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## Volume 15, Issue 4/2013 - Driving Operational Improvement

### Driving Operational Improvement: Joined-up Healthcare Data

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Following the introduction of the new NHS structures in 2013 in the UK, the NHS still needs to find additional cost savings, despite central health budgets being ring-fenced. This is a common situation across Europe. Peter Osborne believes that an integrated approach to data, which engages both commissioner and provider, could deliver efficiencies without impacting on staff.

The Health and Social Care Act 2012 heralded one of the biggest changes in the way patient health services in England are commissioned. The Primary Care Trusts (PCT) that 'bought' services to meet their patients' health needs have given way to groups of GPs working together in Clinical Commissioning Groups (CCGs). These are now responsible for commissioning the majority of secondary healthcare services – about 60 per cent of the annual budget.

CCGs place clinicians at the centre of the commissioning process and use their knowledge of patient pathways to drive improvements and eliminate inefficient functions not meeting patients' needs. They also have the freedom to buy, build or share services via Clinical Support Units (CSUs), Local Authorities, or any provider meeting NHS standards on price, quality and safety under the 'Any Qualified Provider' policy.

The core objective now is to drive further savings and improve clinical efficiency. This is arguably the greatest challenge facing the NHS because although budgets are ring-fenced, they are allocated on a 'flat-cash' basis at circa £100bn per annum through 2015.

With growth in demand rising at about five per cent each year, annual cost savings of some £5bn must be found – the so-called £20bn 'Nicholson Challenge'. More recently, NHS England reported that the funding gap could grow to £30bn between 2013/14 and 2020/21 if services continue to be delivered

in the same way as now.

The easier savings have already been made, mainly via the Quality, Innovation, Productivity and Prevention (QIPP) agenda introduced in late 2009. QIPP embraces a range of efficiency measures such as voluntary redundancies, procurement, asset optimisation, and the selling off of properties.

#### **Quest for Innovation**

The obvious cost saving is to cut staffing levels. Pay accounts for approximately 70 per cent of NHS trusts' costs but there are always claims there are not enough front-line staff. A much better approach is to deploy this cost in a more effective way by identifying instances where there is duplication or inefficiency at the primary and the secondary care level, and optimising the flow of patients between them.

While the easier types of efficiency opportunities targeted under QIPP still exist, flatcash allocation and increasing demand for services mean CCGs must come forward with innovative commissioning models. Data is now core to driving this next phase. Yet many trusts today consider data collection a burden imposed on them by external parties, and are often unwilling to collect data to support their own decision-making process. In other words, they tend to collect it to meet the measure rather than recognising its value.

Another challenge is that CCGs, CSUs, and secondary care providers are each operating as separate entities, managing their own budgets and costs rather than working collaboratively. The result is a non-joined up approach. For example, a patient arrives at a primary care facility; a clinician examines them and, if required, sends them to a secondary care facility where they are re-examined and provided specific treatment if needed. The patient is then discharged, but if they have to make a repeat visit, the whole process is replicated – with all the associated costs.

Looking at this scenario as a cost driver would suggest that the patient in question should be treated differently.

### Interactions as Cost Drivers

Lessons can be learnt from the manufacturing supply-chain, where there is a need to assess the cost to produce, aligned wastage, the cost to expedite and the desire to achieve a just-in-time delivery. Much of this thinking could be transferred to the health sector, with pathways seen as an integrated process. Information on the costs of treating individual patients provides a much more detailed understanding of the real costs of care incurred, enabling more informed management decisions. It also has the potential to engage clinicians, by making clearer the link between clinical decisions and aspects of efficiency cost-drivers and cost-effectiveness.

Both commissioners and providers are required to submit data concerning services and patient activity to the Health and Social Care Information Centre (HSCIC) to support planning healthcare. But while there are set requirements governing the collection of data, the methods employed vary between organisations, making any comparative benchmarking unreliable. NHS England's chief data officer Geraint Lewis stated in the HSJ that "only a handful of trusts" are likely to meet the new data requirements from April 2014.

The ability to compare costs to benchmarks is a crucial tool for enabling providers to focus on achieving cost reductions in those areas that would enable them to meet their annual efficiency obligations. Many trusts are part of benchmarking clubs and there are several organisations looking at data-sets but much of the data is historical and looks at KPIs more from a clinical achievement perspective rather than an operational cost or activity-based perspective.

### Value of Data Collection

Patient-level information and costing systems (PLICS) provide an accurate way of deriving costs by identifying the resources used for care of each individual patient as the basis for calculating the actual costs of activities performed by the organisation (which may span several departments). Yet the information agenda is much wider than PLICS, efficiency measures under QIPP, or the data requirements of incentives such as payment by results (PbR) – whereby CCGs pay providers a fixed price for each individual treatment.

Healthcare organisations need to recognise the value of disciplined data collection and consolidation, and then use thorough analysis to make better decisions. For example, a good proxy for treatment cost can be sought by analysing staff-patient interactions via a time-booking system such as Rio. Reconstructing treatment pathways from this and other required data would give a more granular understanding of the cluster costs and enable healthcare organisations to provide evidence to control scope and patient categorisation.

'Clustering' assesses the needs of each patient to allocate them to a needs-based 'cluster' and was introduced under PbR. Developed initially for mental health services, the clustering model is being adopted by the Department of Health as the template for wider implementation of PbR.

There will be variation in the cost to treat patients within any given cluster, with a minority of patients far exceeding the median cost. Identifying and reclassifying said patients, or identifying new treatment pathways or interventions for them will reduce the mean cost of the cluster and potentially allow for effective exception management.

Other opportunities for improvement include identifying efficient teams and successful practice, or identifying inefficient resourcing and scheduling, as well as managing cluster activities and cost variances within the pathways. By understanding the elapsed time and contact time by clusters, trusts will be able to better forecast their bed, facility, and staffing needs and so reduce the costs associated with being over or under capacity.

### Knowing Where to Focus

Understanding the margin by service and activity (clinical pathway or cluster) is vital to knowing where to focus. Once this is achieved, it will then be possible to optimise clinical pathways by linking process, procedures, resourcing and consumables. The key will be to ensure the logistics, such as usage of assets and resources, and procedures in the form of clinical outcome and cost effectiveness are aligned to deliver the best value service at the lowest cost. This includes elements such as rationalising the supply chain, effective stock management, and leading procurement practice.

As part of the need to cost packages of care under PbR, a set of care packages must also be developed that describe what interventions patients will receive (on average) dependent on their care cluster. This care package may contain core elements and supplementary elements. To calculate a price for the care package and by extension the staffing level required for its delivery, a measure for the amount of time clinicians spend delivering elements of the package is required.

To achieve this, a standardised approach to capturing data across all organisations is needed, so that data is captured from the appropriate sources proactively, while eliminating irrelevant or superfluous data. A set of tools is also necessary to allow extraction of data in the format required, as well as rapid presentation and reporting to enable managers to identify the root cause of inefficiencies.

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Given that each CCG will have a preferred clinical path – i.e. its own community of CSUs, acute care, secondary care and other suppliers – operational processes, cost drivers and available data will vary, making cross comparison difficult. This is where an independent consultative partner can be engaged to assist in assessing available data, developing the necessary toolset, and performing process reviews and improvements to derive real value from the secondary usage data-sets stored within the trusts.

#### **Time for Action**

Driving operational efficiency is not about encouraging clinicians to work harder, it's about changing their interaction because the data available shows that in certain instances an expedited option may be optimum.

Understanding the margin by service, and identifying elements of the service that are efficient and effectively running at a cost lower than what they are being 'paid' (i.e. budget allocated) allows a focus on those areas running at a cost higher than budget allocated. This is critical if efficiency targets are to be met. Developing the capability to apportion costs to patients or to treatment pathways will also be vital for a successful transition to PbR.

The concept of assessing the cost of a clinical interaction and its effectiveness is a highly complex (and contentious) area, but there are real opportunities to drive efficiencies if the logistics surrounding it are suitably addressed.

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