Lack of transparency surrounding use of savings from the marginal rate

The review heard that in some local health economies there is a lack of transparency about how commissioners plan to invest the retained 70% funds in managing demand, and that providers are not always sufficiently involved in the planning process. It may be too early to assess the impact of the update to the rule for 2013/14 requiring the retained 70% to be spent on demand management by commissioners, with approval of plans by NHS England Area Teams. However, transparency about how the 70% is invested is essential for the rule to ensure commissioners play their part in reducing avoidable emergency admissions.

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2 Our sample includes all trusts with over 1000 emergency admissions in 2012/13 (excluding Isle of Wight and Mid-Staffordshire due to data issues): 140 general acute trusts and 15 specialist acute trusts which together account for over 97% of all emergency admissions.

3 In previous years, it was for “SHAs to determine how they collect and utilise these savings.”
Activity planning

Several acute providers that have experienced large increases in emergency care claim that the 30% payment for marginal emergency admissions is significantly below the costs of caring for these extra patients. Setting marginal income for emergency care at or below its marginal cost is not, in itself, inappropriate because it is the source of the incentive to control emergency admissions growth. But if commissioners set unrealistically low activity levels in a contract, the provider may incur higher than usual costs to treat the extra patients because they have not planned extra capacity. For example, they may have to use more locum staff or open spare bed capacity.

We have not been able to verify the marginal cost of admitting extra emergency patients and believe that, in any case, this would vary across providers. But commissioners must set realistic activity levels for urgent and emergency care in contracts to allow providers to plan cost-efficient and quality provision or urgent and emergency care.

The rule has gone some way to achieving its intended effects

In contrast to the problems outlined above caused by poor implementation, the evidence also shows that the rule has gone some way towards achieving its intentions. It has played a part in holding back growth in emergency admissions and stimulating collaborative demand management programmes.

Helping to hold back growth in avoidable emergency admissions

Emergency admissions for patients staying in hospital for fewer than two days have been responsible for almost all of the growth in admissions over the whole period from 2003/04 to 2012/13. Patients whose conditions might be appropriately treated in a different setting are more likely to fall into this group. Yearly growth in these short stay emergency admissions rose from 2.2% before 2003/04 to 7.8% up to 2009/10 (see Figure 1), prompting the introduction of the marginal rate rule. Since then, growth in short stay emergency admissions has levelled to 1.4% a year.
Our analysis also shows that these changes cannot be explained by hospitals reducing the length of emergency stays in general.  

There has been constant change in the regulation and delivery of emergency care services over the past 15 years, which makes it difficult to attribute any changes in emergency admissions to any particular policy. However, there were two particular regulatory changes which would affect providers’ decisions to admit patients and coincide with the start of the accelerated increase in short-stay emergency admissions around 2004. These were:

- the introduction of the A&E target in 2004, requiring providers to treat or admit 98% of patients within four hours. This may have encouraged providers to admit patients who would otherwise have stayed in A&E for over four hours; and

- providers were beginning to use payment by results, which paid a fixed price for each patient they admitted. Providers therefore receive more income for admitting more patients.

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4 The number of patients staying for any length of stay over two days has stayed stable, suggesting that the increase in short stay admissions is due to new patients being admitted for short stays, rather than longer staying patients being discharged sooner.
Monitor and NHS England’s review of the marginal rate rule

The levelling of growth in demand for emergency admissions coincides with further changes to the same regulatory measures in 2010/11:

- the A&E target was adjusted to 95% of patients to be treated or admitted within four hours. This would have reduced the number of patients who may need to be admitted to avoid breaching the waiting time target; and

- the marginal rate was introduced, paying providers a lower price for admissions above a baseline income level.

These findings suggest that the marginal rate rule helped to constrain growth in emergency admissions although it was not the only factor.

Analysis of the drivers of growth in emergency admissions from A&E departments confirms this view. Admissions are driven by three variables: changes in population, the rate of A&E attendance per head and rate of conversion from A&E attendances to admissions (see Figure 2).

**Figure 2: Factors responsible for changes in emergency admissions**

An increase in the A&E conversion rate explains 85% of the growth in emergency admissions from A&E from 2007/8 to 2009/10, but only 40% of the subsequent increase. This is consistent with a weakening of the financial incentive for providers to admit patients caused by the introduction of the marginal rate rule and the relaxation of the 4-hour target.

**Encouraging the management of demand for emergency care when well implemented**

In our call for evidence we heard confirmation from some stakeholders that when the marginal rate is implemented well it can:

- Incentivise the avoidance of emergency admissions;
Monitor and NHS England’s review of the marginal rate rule

- Stimulate dialogue in the local health economy to plan a whole-system response to deal with demand for emergency and urgent care; and

- Provide a mechanism for funding demand management schemes.

Submitted evidence illustrates a number of effective out of hospital demand management schemes that have been funded by the marginal rate rule. For example, one commissioner introduced acute medical clinics in a major city, resulting in the “avoidance of 6,000 A&E attendances and … a reduction in both short term and long term acute hospital admissions”.

Evidence on the financial impact of the rule points to broader issues with urgent and emergency care funding

Positive effects of the marginal rate on emergency admissions and demand management could be outweighed if the rule left providers too little funding to provide patients with quality emergency care. However, we could not analyse the effect of the rule on providers’ margins in depth. Detailed evidence on the financial impact of the rule is scarce because it has been applied differently in different areas. In addition, reliable comparative data on revenues and costs for admitted emergency care at the provider level is not available.

However, the provider sector remains in surplus overall, indicating that the sector as a whole is managing with the current budgets and with the rule in place. Objections raised by the sector in connection with the rule, outlined below, generally point to broader urgent and emergency care funding issues. Indeed, where respondents to our call for evidence expressed concerns about effects of the payment system on quality in urgent and emergency care, these were generally concerns about perceived underlying funding shortfalls rather than specific problems with the marginal rate rule. We take these possible broader A&E funding issues very seriously and are investigating them further as part of our continuing programme of research and development.

A&E services may be loss-making

We heard several reports that urgent and emergency care is a loss-making service requiring subsidy from elective care. There is as yet limited reliable evidence available on margins for emergency care and the extent to which providers need to cross-subsidise these service lines. The only conclusion we can draw from the available evidence is that the costs of non-elective services appear to be rising faster than activity levels, suggesting unit costs are rising.5

The reported increases in the costs of emergency care are hard to explain. This is because patients who stay for fewer than two days account for most of the recent increase in emergency admissions. Our analysis shows that an increase in

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5 Based on analysis of reference costs and PCT programme budgeting data.
emergency admissions at a provider which is driven by patients staying for fewer than two days is not accompanied by an equivalent increase in total cost to the provider, probably because patients staying less than two days do not need extensive interventions.

Furthermore, average length of stay for emergency patients staying for more than two days continues to fall, which means that costs for these patients should be contained. Nevertheless, unit costs appear to be rising and there are many possible reasons, for example, more expensive labour.

If providers need to use cross-subsidies to fund their urgent and emergency care services, we may need to adjust the payment system to remove the need for this cross-subsidy. However, trying to unpick cross-subsidies before we fully understand their extent, direction and causes could create financial shocks. The rebalancing of payments needs to be managed carefully, on the basis of reliable and extensive evidence.

In the meantime, from 2014/15, if the safe provision of emergency services at a provider is uneconomic, then the provider may be eligible for a local modification to the normal prices for emergency services.

**Activity-based payment for A&E may be inappropriate**

In our call for evidence, several stakeholders argued that the marginal rate rule runs contrary to the principles of activity-based payment. The marginal rate does indeed represent a move away from activity based payment towards a budget with some sharing of volume risk. But this may be an appropriate move in the context of emergency care. Activity-based payment provides a financial incentive for hospitals to admit patients, which may not be appropriate for this type of care. It can create uncertainty about provider revenues making it hard to plan for the capacity necessary to meet demand at acceptable levels of quality. It may also discourage an efficient and sustainable response to managing demand and discharge planning involving all the parties in the local health economy.

Alternatives to activity-based payment, such as capacity-based payment may in fact be more suited to the cost structure of emergency care, provide more appropriate incentives, and allow providers to plan to meet demand more sustainably. We will consider these and other alternative options for urgent and emergency care payment as a priority for 2015/16 and beyond.

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6 Total emergency admissions explain 83% of variation in total provider cost of non-elective admissions. 2+ day admissions in isolation explain 89%.

7 Average length of stay may not be a useful indicator for patients staying less than two days as it does not account for in-day variations.
NHS England and Monitor are making changes to the rule in 2014/15 to address immediate issues

The Secretary of State for Health recently announced an extra £500 million of funding targeted at relieving pressure points in emergency care over 2013/14 and 2014/15. These funds are to be distributed to systems identified as at risk, where local decision-makers are to decide how best to spend the funds on managing demand for emergency care.

The principle of empowering local systems to invest in demand management can be supported by the marginal rate rule, when it is well implemented. However, as we have seen, there are problems with the current implementation of the rule.

In the light of these findings, we have decided to maintain the marginal rate rule for 2014/15, but with the following changes to address the immediate issues identified, while further work is done to develop a longer term solution for payment for urgent and emergency care.

1. Guidance on setting activity baselines locally
   The national tariff contains clear requirements regarding when it is necessary for commissioners and providers to review the existing baseline arrangements and agree changes to their baseline value for the marginal rate.

2. Commissioner accountability for setting baselines
   Commissioners are to be held accountable by NHS England for setting appropriate baselines with their providers, through quarterly assurance and we plan to incorporate this in CCG planning guidance. Agreed baseline values need to be published by commissioners, alongside the rationale for its level.

3. Preparation of demand management
   Commissioners should prepare demand management using best available evidence and involvement from all relevant stakeholders, including in particular the local Urgent Care Working Group.

4. Oversight of demand management plans
   The national tariff contains clear requirements for how demand management plans will be made transparent, by being published on commissioners’ websites as well as shared with relevant acute providers’ chief executives, Monitor and NHS England. After the year is over, commissioners will be expected to report on the effectiveness of their plan.

NHS England, through its Area or Regional teams, will provide mediation, in the context of its CCG assurance role, when local consensus cannot be reached, to ensure CCGs’ plans are consistent with guidance. Where necessary, NHS England

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and Monitor will consider enforcing the rules set out in the guidance through the use of their enforcement powers. Monitor will also be notified to keep the implementation of the rule under review.

**Further work to consider alternative payment approaches**

NHS England and Monitor are already starting to consider alternative payment approaches for emergency and urgent care that could be implemented in 2015/16 and beyond. To this end, we are conducting research and analysis to improve our understanding of the cost structures of emergency and urgent care services.

Our long-term strategy for the payment of emergency and urgent care will support the findings of the two reviews of emergency and urgent care and 7-day services being undertaken by Sir Bruce Keogh and any recommendations they make on new models of service delivery. We are already collaborating with both teams in our work on alternative payment systems.

We will continue to engage with the sector over the coming year as we develop proposals for emergency care payment in 2015/16.
Annex A: Evidence gathered during NHS England and Monitor’s review of the marginal rate rule

3 October 2013
In response to problems reported with the marginal rate rule, NHS England and Monitor conducted a joint review of the rule, including:

- Analysis of available data
- Call for evidence to gather information and opinion from the sector
- Workshop to discuss findings with stakeholders
- Engagement with other bodies studying urgent and emergency care (e.g. National Audit Office)

This slide pack presents evidence gathered during the review relating to:

- Long-term trends in emergency care
- Recent changes in emergency admissions
- Causes and effects of emergency admissions
- Findings from our call for evidence

The evidence presented in this pack forms the basis of our conclusions on the policy, which we have outlined in a separate document.
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1. Long term trends in emergency care

2. Recent changes in emergency admissions

3. Causes and effects of changes in emergency admissions

4. Findings from Call for Evidence

Bibliography
Trends in A&E attendances since 1987

Attendances at type 1 A&E units have remained broadly constant

Type 1 A&Es account for 98% of emergency admissions from A&E

The increase in total attendances over the last decade has been due to attendances at Type 2 and 3 units

Source: King’s Fund

Type 1 A&E units are consultant-led 24-hour services
Type 2 A&E units are single specialty
Type 3 A&E units include minor injuries units and walk-in centres

Note: the marginal rate rule does not apply to A&E attendances
Trends in emergency admissions since 1997

Emergency admissions grew due to short stay admissions between 2003/04 and 2009/10

- **2.0% annual growth**
- **4.0% annual growth**
- **1.0% annual growth**
- **Total**

**0-1 day stay**
- **2.2% annual growth**
- **7.8% annual growth**
- **1.4% annual growth**

**2+ day stay**
- **-1.2% annual growth**
- **-0.1% annual growth**
- **0.5% annual growth**

Source: HES
The number of bed days occupied by emergency admissions has decreased

Total bed days occupied by emergency admissions have fallen for each age group except the 95+ year olds.
Outcomes are hard to measure, but access and waiting appear to have deteriorated

Total deaths in hospital after an emergency admission peaked in 2003/04 but have been decreasing since.

There has been a recent increase in patients waiting in A&E departments for over 4 hours.

Emergency readmissions have followed a similar trend to total emergency admissions.

Patient experience has slightly deteriorated overall, and deteriorated faster for access and waiting.
Many inter-related factors are affecting supply and demand

Activity changes

- Increase in attendances at Type 2/3 A&E departments
- Increase in short stay admissions
- Levelling of increase in A&E attendances
- Levelling of increase in short-stay admissions

Supply changes

- 36 walk-in-centres open
- 7% total decrease in number of Type 1 A&E departments
- 3.3% annual decrease in available beds
- Overall patient experience broadly constant; deterioration in experience of access
- Increase in patients staying in A&E over 4 hours
- Levelling of increase in readmissions

Quality changes

- Increase in emergency readmissions

Payment system

- Introduction of PbR
- PBR applies to non-elective and A&E services in all trusts
- Short stay emergency adjustment
- Differential tariff for admitted emergency care
- Marginal rate for admitted emergency care
- Same day emergency BPTs
- Emergency readmissions penalty

Other regulatory measures

- Announcement in 2000 that 4-hour targets will be enforced from 2004/5
- 4-hour targets enforced at 98%
- 4-hour targets relaxed to 95%
- Provision of out-of-hours services becomes optional in GP contracts

*Under the differential tariff, providers were paid 50% of both increases and decreases in the value of emergency admissions*
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A&E attendance growth has accelerated slightly in recent years

Attendances at major A&Es grew at **0.8% per year** before 2010/11 and at **1.5% per year** since 2010/11.

*Note: differences do not sum due to in-year variation; the four hour target was relaxed at the same time as the marginal rate was introduced. Source: QMAE attendance data*
Emergency admissions growth has levelled in recent years

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<th>Year</th>
<th>Provider’s own A&amp;E</th>
<th>Other methods</th>
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<tr>
<td>2007/08</td>
<td>3.10</td>
<td>1.66</td>
</tr>
<tr>
<td>2008/09</td>
<td>3.31</td>
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<tr>
<td>2009/10</td>
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<td>2010/11</td>
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<td>2011/12</td>
<td>3.66</td>
<td>1.58</td>
</tr>
<tr>
<td>2012/13</td>
<td>3.76</td>
<td>1.57</td>
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Total emergency admissions grew at **4.4% per year** before 2010/11 and at **1.0% per year** since 2010/11.

Note: differences do not sum due to in-year variation; the four hour target was relaxed at the same time as the marginal rate was introduced. Source: Monitor analysis of HES data.
There has been significant regional variation in changes in emergency admissions (-21% to +48%)

Total emergency admissions in England grew 6.4% from 2008/9 to 2012/13, and our non-specialist providers in our sample have had an average 7.7% growth in admissions from 2008/9 to 2012/13 (1.9% annual growth). ...while, only 19% of providers (27) had decreased emergency admissions

81% of providers (113) had increased emergency admissions

We investigated changes at the trusts with the largest ten increases and decreases in emergency admissions in more detail. We found that transfers of activity between providers were a key factor in explaining these large changes: 6/10 trusts with the largest decreases had neighbouring trusts with some of the largest increases.

The financial impact of the marginal rate rule on these trusts was not clear. The trusts with the largest increases had a stronger average EBITDA (5.6%) than the trusts with the largest decreases (4.9%) and had failed A&E targets less often.

Our sample for analysis includes all trusts with over 1000 emergency admissions in 2012/13 (excluding Isle of Wight and Mid Staffordshire due to data issues): 140 general acute trusts and 15 specialist acute trusts. Together, they account for over 97% of all emergency admissions.
The drivers of changes in emergency admissions have changed

The total increase in emergency admissions from A&E can be broken down into changes in three factors:

Note: Conversion rate = admissions from A&E / A&E attendances; differences do not sum due to in-year variation

Source: Monitor analysis of HES data, ONS population statistics (revised in light of 2011 census), QMAE attendance data
Population changes have varied regionally

<table>
<thead>
<tr>
<th>Region</th>
<th>Population growth (mid 2008 to mid 2012)</th>
<th>Average provider emergency admissions growth</th>
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</thead>
<tbody>
<tr>
<td>ENGLAND</td>
<td>3.2%</td>
<td>7.7%</td>
</tr>
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<td>London</td>
<td>6.4%</td>
<td>6.8%</td>
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<tr>
<td>South East</td>
<td>3.5%</td>
<td>6.9%</td>
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<td>East</td>
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<td>13.3%</td>
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<td>East Midlands</td>
<td>2.9%</td>
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<td>West Midlands</td>
<td>2.7%</td>
<td>13.5%</td>
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<td>South West</td>
<td>2.6%</td>
<td>6.4%</td>
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<tr>
<td>Yorkshire and The Humber</td>
<td>2.3%</td>
<td>6.7%</td>
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<td>North West</td>
<td>1.8%</td>
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<tr>
<td>North East</td>
<td>1.3%</td>
<td>2.9%</td>
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Source: ONS (adjusted for 2011 survey); HES Monitor sample of providers (see slide 12)
Average length of stay has decreased for patients staying for two or more days

Some providers suggest that there has been an increasingly severe case-mix. An indicator of this could be an increase in average lengths of stay, but the data does not support this.

Note: Data clipped to exclude stays over 30 days as these are not yet included in month 12 of the 2012/13 data. In previous years over 96% of admissions have been shorter than 30 days. Clipping at 365 days and examining to 2011/12 shows a very similar trend.

Note (2): LOS is not a reliable measure for 0-1 day admissions (recorded as 0 or 1 days, which does not represent in-day bed usage)

Source: Monitor analysis of HES data.
Bed occupancy rates are high in winter, but have stayed relatively stable

Peak occupancy rates remain relatively stable over the last three winters …

… and full year average occupancy rates over the last six years also remain stable

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<tr>
<td>Occupancy rate</td>
<td>85%</td>
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Source: DH Bed Statistics (average of quarterly results), Winter pressures monitoring
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Number of factors do not appear to be significant in explaining recent changes in admissions

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<th>Drivers of changes in emergency admissions</th>
<th>Drivers of emergency admissions regionally</th>
<th>Drivers of emergency admissions at a provider</th>
<th>Consequences of changes in emergency admissions</th>
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<td>GP out of hours</td>
<td>Available beds</td>
<td>Effects on provider finances</td>
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<td>Regional morbidity</td>
<td>A&amp;E targets</td>
<td>Effects on patient flow</td>
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<td>Effects on provider finances</td>
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<td>Higher costs for non-elective care</td>
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<td>Lower margins for non-elective care</td>
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<td>Lower total surplus</td>
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- Factors explain effectively the level of emergency admissions in PCT areas
- Regional variations in population changes in recent years do not translate into regional variation in change in admissions
- No identifiable significant national relationship between recent changes in other statistics and changes in emergency admissions
- Lack of identifiable relationship may be due to short time series

- Total number of available beds has decreased from 2008/9 to 2011/12
- Admissions peak just before 4 hour mark, but are no more likely to be short stay at this point
- Correlation between introduction of PbR and rise in short stay admissions
- Total number of A&E specialty doctors increased 70% over 10 years
- Reportedly an increased reliance on locums
- Total non-elective reference costs appear driven by 2+ day emergency admissions
- Short stay admissions have little significance in explaining cost variation
- Short stay admissions may therefore be (at least in part) an administrative change from A&E attendances
- Difficult to measure with available data
- No apparent relationship
- Reported DTOCs are stable/declining slightly overall
Hypothesis: there are some patients who require monitoring or diagnostics for more than 4 hours, but do not require full admission. Before the 4 hour target, they were recorded as A&E attendances. After the 4 hour target they were recorded as admissions. So, the statistics may exaggerate the extent to which there has been a change in clinical practice (and therefore costs).
Total non-elective costs are driven by 2+ day admissions while 0-1 day admissions have little significance

- Over 80% of income for non-elective admitted care is due to emergency admissions.
- However, total emergency admissions explain 83% of the variation in total non-elective admitted care costs at providers while 2+ day admissions in isolation explain 89% of the variation.
- Regression analysis shows very low significance of short stay admissions in explaining total non-elective admitted care costs.

However, short stay admissions do appear to be significant in explaining the total cost of A&E attendances at a provider. This supports the hypothesis that the increase in short stay admissions exaggerates a change in clinical practice and therefore total cost.
Robust evidence on margins for emergency care is lacking

Costs for emergency care and A&E look to be increasing, although different sources produce highly variable estimates*. Margins for A&E may be decreasing as A&E costs have increased faster than inpatient non-elective care.

But, there are significant inconsistencies in revenue reporting for emergency care, which make it difficult to calculate margins for non-elective care:
- FT accounts suggests that on average, providers have a negative margin for in-patient non-elective care
- A comparison of PCT programme budgeting data with reference costs suggests that in total, non-elective care is in surplus, although this has decreased over 2010-11 to 2011-12

* NOTE: Keogh review of urgent and emergency care highlights inconsistency in cost reporting: spending on A&E is between £760m - £1.5bn p.a.
We have heard many potential reasons for increases in emergency care costs, but there is lack of evidence

<table>
<thead>
<tr>
<th>Input Costs</th>
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</table>
| Inputs more expensive overall                                             | • Wages generally frozen since 2010/11 but some providers report increasing costs for emergency labour due to shortages and heavy general reliance on locums to fill senior doctor positions  
  • Tariff inflator captures input cost changes generally                   |
| Volume growth increases marginal costs                                    | • Several providers & stakeholders argued reopening wards & extending capacity resulted in increasing marginal costs but no quantitative evidence given to support argument.  
  • Length of stay has fallen and reopening bays/beds is mainly variable cost increase.  
  • Bed utilisation remains steady at 87-88%                                 |

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<tr>
<th>More resources are required to be clinically effective</th>
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| Increased patient acuity                                                  | • A number of respondents claimed increasing acuity in terms of an ageing population with more comorbidities.  
  • Impact on unit costs per admission unclear and unevienced               |
| Increased quality                                                          | • No respondent claimed higher standards of quality have driven cost increases. However, staffing is below College of Emergency Medicine recommendations  
  • When higher quality achieved to best practice standards marginal rate no longer applies. |

<table>
<thead>
<tr>
<th>Less efficient use is being made of inputs to achieve outputs</th>
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</table>
| Scope economies with A&E attendances reduced                              | • No respondent raised cost allocation concerns or commented that A&E attendance services had changed such that scope economies with admissions were reduced.  
  • However, A&E costs have also been rising faster than volumes             |
| Scope economies with other service lines reduced                          | • No obvious national level service reconfiguration to indicate scope economies reducing for acute providers. No respondent raised this as a reason for cost increases. |
| Scope economies with local health economy reduced                         | • Several respondents highlighted social care budget cuts resulting in higher costs for acute providers (higher attendances, admissions and delayed discharges) |
| Productivity has been reduced                                             | • Decreasing length of stay at acute providers suggests improvements in efficiency but efficiency of providers needs further investigation. |
Emerging consensus that coordination across the urgent and emergency care system is required

- **Clinicians** (the Keogh review): “There is a clear need to adopt a whole-system approach to commissioning more accessible, integrated and consistent urgent and emergency care services”

- **Clinicians** (CoEM): “Close collaborative working will produce the most cost effective and efficient solutions”

- **Independent thought leaders** (the King’s Fund): “To address the problems created by increasing demand on urgent and emergency care we need more strategic approaches that reduce complexity, reshape primary care and chronic disease management, support patients in their own homes, and change the way that nursing and residential care are incorporated into the system… *All of this requires leadership across a system rather than attempting to fix each individual component*”

- **NHS Confederation**: “We must adjust the financial incentives across the system so that they support effective management of demand for unscheduled care. We need the resources to invest in primary, community and social care, so they can contribute to providing effective urgent and emergency care services. The marginal tariff provides a mechanism to realise this investment, which should be transparent and driven by local commissioners”

- **Pulse**: “…. contracting with the CCGs for an *outcome measure* of reduced admissions (and giving them control of the resources currently involved) would allow them to be inventive and innovative in their approach, … letting them see the direct benefit to patients, to hospitals, and yes, to their bank balances”

- **Social Care Directors**: “More than half reported that where integrated services were in place they had seen a reduction in delayed discharges. Two out of five said they had seen a positive impact in unplanned emergency hospital admissions as a consequence of integration, and the same proportion reported more service users were still at home three months after being discharged from hospital into rehabilitation”

- **And providers**: FTN submission to our call for evidence suggests that many providers would spend extra money on demand management schemes rather than on core operations – for example on ensuring ambulatory care, primary care (in and out of hours) and 111 services are effective
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1. Long term trends in emergency care

2. Recent changes in emergency admissions

3. Causes and effects of changes in emergency admissions

4. Findings from Call for Evidence

Bibliography
As one of our questions, we asked: *has the policy helped?* Generally, commissioners found that the policy had helped while providers found that it had not.

**Note:** one stakeholder response was a survey, which represents multiple opinions.
### Summary of arguments presented for and against the marginal rate rule in responses to our call for evidence

<table>
<thead>
<tr>
<th>Arguments presented in favour</th>
<th>Arguments presented against</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incentivise admissions avoidance</strong></td>
<td><strong>Decreased funding to providers</strong></td>
</tr>
</tbody>
</table>
| • Remove financial incentive to admit inappropriately  
  • Incentives to avoid admission do not outweigh incentives to admit when clinically appropriate | • Cross-subsidy necessary from other service lines.  
  • Lost income could be spent on innovation, improvement and pathway redesign to help with A&E pressures. |
| **Requires local engagement** | **Does not account for effects of admissions increases** |
| • Provider and commissioners required to discuss changes in emergency admissions and plan for demand | • Activity increases are outside providers’ control  
  • Increased activity can result in cancelling elective procedures  
  • Does not account for step changes in costs |
| **Empowers commissioners to manage demand** | **Lack of confidence in commissioner behaviour** |
| • Commissioners control budgets to spend on demand management where it would be most effective in the local health economy | • Disincentive for commissioners to manage demand as admissions now cost 30%  
  • Where commissioners have funding constraints, they may be more focussed on meeting budgets than developing demand management.  
  • Unclear if money has been re-invested. |
| **Key driver of change in local health economy** | **Others** |
| • The rule has supported initiatives to develop demand management | • Specialist activity cannot be demand managed, so marginal rate doesn't work as an incentive.  
  • Lost opportunity to incentivise out of hospital care |
There appears to be wide variation in how the marginal rate rule has been applied

Our stakeholder engagement during the review found that the rule had only been applied strictly in around 26% of cases. The rule was not applied strictly in around 43% of cases, while the remainder was unclear.

We asked how the rule had been applied. There were several different examples of variations in the application of the marginal rate rule…

- **Yes - applied strictly** without the use of any flexibilities - 8 providers
- **Yes - but with increasing technical difficulty**, and agreed increases in the baseline for some providers have not been matched by decreases in the baseline at other providers - 1 commissioner
- **Yes - the threshold has been applied across contracts** and there has only been one modification of the baseline period (service change for emergency cardiac service transfer) - 1 commissioner
- **Yes - but with an update to the baseline** following CQC recommendations about need for additional emergency care capacity – 1 provider
- **No - the FT moved to a block contract** to enable innovative pathway changes, but hds not changed the activity baseline from 2008/09 – 1 provider
Opinions differed on the impact of the marginal rate on partnership working

We asked specifically what impact the marginal rate had on partnership working between commissioners and providers

<table>
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<tr>
<th>Commissioner opinions</th>
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<tbody>
<tr>
<td>• Acute providers have responded with positive engagement</td>
</tr>
<tr>
<td>• Improvement in provider commissioner relationships</td>
</tr>
<tr>
<td>• Providers can no longer 'politely ignore' discussions about demand management</td>
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<tr>
<td>• Dialogue with the trust improved</td>
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<table>
<thead>
<tr>
<th>Provider opinions</th>
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<tbody>
<tr>
<td>• No provider involvement in demand management plans</td>
</tr>
<tr>
<td>• Disagreement about whether fund have been invested and whether this has been successful</td>
</tr>
<tr>
<td>• No impact (three providers)</td>
</tr>
<tr>
<td>• Commissioners do not face incentives for partnership working</td>
</tr>
<tr>
<td>• Partnership working has improved since CCGs were introduced</td>
</tr>
<tr>
<td>• Partnership working still needs to be developed</td>
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<table>
<thead>
<tr>
<th>Stakeholder opinions</th>
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</thead>
<tbody>
<tr>
<td>• The marginal rate rule has created an incentive for commissioners and providers to work together</td>
</tr>
<tr>
<td>• Lack of involvement of local commissioners</td>
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</table>
Responses did not suggest that the marginal rate has directly caused a decline in quality

“[The marginal rate] has made a significant difference in improving patient care promoting a whole system approach, removing perverse incentives to see more patients” – Commissioner

“We suggest that the quality of care provided to those patients who are admitted has not been compromised” – Stakeholder

A survey of providers suggest extra funds would be spent on demand management, supporting the respondent's view that quality has not been affected by the marginal rate – if the providers had received 100% of tariff, they would spend it on demand management schemes such as geriatrician outreach, or A&E redesign (rather than normal operations)

Concerns about quality seem to be focussed on general funding shortfalls in emergency care rather than any incentive or structural properties of the marginal rate rule.

Fewer than half of the call for evidence respondents mentioned quality and only a few raised concerns about it.

No current substantiated negative causal links were made to the marginal rate and a number of respondents said quality had not been affected by the rate.

One respondent drew a positive causal link between quality and the marginal rate.
Growing concern about securing sufficient funding to maintain or improve quality in the future due to perceived growing demand

“Our view from the acute sector perspective is that introduction of the Marginal Rate has exacerbated the imbalance [between rising emergency demand and shortfalls in bed capacity] that can challenge and undermine high quality patient care” - Provider

“[Our members] are concerned that the quality of urgent and emergency care services is falling as a result of … increasing demand” – Stakeholder

“There have been concerns at one local provider on quality of care where emergency pressures have risen, however this is not directly related to the application of the threshold, albeit that the increase has led to financial pressure via application of the threshold” - Commissioner

"The overall impact of the emergency admission marginal rate without a coherent agreed plan across the health community means that delivery of safe care will be unsustainable in its current form” - Provider

“Some Trusts, particularly smaller ones, will not be able to continue to cover this loss causing failing trusts with all of the quality issues that financial difficulties bring” - Provider
We received examples of demand management initiatives funded by the marginal rate rule

<table>
<thead>
<tr>
<th>Details of initiative</th>
<th>Outcome of initiative</th>
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<tbody>
<tr>
<td>“our main trust has implemented a programme of ambulatory care pathways as a consequence of this”</td>
<td>Unknown</td>
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<tr>
<td>• Expansion in case management for long term conditions</td>
<td>Unknown</td>
</tr>
<tr>
<td>• Increased capacity in … preventive community services</td>
<td></td>
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<tr>
<td>• Increased spend with partners on reablement services</td>
<td></td>
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<tr>
<td>• Bounce-back schemes from A&amp;E</td>
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<tr>
<td>• Urgent primary care visit schemes in partnership with Ambulance providers</td>
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<tr>
<td>• Incentives placed in contracts and development plans with other providers (e.g. Ambulance schemes to support transit to other settings or treatment at scene)</td>
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<tr>
<td>• Incentive schemes for GP practices to … tackle both admissions and attendance at A&amp;E … for example including practice follow up of patients attending ED for conditions treatable in primary care.</td>
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<tr>
<td>• Investments of over £1m per year in clinical utilisation review decision support tools and a trained dedicated team … to support improvements in community services and identify and tackle causes of patients cared for in acute settings [inappropriately]</td>
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<tr>
<td>“introduced acute medical clinics in Birmingham”</td>
<td>“avoidance of [c.] 6,000 A&amp;E attendances per annum and … a reduction in both short term and long term acute hospital admissions”</td>
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<tr>
<td>• Educational materials to explain range of emergency and urgent services to public</td>
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<td>• Ambulatory care area in A&amp;E</td>
<td></td>
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<tr>
<td>• Enhanced geriatric assessment</td>
<td></td>
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<tr>
<td>• Clinical leadership in A&amp;E department</td>
<td></td>
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<tr>
<td>• No growth in A&amp;E attendances</td>
<td></td>
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<tr>
<td>• 4-hour targets met</td>
<td></td>
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<tr>
<td>• Reduction in cancelled elective procedures</td>
<td></td>
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<tr>
<td>• Reduction in unnecessary admissions</td>
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## Summary of points raised by providers, commissioners, and other stakeholders

### PROVIDERS
- Admissions have continued to increase, indicating policy not successful and result in loss of income.
- Variable application of the rule, including the use of block contracts.
- Many have not been involved in 70% decisions, do not think the savings have been spent on demand management, or have concerns about effectiveness of investments.
- Perverse incentives for commissioners who now only pay 30% of admissions costs at margin.
- Risks and responsibilities not aligned correctly.
- Baseline outdated and/or application becoming increasingly difficult because of HRG changes.
- Quality has not been directly affected but financial sustainability is threatened.
- Others in system – commissioners, social care, community care, GPs and ambulance trusts – need to play role in reducing admissions.
- Lack of investment/cuts in social and community care impacting urgent and emergency care.
- Emergency care requires cross-subsidy.
- Steep marginal costs faced reopening wards/using locum staff are not covered by marginal rate.

### COMMISSIONERS
- Since introduction of marginal rate rule, providers prepared to discuss/work together on demand management.
- Incentives to perform activity regardless of patient need, a weakness of PbR, are effectively addressed by the rule to the benefit of patients.
- Certainty needed around savings from marginal rate rule if to be invested effectively in demand management.
- Can be difficult to assess/attribute effect of demand management schemes.
- New patient pathways developed in response to marginal rate.
- The baseline or marginal rate could be made more flexible.

### OTHERS
- Policy not as successful as hoped (admissions have continued to increase).
- Lack of transparency around investment of savings and joint working has not materialised to extent anticipated.
- Risk should be placed with those best placed to manage it.
- Whole system solution is needed, including community and social care providers.
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