Practical value

There is agreement about the need to pursue value in healthcare delivery, but how do you put it into practice? Leading value expert Professor Robert Kaplan explained how. Steve Brown reports

The only way to meet the demands facing modern healthcare systems is to pursue the delivery of value – and that means a detailed understanding of outcomes and costs at medical condition level and across whole cycles of care. This was the clear message of Harvard Business School professor Robert Kaplan when he gave the keynote speech to an HFMA Costing for Value Institute masterclass in April.

The masterclass marked the launch of the HFMA institute, which has already attracted nearly 100 organisations from across the NHS. Professor Kaplan has been a leading proponent of the need to focus on value alongside fellow Harvard professor Michael Porter.

Speaking via videoconference link, Professor Kaplan told the audience: 'In the US, we have a forgiving and generous reimbursement system based on fee for service. The goal is to drive revenues to cover expenses. But that era is coming to an end – or has come to an end – not just in the US. And we are looking for new ways to deliver medical solutions to patients while containing the costs that have inexorably risen over the last 20 years.'

He described the value approach as providing an 'optimistic framework', but said health systems had little choice. 'This is the only way we can go in transforming healthcare systems in a way where we don't ask workers to take a pay cut, limit access through rationing or devote more and more GDP to healthcare when there are other pressing needs for society.'

The value approach offered an opportunity for better outcomes and higher capacity, translating into lower unit costs, he said.

Professor Porter had defined value as the ratio of healthcare outcomes and the costs of delivering those outcomes and Professor Kaplan said he enthusiastically endorsed this view. His role had been to provide a more detailed view on the costing side, in particular proposing time-driven activity-based costing as the most appropriate way to determine this value denominator.

Professor Kaplan said that even with agreement about the definition, the unit of analysis had to be agreed. 'The problem is that most systems are looking at the wrong one – the hospital or healthcare provider,' he said. 'When you look at this level, what you are left with are somewhat generic outcomes. That is where we are in the US. They say we want to improve outcomes, but they measure outcomes at the institution level so they are limited in choice.'

He listed typical measures - patient safety, avoiding infections, avoiding

The HFMA Healthcare Costing for Value Institute, which formally launched in April, has already attracted 96 member organisations from across the UK NHS. Member bodies are drawn from acute, mental health and community providers, as well as commissioners. For details visit www.hfma.org.uk/ costing and follow on Twitter @HC4VInstitute



readmissions and length of stay. 'Clearly, they are important but they are only quasi-outcomes. They are not granular enough to get what we want.' Instead, he said, value had to be measured at the medical condition level – lung cancer, diabetes, hip problems or congestive heart failure – and you need to look at the outcome of the whole cycle of care, not just part of it.

The first step is to identify and understand this whole cycle of care for different conditions, which can be achieved by process mapping. Ideally, the cycle should be looked at from when a patient first enters the health system at the primary care stage. But he acknowledged that practicalities might mean looking at cycles that start once a decision is made to do surgery or undertake other intervention. And to make the value framework 'operational' for long-term conditions where the cycle of care is ongoing, it might be necessary to choose a year of care. He identified three building blocks for a value-based healthcare system:

• Measure and communicate outcomes by medical condition

• Measure and improve costs by medical condition

• Develop bundled payments to compensate providers for treating medical conditions.

Getting the first two in place, measuring outcomes and costs for patients at medical condition level, would provide the opportunity for the third. 'If you don't change the payment system to align with value, you won't get all the benefits that you can get,' he said.

Outcomes

Professor Kaplan said value was multi-faceted and subject to different perspectives and it was important to understand the difference between process measures – number of readmissions, for example – and real measures of good outcomes, such as a cancer being in remission.

He highlighted work by his colleague Professor Porter that identified three categories of outcomes:

• Tier one would reflect the health status achieved or retained – so survival or the degree of health/recovery.

• Tier two would measure the patient's experience during the care cycle – how long did the treatment take, was there any care-related pain,

complications or the need for re-interventions.

• Tier three would look at the sustainability of the patient's health – long-term clinical/functional status and the consequences of the treatment.

Once outcomes are measured in this more meaningful way, it provides opportunities to understand the value delivered by different approaches. He highlighted work at specialist prostate cancer centre the Martini Klinik in Hamburg. The clinic started a more detailed approach to outcome measurement 20 years ago and now publishes outcomes by different surgeons every six months to identify learning opportunities. While five-year survival rates are similar to those across Germany, performance against other key measures important to patients – such as continence – are about five times better. Although identifying outcomes by medical condition might seem daunting, Professor Kaplan said much of the



work was being undertaken centrally. Non-profit body the International Consortium for Health Outcomes Measurement had already published outcomes for 12 conditions in 2013 and 2014 and had a bigger programme in 2015. 'The point is you don't have to reinvent the wheel,' he said.

Costing

Costs are the other key part of the value equation and, again, these need to be considered across the whole care cycle. But getting clinicians interested in costs and margin can be difficult. Clinicians are mission-driven, but finance administrators are under pressure to reduce costs and preserve margin. And while Professor Kaplan said there has often been a conflict between 'mission and margin', the two were not incompatible. 'After five years of doing this, I can assure you clinicians in fact enjoy discussions about cost – but only if the way we measure makes sense to them,' he said.

To understand costs for the care provided for a particular condition, it is back to the process maps. 'But this time we ask two additional questions: who does [each step] and how long does it take?' he added.

Talking through the basic approach to time-driven activity-based costing, Professor Kaplan showed examples of process maps that also identified the personnel and equipment involved in each step and the time taken (see above). The next step involves identifying the total costs associated with having these different personnel available to treat patients and their total capacity – how much time these personnel have available for treating and caring for patients. This enables cost/minute rates to be calculated and assigned to each of the process steps for the relevant personnel. A total cost for each process is calculated and then the costs of all the process steps in a care cycle can be added up.

As well as providing robust estimates of the costs involved in treating different conditions, the approach provides a good way to identify

potential cost improvements if personnel were used in different ways. Professor Kaplan said there are often 10:1 variations in the personnel capacity rates for the different people involved in the care cycles. 'Who does what determines how efficient we are,' he said. 'In the US, we have \$6 a minute surgeons doing work that 60 cent a minute assistants could do equally well. This is an inefficient use of resources, but you don't see this unless you get to this calculation.'

Professor Kaplan cited a joint replacement study at 30 hospital sites that revealed a huge 1.7 times cost variation from the 10th percentile to the 90th percentile. This variation was after standardising the cost of the individual staff types and so represented variations in process. 'The opportunity for improvement is enormous,' he said. 'Some surgeons were doing 10 joint replacements a day, others did three a day. The time in the operating room was the same, but the high-productivity surgeons had access to two operating rooms – this was the big driver [of the variation].'

He said there was a myth that operating rooms are expensive. 'This turns out not to be true,' he said. 'Space is not that expensive – even operating room space.' He said the cost per minute of having an operating room available was about 40-50 cents but a well-trained surgical team was about \$20/minute. 'What do you want maximum utilisation of – your \$20/minute resource or your 50 cents/minute resource? It's a no brainer.'

The final step, according to Professor Kaplan, is to devise a payment system that drives organisations to focus on value. Current payment mechanisms round the world typically use fee-for-service, global provider budgets or global capitation budgets to pay for healthcare. Instead, a bundled payment approach was needed, with a single payment for treating a condition over the full cycle of care. 'Some of this payment needs to be at risk based on outcomes,' he said. 'That's our vision. We'd love to be there in five years' time for all major conditions, but we have to start now.'