TITLE: Funding approaches for mental health services: Is there still a role for clustering?

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ABSTRACT

Funding for mental health services in England faces many challenges including operating under financial constraints where it is not easy to demonstrate the link between activity and funding. Mental health services need to operate alongside and collaborate with acute hospital services where there is a well-established system for paying for *activity.* The funding landscape is shifting at a rapid pace and we outline the distinctions between the three main options – block contracts, episodic payment and capitation.

Classification of treatment episodes via clustering presents an opportunity to demonstrate activity and reward it within these payment approaches. We have been engaged in research to assess how well the clustering system is performing against a number of fundamental criteria. Clusters need to be reliably recorded, to correspond to health needs, and to treatments that require roughly similar resources. We find that according to these criteria, clusters are falling short of providing a sound basis for measuring and financing services. Yet, we argue, it is the best available option and is essential for a more transparent funding approach for mental health to demonstrate its claim on resources, and that, as such, clusters should be a starting point for evolving a better funding system.

LEARNING OBJECTIVES

1. Understand the different payment models currently being used and proposed in mental health services in England.
2. Understand the role of clustering in measuring mental health activity and providing a basis for funding.
3. Understand how a robust model of clustering can benefit the provision of mental health services.

1 INTRODUCTION

In 2014, one of the authors (Jacobs, 2014) wrote an article for *BJPsych Advances* which explained a new method of funding which was being rolled out in England's National Health Service for mental health providers. This approach, then termed payment by results (PbR), was to represent a fundamental change to the way providers of psychiatric services are paid for the care of patients.

Now, four years on, it is opportune to take stock of how things have developed, provide an update on how the sector has responded to the proposed funding approaches, and reflect on what the funding landscape means for clinicians and services.

A key development since 2014 has been the development of not one, but two new proposed payment approaches to replace block contracts for mental health services in England (NHS Improvement, 2016). The first approach, formerly termed PbR, now referred to as the National Tariff Payment System (NTPS) is an *episodic payment* model. Under this approach, a provider is paid a fixed price or tariff for the care provided to a patient during an agreed timeframe or episode. The tariff is specific to the mental health needs of the patient and a Mental Health Clustering Tool (MHCT) was developed to categorise these relative needs of patients (Self et al. 2008). Twenty clusters have been developed as part of the classification system and the cost of treating patients in different clusters is collected by service providers. These are used to calculate national or local average costs for patient care in each cluster. The ultimate goal of this funding approach is the creation of a fixed price for each care cluster which could then be used to pay services and may help to support cost control.

The second proposed payment approach, termed the *capitated payment* model, is where a provider is paid to cover a range of care for their whole population. The providers are paid on the basis of the number of people in the relevant population and the payments are risk-adjusted to reflect the complexity and needs of people with mental illness in that population. Mental health activity data is crucial to identifying the mental health population that may need care (NHS England and NHS Improvement, 2016a) and adjusting payment for the population's needs and the proportion of patients within each cluster could serve as one of the mechanisms for risk-adjustment, although other approaches are possible, along with other factors e.g. age and sex proportions within the population.

But what are the advantages and disadvantages of the two payment approaches? How do quality and outcomes indicators fit into either of the payment systems? Have mental health services introduced either approach? And where does this leave the collection of care cluster data by clinical teams?

In summary, there is a classification or clustering system that was originally developed with a view to using it as a *basis* for payment, and a new suggested approach to payment being developed that seems to not require clustering at all. In the rest of this article we attempt to unravel this paradox and answer two fundamental questions. Does the present clustering system fulfill its purpose? Does clustering still matter? We start by providing some more details of the two payment systems, how they are supposed to work, how they link to quality and outcomes, and what they require to operate. We then set out the role that clustering can play and summarise what we have found regarding whether the current clustering system is fit for purpose.

2 TWO PAYMENT APPROACHES FOR MENTAL HEALTH SERVICES

At present, NHS mental health services in England are primarily funded through block contracts agreed between commissioners and providers of care. A block contract is a payment made to a provider to deliver a broadly-defined service, for example, a hospital could be given a block contract to provide mental health services in a particular geographical area. Under block contracts an agreed fixed sum is paid regardless of the number of patients treated. Amongst the perceived problems with this method of financing is that it neither encourages a hospital to control costs nor to increase output (activity levels) (Mason et al., 2011).

Although there are certain advantages to block contracts (they require little in the way of data and monitoring costs, are easy to contract for and provide stable funding since they are usually based on historical funding patterns), there are clear disadvantages (they are not transparent and it is unclear what value for money is being obtained for a given level of expenditure). The two new payment approaches seek to overcome these disadvantages.

2.1 Episodic payment approach

The predominant mode of paying for acute physical health care in England remains the episodic payment approach, where Healthcare Resource Groups (HRGs) are the unit of activity or episodes of care for which a fixed price or national tariff is set. There are over 1,400 mandatory tariffs representing around 60% of payments made to hospitals in England (British Medical Association, 2017a) and this approach is the dominant form of payment in most high-income countries.

Previous articles in this journal (Bhaumik et al., 2011, Fairbairn, 2007, Oyebode, 2007, Yeomans, 2014, Jacobs, 2014) have highlighted the potential advantages and disadvantages of introducing this form of payment system to mental health, as outlined in Table 1.

[TABLE 1 ABOUT HERE]

The dominance of this funding approach is however diminishing as it is increasingly being seen as unsustainable. NHS England and NHS Improvement now seek to find new ways to pay providers to support implementation of new models of care proposed in The Five Year Forward View (Naylor et al, 2017; The Mental Health Taskforce, 2016).

One of the key reasons for the shift away from the tariff payment approach for acute care, is that the focus on specific procedures, can lead to fragmented care and does not facilitate a coordinated approach to health care delivery across sectors. This can discourage the treatment of patients in out-of-hospital settings. As such it is seen as a major barrier to the development of integrated care (British Medical Association, 2017a) which is a major plank of current policy.

Sustainability and transformation partnerships (STPs) are now the main mechanism for delivering the Forward View and are seen as a vehicle for developing more integrated approaches between mental and physical health. STPs are where NHS organisations and local authorities in different parts of England have come together to develop five-year ‘place-based’ plans for health and care services

in their area. There are 44 STP areas, each covering an average population of 1.2 million people (Kings Fund, 2017).

Some of the more advanced STPs are now evolving to become accountable care systems (ACSs) and these have more recently been rebranded as integrated care systems (ICSs) (NHS England and NHS Improvement, 2018). These systems have no statutory basis, but are areas in which commissioners and providers, in partnership with local authorities, are willing to work together to take explicit collective responsibility for resources and population health. These systems effectively dissolve the boundaries between commissioners and providers. ICSs should have greater freedom and control over the operation of their local health system and how funding is deployed. There are currently 10 ICSs that are working out the financial, contracting and risk sharing arrangements to make these systems sustainable (Kings Fund, 2018).

A further development is accountable care organisations (ACOs) which are a more formal version of an ICS which supposedly simplifies contracting by bringing together funding streams and allowing commissioners to hold a single contract with a single provider who takes responsibility for deciding how to allocate resources and design care for the local population (British Medical Association, 2017b). This can include primary care, hospital care, and community care. Providers within the ACO can share any 'savings' to the public budget that are achieved (Pollock and Roderick, 2018). Most parts of the country may become ICSs before they consider whether to introduce ACOs, which as yet do not exist and are the subject of legal challenges (Dyer, 2018). These challenges are on the basis that ACO decisions will be taken by non-statutory bodies who may lack public accountability. They will subsume some of the functions of clinical commissioning groups (CCGs) and legislation will be needed for ACOs to replace CCGs. All STPs should become ACSs over the next few years, but it should take considerably longer before ACSs formally become ACOs (Moberly, 2017), if at all.

The reduced incentive to integrate care under the episodic payment approach, and the increased ability to foster integration under these new organisational arrangements has led to the development of STPs (and ICSs and ultimately ACOs), and underpinning this, a major driver towards the capitation payment approach which is seen as a means of contracting and paying for care under these new geographic footprints.

2.2 Capitated payment approach

Capitation is a payment system whereby a lump-sum payment is made to a provider or group of providers based on the number of patients in a target population, to provide some or all of their care needs (British Medical Association, 2017a). Like a block contract, the capitation payment is not linked to how many patients are treated. Capitation is often seen as a means to integrate services, particularly between physical and mental health care, where the provider is responsible for all the health needs of mental health patients. For example, under an STP local footprint, acute and mental health providers will be jointly responsible for the mental and physical health of their population. In essence, capitation is a means of pricing a form of 'block contract' in that the population needs or risks need to be defined so that a per person price can be defined.

The potential advantages and disadvantages of a capitation approach are indeed very similar to that of a block contract and are outlined in Table 2 (Monitor, 2015).

[TABLE 2 ABOUT HERE]

Capitation may encourage greater investment in preventive care and care delivered in community settings because providers should have greater flexibility to spend money in the areas of a care pathway where they believe it will deliver the best outcomes for patients (British Medical Association, 2017a). However there needs to be a clear mechanism to take account of quality and risk as part of capitated budgets. Risk-sharing arrangements and financial gain/loss sharing arrangements can be difficult to agree and operationalise in practice. The approach therefore demands high-quality data to measure quality and outcomes which are notoriously difficult to agree and measure, and to develop risk-adjustment mechanisms on demand levels to ensure the system can cope financially.

Most STPs being developed and operationalised in England aspire to move towards an outcome-based capitated approach for their populations, which would mean clinicians would need to document their activities and outcomes, and in turn payment would be delivered on a per person basis to their provider according to the overall needs of their population, not the individual patient. How this payment approach is to be implemented for mental health within these complex geographic footprints and care networks is as yet unclear. Ultimately, under an ACO, the intention is that list-based capitation payments will be derived from current CCG expenditure, though there will be significant challenges around deriving risk-adjusted capitation and risk-pooling (Pollock and Roderick, 2018).

2.3 Linking quality and outcomes to payment

Under either of these payment approaches, linking quality and outcome indicators to payment, is a high priority. This is because under either of the above payment models, skimping on quality is a real risk. Either payment system therefore needs to be linked to metrics of care quality and outcomes for individual service users (NHS England and NHS Improvement, 2016b). Guidance suggests a combination of both national and local measures should be used, ones that include both physical and mental health, and that reflect both clinical and social outcomes (NHS England and NHS Improvement, 2016b). Other potential criteria include the need for waiting time standards to be included, and for the co-production of indicators with service users.

An example framework of potential quality and outcome indicators as proposed by NHS England is provided in Table 3. These cover a range of quality and process as well as outcome measures. Some are being routinely collected in services while others may be more challenging to collect. Guidance suggests a set of three to seven outcome measures with between six and 15 indicators should be used to link to payment at the contract level (NHS England and NHS Improvement, 2016c).

Our research shows that the type of quality or outcome metric may matter in the design of the payment system and this should be based on sound evidence (Moran et al, 2017; Moran & Jacobs, 2015). There may also be unintended consequences from the collection and use of these performance indicators within a payment framework. Any approach will clearly require high quality and timely data to operate effectively.

[TABLE 3 ABOUT HERE]

There are currently a few examples in the sector of where payment is attached to outcomes, but not many where outcomes are linked to clusters for payment purposes. Policymakers are now considering ways to try and link specific clusters, e.g. for psychosis, to evidence-based care and set a best practice tariff that is linked to outcomes. One challenge is that NICE guidance for mental health

pre-dates the use of care clusters and so does not simply map over to them in terms of prescriptions of best practice.

2.4 Which approach to use? And what is happening in reality?

Evidence suggests that despite guidance (Monitor, 2016) to the sector that it move away from block contracts, very few providers/commissioners have indeed done so. Whilst a handful of providers have adopted the episodic payment approach, capitation approaches are currently seen as difficult to adopt since the data are not yet adequate to risk adjust appropriately. Our research has shown that the choice of payment options has in fact caused much confusion amongst commissioners (Jacobs et al, 2016) and they have felt uncertain as to which approach to adopt and how to do it. Some felt they ought to be developing capitation models to be keeping up with the latest thinking, but this felt like a big step from their current practice with block contracts because of not being able to meet data requirements to adequately understand the risk of their populations and/or seemed to be abandoning their work on episodic models which has a stronger evidence base behind it before they had a chance to fully learn about this approach to commissioning.

Extrapolating from our understanding of the evidence base about forms of payments and issues of data quality, the notion of a capitation model seems to pose significant challenges as a way forward. There is, however, little in the way of robust evidence about the performance of capitation models in the context of mental health care in England chiefly because they are new, although there are some international examples (Monitor and NHS England 2014). Indeed there is little evidence comparing a capitation with an episodic payment system. This makes it difficult to determine the best model in terms of its overall cost-effectiveness and as a means of managing fragmentation/integration risks.

We would argue that the episodic payment approach has a number of advantages over the capitated payment approach and has stronger incentives than the capitated payment approach to increase activity rates and control costs. It may also be simpler to implement from a contracting perspective, and given capacity constraints within commissioners, may be more pragmatic since it may be less prone to potential problems in terms of the quality of partnerships, or which organisations within a local health economy are running a deficit. Episodic payment is a more transparent funding approach than the capitated payment approach. Therefore the episodic payment approach has the potential to establish greater parity of esteem between mental and physical health, although it is the case that acute physical health services are slowly moving away from episodic payment and this argument may not hold in the future.

Two aspects are however common between the two approaches and both are fundamental to the operation of any payment model:

- The need for high quality, timely data as part of a classification system which defines a measure of activity - this could be diagnosis, or e.g. a cluster
- The need for valid and reliable measures of quality and outcomes which can be linked to the classification system

While the use of diagnoses could be a valuable addition to a classification system, most countries have found they do not operate sufficiently on their own to identify need within a mental health payment framework (Mason 2011).

3 WHY DO WE NEED CLUSTERING?

It would seem there is a simple truth, that episodic and capitated payment approaches rely on a classification system that categorises patients' symptoms and needs effectively. Unless mental health activity is recorded and classified in a way that provides strong *evidence* of what funding is achieved, it is at continuing risk of being funded inadequately. Why? Because in any system where the financial resources follow patients and their needs it is ultimately health care *activity* that is used as the metric of need – and hence determines funding. Mental health clusters therefore continue to be an important tool both locally and nationally (NHS Improvement, 2016):

- in local pricing arrangements as a source of activity data, and
- in both capitated and episodic payment approaches.

Our research showed that commissioners welcome the care cluster model (Jacobs et al, 2016) and use it as a framework to understand and discuss local patterns of care and variations.

In both payment systems, clusters should be essential to either (i) assign patients to resource-homogeneous groups, or (ii) define a unit of activity for resource allocation. Clusters can help identify the level of resources needed to treat different groups of patients and therefore allow the provider to 'claim' resources according to the activity it performs. Care clusters provide the basis for a classification system which makes mental health service more transparent and accountable.

4 HOW IS CLUSTERING WORKING?

The key challenge for any payment approach would be to introduce a classification system that accurately and consistently captures similarities and differences between patients. The categories of such a classification system need to be both casemix- and resource-homogenous, that is patients within a given care cluster have similar needs profiles and require approximately similar levels of resources to be treated. Our research shows there is enormous **variation within the current clusters** in terms of activity and costs. Considerable variation in levels of need and case-mix within care clusters was anticipated from the outset (Jacobs, 2014, Bhaumik et al., 2011). However, the problem with high levels of variation within clusters is that accurate baseline activity cannot be determined for commissioning purposes. And high levels of cost variation within clusters make it difficult to set prices or tariffs.

We are not only concerned with absolute levels of activity and costs, but also in the relative **variation between providers** in costs and activity rates. Our research shows that the variation in activity rates between providers is substantial. Variation in activity rates means that providers see different numbers of patients, have different levels of productivity, and put different care pathways and packages of care in place for patients with similar levels of need. This suggests differences in the quality of care that patients receive across providers, generating potential geographic inequalities for patients. Variations in costs mean that patients with similar levels of need as defined by the MHCT may be receiving different levels of resource, or again, an inequality between patients in what care they receive, based on their geography. The reduction of variation in care, activity levels and costs is therefore pivotal to the establishment of a well-designed classification and payment system.

To examine these sources of variation, we did an evaluation of whether the data collected in the Mental Health Minimum Dataset (MHMDS)[1] can provide accurate measures of activity in mental health providers and it showed there is significant variability in activity and resource use within clusters (Jacobs et al., 2016). The measure of activity used was the number of cluster days, while the measure of resource use, was (i) the number of admitted (inpatient) days, and (ii) the number of days with contact with a health care professional. We used MHMDS data for the period 2012/13 and 2013/14.

One of the issues identified (Jacobs et al, 2016) was the differences in the length of the cluster-episodes among providers. If all providers were delivering the same care but were reporting it at different intervals we would observe something like Figure 1, where longer episodes (measured on the right-hand-side axis) have the same proportion of activity (measured on the left-hand-side axis), both in terms of the proportion of admitted days and in terms of the proportion of days with contact with a health care professional (HPCON days), as shorter episodes. The x-axis represents each of the approximately 50 mental health providers in the NHS ordered in increasing size of their reported number of cluster days for this particular hypothetical cluster.

[FIGURE 1 ABOUT HERE]

Figure 2 shows the actual length of cluster-episodes and activity and resource use for Cluster 10 (First episode in psychosis) as an example, using MHMDS data. We see that longer cluster-episodes do not translate into proportionally more activity (admitted days) and resource use (days with contact with a health care professional), as anticipated. The sources of this variation are not clear, some of it is the result of data quality issues, but this variation also points to actual differences between providers, in terms of practice and/or allocation to clusters.

[FIGURE 2 ABOUT HERE]

We found very similar patterns of variation within clusters and between providers for all 20 care clusters (Jacobs et al, 2016), i.e. there is substantial variability across providers in the length of cluster episodes, and there is substantial variability within clusters in terms of the proportion of inpatient admitted days and the proportion of contact with healthcare professionals (activity and resource use).

Authors have also drawn attention to the limitations with respect to the costing of clusters, in particular a lack of homogeneity in costs for care clusters (Bhaumik et al., 2011, Jacobs, 2014). Our research (Jacobs et al. 2016) also provides evidence of significant variation in cluster costs between providers. We observe that the provider with the highest cost has costs that are 55% higher than average and the provider with the lowest cost is 25% below average. Considering all activity together, the ratio between the provider with the highest costs and the one with lowest is around two-fold, but in some clusters this ratio can be as high as ten-fold. Looking within clusters, those with large variability in costs include clusters 1 (Common mental health problems (low severity)), 2 (Common mental health problems), 15 (Severe psychotic depression), 18 (Cognitive impairment (low need)), 19 (Cognitive impairment or dementia (moderate need)), and 21 (Cognitive impairment or dementia (high physical need or engagement)).

5 DO WE ABANDON CLUSTERING? NO!

[1] Now called the Mental Health Services Dataset (MHSDS).

Clusters are therefore not performing very well as a classification system to capture similarities and differences between patients. The categories of the current classification system appear to be neither casemix nor resource homogenous. We find evidence of large variation in terms of activity and costs within clusters and between providers.

This would seem to suggest it would be best to dismantle the clustering approach altogether. Indeed, there have been calls from many corners expressing such views (Royal College of Psychiatrists, 2014). However, we would argue that any payment approach needs to be underpinned by a solid classification system and to abandon the clustering approach now will thwart all progress. The clustering approach is already relatively well established in most providers. Scrapping it all and starting from scratch risks putting mental health services back a decade in terms of developing a more transparent and fair funding system.

The key reason not to abandon clustering is that in the absence of such a classification system, mental health would be deprived of resources. Most CCGs have contracts with acute providers where they must pay according to the activity performed; while other care settings, such as community and mental health care, are usually funded based on block contracts. If acute activity levels increase, CCGs must try to pay for that increased activity, leaving, if their budgets do not grow accordingly, fewer resources to allocate among the other care settings. However, actual behaviour may diverge from the contractual position if CCG budgets are insufficient (Allen and Petsoulas, 2016).

The argument of the 'institutional bias' towards acute providers in the funding system is well rehearsed, often seeing larger cuts for mental health services compared to acute services (Monitor and NHS England 2013). Given the current and future projected financial position of providers, with mental health providers generally delivering overall surpluses year on year, compared to huge increases in deficits in recent years for acute providers (Dunn, KcKenna et al. 2016), mental health services have been at risk of having their resources diverted away towards acute providers. The lack of a transparent funding system for mental health care is a major risk factor. As long as there are parallel funding systems operating, where in one, better quality activity data and a more transparent classification system (episodic payment) make the return on investment of limited budgets more obvious, it will always win out. Thus as long as mental health operates a block contract system and does not use a transparent classification system, commissioners will not have a clear sense of the value for money they are getting from investment in these services. Even if both acute and mental health providers move towards a capitation approach under an STP, the argument for a strong and transparent classification system remains.

While the current cluster system does not work as well as it should, we need to, rather than abandon the system, make it work better, to ensure fair and consistent funding (Oyebode, 2007) and to prevent an unfair reduction in investment in mental services (Bhaumik et al., 2011, Fairbairn, 2007, Jacobs, 2014).

What should be done?

- A continued commitment from clinical teams to cluster patients is required. Since clustering is built on an outcome measure, the HoNOS, providers need to find mechanisms to feedback outcomes to clinical staff in a meaningful way which will reduce concerns over clustering being seen as a paper-filling exercise for managers (Jacobs & Moran, 2010).
- Clusters need to be linked to care pathways and evidence-based care in line with NICE guidelines such that they can be linked to measures of quality and contribute to better outcomes for patients.
- The MHCT should be refined in order to establish more homogeneous groupings of patients.

- The classification system requires a wider range of complexity (more clusters), just as HRGs have increased in number and the clinical labels have become more specific.
- Most crucially of all, there needs to be a significant improvement in data quality, for both costs and activity. A programme to implement the new payment models needs to be supported to ensure that all clinicians and services collect reliable data about classifications, care quality and outcomes. Significant investment in information technology is required and improvement in data quality needs to be a priority in mental health services. The MHSDS is not yet suitable for use as an information tool to accurately count activity which would be central to its use as a platform for the payment system. To facilitate this, all commissioners and providers should routinely use only the MHSDS in their contracting and monitoring processes. This will facilitate a single consistent use of data across all commissioners with any given provider and prevent providers wasting resources filling in different dataset requirements for different commissioners. It will also incentivise rapid improvement in the data quality of the MHSDS because it can be used by all commissioners and providers to benchmark activity.

So while clustering patients may seem a tedious or pointless requirement for clinical teams, it is absolutely crucial for the overall financial sustainability of the sector. NHS England has however recognised the need to strengthen the clinical relevance of clusters in relation to clinical care pathways (NHS Improvement, 2016).

6 CONCLUSION

There is continuing debate about how best to organise a funding model for mental health care, as with other health care. Mental health lagged behind physical health care in not implementing an episodic payment system. It is now caught between systems (block grants, an emerging but underdeveloped episodic system, and an illdefined, aspirational capitation system). There is a risk in all this of confusion and a failure to develop a robust payment system that links fair payments to high quality care and good outcomes for service users. A payment system is needed that could be used to support service improvements and better outcomes for patients. Whatever system is used, some form of classification of service users related to their conditions and needs will be imperative. If we scrap the current system of care clusters we will have to go back to square one and it is not very clear how else we would move from there, nor how long that would take. The care clusters are flawed in the ways we have demonstrated above, but knowing the flaws and having a reasonable empirical basis to understand their use, provides us with an opportunity to improve the clinical and financial bases of the clusters and to move forward with putting mental health care on to a firmer and fairer approach to its funding.

Data quality is a significant challenge with any payment system, but it is at least underway using clustering, and collected routinely. We make a few key recommendations related to clusters:

1. Clinical teams need to continue to collect clustering data. HoNOS ratings which underpin the MHCT should be routinely fed back to clinicians in a meaningful way to effectively utilise the data which is collected.
2. Clusters need to be linked to care pathways and evidence-based care in line with NICE guidelines such that they can be linked to measures of quality and contribute to better outcomes for patients.
3. The MHCT should be refined in order to establish more homogeneous groupings of patients.
4. The classification system requires a wider range of complexity (more clusters).

5. And, there needs to be a significant improvement in data quality, for both costs and activity. This requires an investment in information technology by providers, and a commitment from commissioners to routinely use only the MHSDS in their contracting processes.

Table 1: Advantages and disadvantages of an episodic payment approach

Advantages	Disadvantages
• Incentive to control unit costs and improve efficiency • Incentive to increase activity levels and potentially reduce waiting times • Transparent funding approach for commissioners • Can support patient choice	• Providers may 'cherry pick' low risk patients and 'dump' high-risk patients (Ellis 1998) • Underprovision in order to minimise costs (e.g. skimping on quality and intensity of treatment) (Ellis 1998) • Upcoding of severity to categories with higher remuneration • Requires good quality data and coding • Does not incentivise integration of care or services

Table 2: Advantages and disadvantages of a capitation payment approach

Advantages	Disadvantages
• Incentive to invest in early intervention and prevention to reduce 'downstream' costs • More flexible allocation of resources to improve efficiency • Incentive to co-ordinate and integrate health and social care services	• Providers may 'cherry pick' low risk patients and 'dump' high-risk patients (Ellis 1998) • Underprovision in order to minimise costs (e.g. skimping on quality and intensity of treatment) (Ellis 1998) • Requires good data to track individual patient activity, costs and outcomes across different sectors • Risk of cost shifting if service and population scope is not clearly defined • Requires significant capabilities on provider side to coordinate between different providers and sectors (e.g. primary, secondary and social care)

Table 3: Examples of outcome and process measures as suggested by NHS England which can be linked to payment approaches

Domain	**Measure**
Clinical effectiveness Clinician-reported outcome measure (CROM)	• Health of the Nation Outcome Scale (HoNOS)
Clinical effectiveness Patient-reported outcome measure (PROM)	• DIALOG • Short Warwick & Edinburgh Mental Well Being Scale (SWEMWBS)
Patient experience Patient-reported experience measure (PREM)	• Friends and Family Test
Clinical effectiveness	• Emergency re-admissions within 30 days
Clinical effectiveness	• Premature mortality in adults with serious mental illness (SMI)

(physical health)	• SMI smoking rate • National Commissioning for Quality and Innovation (CQUIN) goal for Mental Health and Physical Wellbeing
Patient experience	• PLACE (patient-led assessment of the care environment): condition, appearance, maintenance • PLACE: privacy, dignity, wellbeing
Access	• Mental health access and waiting time standards (e.g. Improving Access to Psychological Therapies/Early Intervention in Psychosis) • Access to Cognitive Behavioural Therapy for people with schizophrenia • Access to family interventions for people with schizophrenia • Black or Black British ethnic group proportion: % of population who identify their ethnicity as Black or Black British
Efficiency	• Use of A & E for people using mental health services (e.g. Emergency Hospital Admissions for Intentional Self-Harm) • People in contact with mental health services per 100,000 population • Bed occupancy rate • Proportion of admissions gate-kept by Crisis Resolution and Home Treatment teams • Help out of hours • Proportion of people on Care Programme Approach with a crisis plan in place • Delayed transfers of care
Safety	• Age-standardised mortality rate from suicide • People on CPA followed up within seven days of an inpatient discharge • NHS England patient safety notices

Source: NHS England and NHS Improvement, 2016b

Figure 1: Hypothetical Activity Cluster

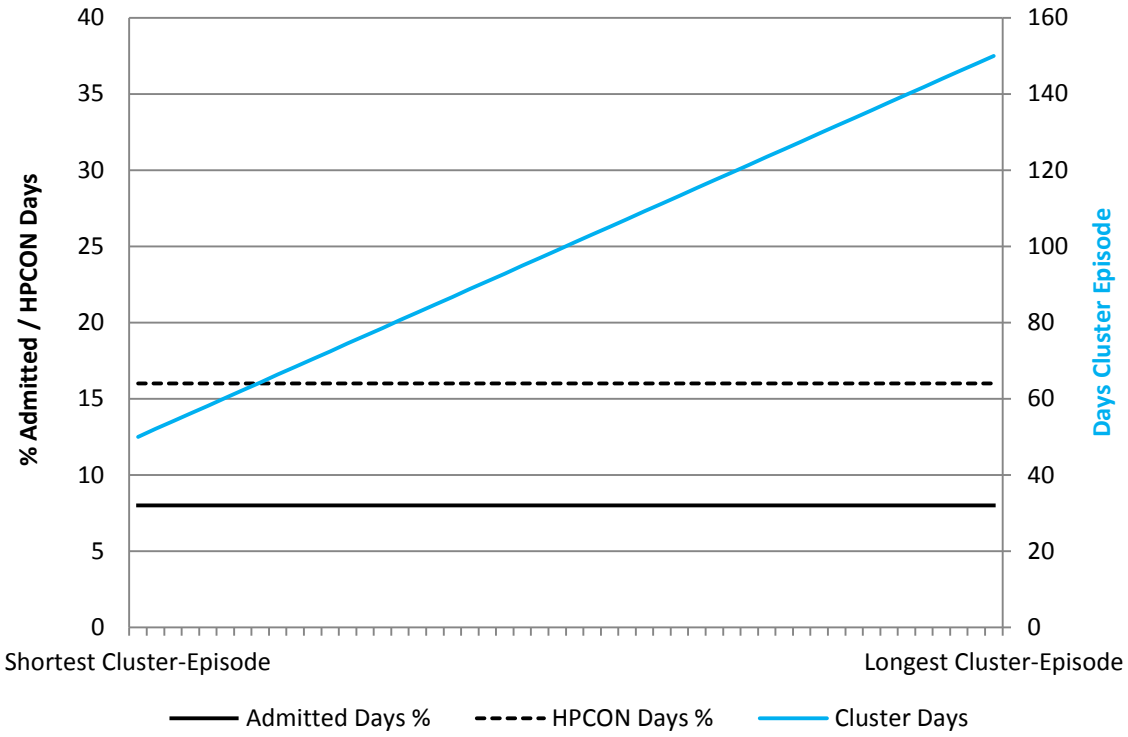
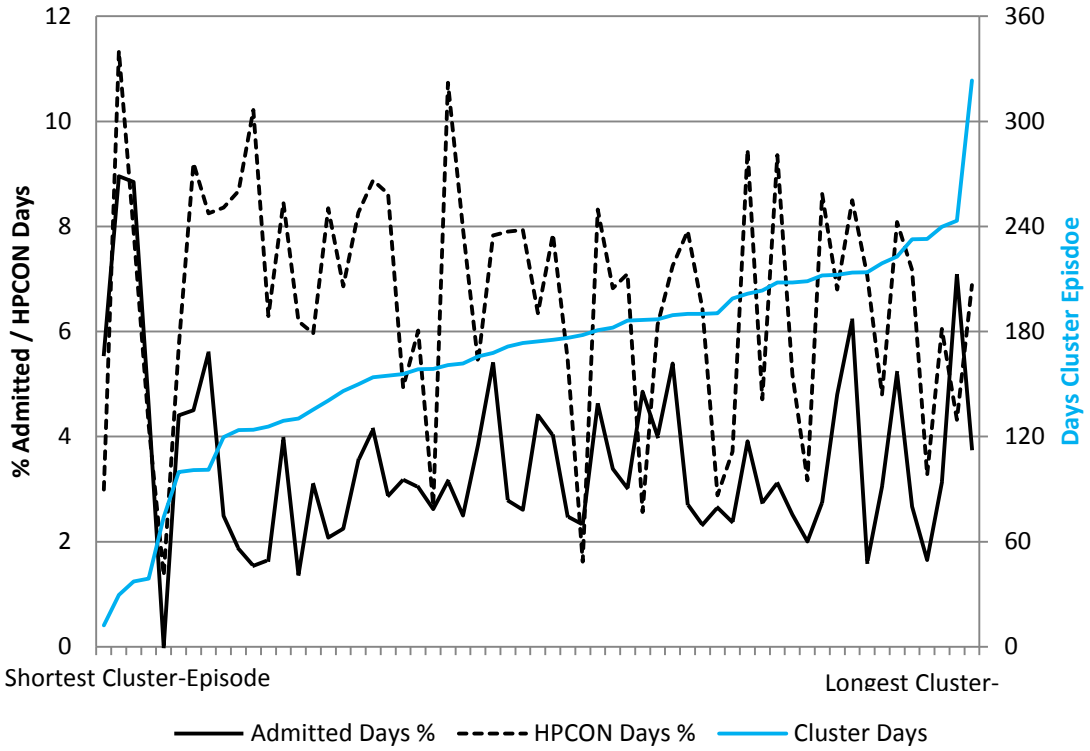


Figure 2: Activity in Actual Cluster



7 QUESTIONS

MCQs and answers

Select the single best option for each question stem

1. Both capitation and episodic payment approaches potentially create incentives for:

a) under-provision
b) over-provision
c) duplicating services
d) providing more expensive services
e) longer length of stay

2. Block contracts are characterised by:

a) A fixed sum payment
b) A payment which does not take account of the volume of patients treated
c) Relatively easy contracting arrangements
d) A lack of transparency
e) All of the above

3. A capitated payment system:

a) May discourage preventive care
b) Provides good data to track patient activity
c) Requires a risk-adjusted price per person to be defined
d) Is linked to the volume of patients treated
e) Disincentivises integrated care

4. Clusters:

a) Are a diagnostic classification
b) Are a good discriminator of cost variation
c) Are used to underpin block contracts
d) Show large variation between providers in activity
e) Can be used as an outcome

5. Clustering is needed:

a) To categorise patients with similar levels of need
b) To define levels of activity
c) To understand local patterns of care and variation
d) To underpin a more transparent funding system
e) All of the above

MCQ answers

1 a

2 e

3 c

4 d

5 e

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