value in action

Value-based healthcare may not be widespread. But there are increasing examples around the world where it's moved beyond the theoretical stage and is starting to deliver. Steve Brown reports from the HFMA's international value symposium

Value-based healthcare is a concept that most people would sign up to. Health services should target the delivery of value that takes account of the quality of services measured in outcomes and the cost of providing those services. Putting this into practice as part of the day-to-day delivery and management of healthcare is a harder prospect. But organisations around the world are showing it can be done.

The HFMA Costing for Value Institute held its second international symposium in October – *Turning value theory into practice – an international perspective.* Its purpose was to showcase some of these value pioneers. It became clear that there is no single, off-the-shelf model that organisations can adopt. Local ownership and development are important, and local context – existing structures and working arrangements – needs to be taken into account.

There were clear common messages. Data is the foundation for value-based healthcare. Outcome data needs to be right (robust enough for decision-making) and the right data (the outcomes that matter most to patients). And cost data must be accurate and detailed enough to reliably show up where costs are arising for individual patients and cohorts.

This data then needs to be brought together in a usable format – typically dashboards showing outcomes, process measures and costs – so that multidisciplinary teams can discuss and target improvement. Get it right and it becomes a process that staff of all disciplines want to be involved in, creating demands for better, wider and more detailed data, and creating a virtuous circle of improvement.

The **Karolinska University Hospital** in Sweden has been running a value-based operating model since 2011. It delivers specialised and highly specialised care for Stockholm County Council. Like many European countries, Sweden has seen healthcare spending rise rapidly in recent years as a proportion of gross domestic product (GDP). And it faces a number of familiar issues – fragmented care, variations in treatment method and outcomes and cyclical economic challenges.

A value-based approach was seen as the solution and started with reorganising around patient pathways. A matrix model sees the hospital organised in themes (such as children and women's services of cardiovascular) served by different functions such as pathology, the emergency room and imaging.

Interdisciplinary teams – including clinicians, finance and patient representatives – lead the work within each patient flow, taking joint responsibility for outcomes and costs. 'The challenge for the finance department is to help provide the data they need,' said Claes Ruth, the hospital's head of central control. 'We provide a finance statement in a cost centre structure and we use a cost per patient system, so we can show line and cross-functional views.'

He added that the cost per patient data was an important enabler. 'It connects the patient's journey to care events and cost structure,' he said.

Digital scorecards

The groups are given digital scorecards bringing together agreed outcome and process measures and cost data. Data is produced in more or less real-time, with data extracted from medical records on a daily basis. Insight reports then allow in-depth analysis, with the group using the data to identify areas of variation, poor outcomes or high cost for further exploration.

Mr Ruth said that around 45 scorecards had been developed for different patient flows. The aim is to have 200 live by next year. There is already pressure from existing teams to revise the metrics used in their scorecards. Mr Ruth said this had to be balanced with the need to get scorecards rolled out to all parts of the hospital.

The hospital is also starting to use the information in a proactive way with a new multi-resource planning tool. So if a clinic or team is given an activity target, because the hospital knows the detailed costs of care and contributions from different functions (for example, the number of X-rays that will be needed), it can start to identify the budget and other resources it will need. Four units are trialling this and Mr Ruth said it would be 'fully operational' next year.

Across the hospital the approach has led to the harmonisation of processes on different sites and other improvements. Mr Ruth admitted that changing behaviour is the tricky part – although it is happening – and the finance department has had to 'let go of budget meetings'. But he said there was better transparency of data and 'improved dialogue between functions in a controlled and fact-based way'.

A value-based initiative in the Netherlands has seen an initial alliance of six hospitals – recently expanded to seven – start to compare outcomes and drive improvement across all the organisations involved. Working under umbrella organisation **Santeon**, the hospitals started by developing and publishing outcomes for prostate and lung cancer, following this up by adding breast and colon cancer.

As with the Karolinska, the initiative is clinician-led, again based on multidisciplinary teams that include patient representatives. And these teams look at scorecards comparing outcomes, processes and costs across the different sites. Samyra Keus, a programme lead for value-based healthcare, says that to construct the scorecard it was important to 'use readily available data and to keep it simple'.

Available outcome data could involve data already collected for registries or using established outcome measures (such as those produced by the International Consortium for Health Outcomes Measurement, ICHOM). Cost metrics looked at the highest cost drivers such as treatment days, time in theatre and high-cost drugs. Processes might focus, for example, on the number of days from referral to an outpatient visit or time from outpatient to diagnosis.

Once a scorecard is agreed, the data collection can start and analysts from each site stay in touch to ensure data is comparable. All data is approved by key clinicians before it is shared across the group. Meetings identify variation, and attempt to understand the root cause, which could be data, patient mix, treatment decision,and treatment execution.

Out of this analysis, the team would then decide to focus on one or two variations to explore with a couple of improvement cycles each year.

There have been significant changes on the back of this value work. For example, prostatectomies have been concentrated in one centre. In breast cancer care, there has been an improvement in the percentage of day care surgery for primary lumpectomies – which has involved clearer communication to patients and better planning around theatres.

Also in breast cancer, there has been a reduction in the number of re-operations caused by post-surgical wound infection. One hospital had shown no such infections, and analysis suggested this was due to the use of preventative antibiotics. This was subsequently implemented across all six sites. 'We only did this because of the data,' said Dr Keus.

She left the delegates with key messages, including the need to keep things simple and to 'use data as a mirror: don't judge but learn'.

Alfa D'Amato, director of activity-based management for **New South Wales Health** in Australia, made his second consecutive appearance at the international symposium. At the first symposium in 2016, Mr D'Amato described the state's patient activity and cost portal being rolled out across Australia (*Healthcare Finance* July 2016), and this time he gave a progress report on the development and use of the portal.

The state uses an activity-based funding approach for hospital care and, since 2014/15, Mr D'Amato said money had been taken out of the system. The portal was a tool that helped the more expensive hospitals – and others – to improve productivity. Mr D'Amato said confidence in the data was paramount. The New South Wales system had reached the point where the debate was about what to do on the back of the data rather than arguing about the data itself.

Getting the data 'fit for purpose' had been helped by a mandatory audit programme for costing that started in 2014/15. This programme is a condition of receiving state subsidy, and hospitals have to involve their own internal audit teams. The challenge now was to build capability in the hospitals, so that they could use the portal more extensively.

Mr D'Amato's colleague Susan Dunn, who leads on stakeholder and clinical engagement, said her team spent a lot of time demonstrating how the system could highlight variation and identify opportunities for improvement. She highlighted examples where the central team had

Other speakers

The Quebec healthcare system faces the same financial and service challenges as all health systems. However, to add to the management challenge, it has recently undergone major reform, merging 182 organisations into 34 and is moving to a fee-for-service funding model. The **Centre Integré Universitaire de Santé et de Services Sociaux** in West Central Montreal is unique in the province in meeting the challenges with a formal approach to value. Anne Lemay (right), associate director for support, administration and performance programmes, described the system's value journey involving the creation of integrated practice units, the development of patient-level cost data and moves to establish outcome measures. If the organisation did not want to simply shift costs to patients, restrict services or reduce provider compensation in a simplistic way, 'measuring and improving value was the only solution to reforming healthcare', she said.

Martin Wetzel (left), GP and head of Germany's Kinzigtal GP Federation, described a joint venture – **Gesundes Kinzigtal** – between the physicians' network and healthcare management company OptiMedis. The joint venture is responsible for organising care and improving health for its insured population. The value-based population health approach, which uses prevention and health improvement programmes and has boosted outpatient services, focuses on complex, chronic and cost intensive diseases and has improved health outcomes and reduced per capita costs. Most savings have come from reduced hospital costs.

At the symposium (l-r): Alfa D'Amato, Claes Ruth, Samyra Keus and Susan Dunn

helped organisations to explore variations exposed by the data. She said there weren't enough people taking the maximum benefit out of the system but 'seeing it in action' was key to building this capability.

The UK has started to lay the foundations for a move to value-based healthcare. NHS Improvement's Costing Transformation Programme is working towards getting all provider bodies in England to collect granular costs at the patient level using common costing standards and definitions. While many organisations, particularly those in the acute sector, have established patient-level costing in recent years, there has been little consistency in the approaches used. Using a single specified methodology to establish costs will provide robust costs within each organisation and open the way for benchmarking across organisations.

There has been no national approach to establishing standard condition-specific outcome measures, though a number of organisations across England and Wales have separately adopted outcome standards produced by the ICHOM. There are few examples of organisations bringing this together in a formal approach to value-based management.

HFMA value challenge

The HFMA value challenge pilot set out to prove that it can be done. Duncan Orme (deputy finance director at **Nottingham University Hospital NHS Trust**) and Jean Macleod (consultant physician in medicine and diabetes at **North Tees and Hartlepool NHS Foundation Trust**) briefed delegates on what they had learnt. The ambitious project, initially given a three-month timeframe, looked at applying a value process in two specialties: trauma and orthopaedics; and diabetes.

The project set about identifying a specific condition in each specialty to focus on and to establish what data can be gathered to examine outcomes, costs and variations. The pilot ran into a number of challenges. Even where registries existed for collecting outcome data, the pilot found that data was often incomplete – particularly where data is needed after patients leave hospital. Other consistency issues included different tests as part of order sets for diabetes patients and different definitions for tests. Consistency in costing was also an issue.

Despite this, the project concluded it was possible to link costs and outcomes, and the project team sees huge potential for this area of work. Even though it is a starting point rather than a finished project, there had been positive benefits so far – greater awareness of the sources of data available and improvements in some of the data collected. Improvements have also been made to the allocation of theatre costs in one trust.

Mr Orme said clinicians taking part in the project recognised that patient cost data alongside outcomes gave them a useful tool to improve services for patients and increase value. The work had helped to underline three accelerators of improved performance – patient-level cost data provided by a patient cost system, leadership skills, and clinical leaders.

As other countries have demonstrated, the project showed that if the data can be established and trusted – covering outcomes and cost – there is significant potential for improvement. This will take time to get right, but there is a recognition that organisations pursuing value-based healthcare are on the right road. Some benefits will flow immediately – based on closer working between disciplines. Others will emerge as core data improves. But the clear consensus of the HFMA symposium was that all organisations need to be moving in this direction.

• HFMA Healthcare Costing for Value Institute members can download presentations from the symposium at www.hfma.org.uk (search for the symposium in events archive) or via Catherine Mitchell's blog, *The value in getting together* **www.hfma.org.uk/news/blogs**