Healthy signs

After initial positive results, researchers have concluded that the Advancing Quality incentive scheme is making little difference compared with providers outside the scheme. How will the scheme react, asks Seamus Ward

Over the summer, the pioneering NHS pay for performance programme Advancing Quality (AQ) was painted in a negative light. Despite making significant and rapid gains by reducing mortality rates over its first 18 months, researchers found that at 24 months its impact was no greater than other areas of England that had no such scheme. But despite the downbeat assessment, the AQ programme team are far from subdued.

AQ was launched in 2008 across all North West hospitals and independent research evaluating the impact of the first 18 months of the programme showed there were 890 fewer deaths over the period, almost 23,000 bed days and £4.4m saved due to the reduced lengths of stay.

However, the latest research paper, published in the *New England Journal of Medicine*, was not so positive. It looked at the impact of the programme on 1.8 million emergency admissions for heart attack, heart failure and pneumonia, comparing death rates within 30 days at 24 North West hospitals with 137 other hospitals in the rest of England. The new study said there was no further reduction in patient deaths over that observed in the rest of England.

AQ programme director Lesley Kitchen points out that the research found that mortality rates continued to improve in the North West during the study period. 'We have good clinical engagement and strong clinical buy-in. This is the key to our success,' she says.

There could be a number of reasons for the findings, some of which are conceded by the researchers. For example, co-author of the paper Matt Sutton, who is professor of health economics at the University of Manchester's Institute for Population Health, says: 'One hypothesis resulting from this research is that AQ's early results have had a positive spill-over effect into the rest of England and other clinical areas. Our previous research work also highlighted some of the wider benefits that can be seen through such a collaborative way of working.'

'It's complex. The research is very robust – we have not seen this level of rigorous evaluation of the programme at this scale in England,' Ms Kitchen says. 'The evaluation is welcome and when AQ was set up it was intended that it would be independently evaluated and that it would learn from that evaluation. Our task is to work with the researchers to ask where next? What questions are we left with?'

Ms Kitchen says the potential spill-over effect on providers in other parts of England can only be seen as a positive.

The original areas were chosen because there was room for improvement, so it is no surprise that there was rapid progress in the early years of the project, she says. The focus on safety and quality in the wake of the Francis report on Mid Staffordshire NHS Foundation Trust and the Keogh review of trusts with outlying mortality rates could also have had an effect.

However, mortality was only one measure used to assess and improve performance. There are 'softer' benefits, such as the increased transparency in reporting. 'This allows providers and commissioners to have a real conversation, knowing they can trust the data and it is comparing like with like. It can also help the conversation within clinical teams,' says Ms Kitchen.

US incentive

When AQ was set up, it adopted a financial incentives scheme from the US. In its first 12 months, the top quartile of performers received a 4% uplift on the tariff prices for the procedures, while the second quartile received a 2% uplift. There was then a six-month period where the top performers were rewarded, but also the top improvers.

AQ was brought under the umbrella of the CQUIN incentives scheme, when CQUIN was rolled out across the country in April 2010. However, rather than giving providers tariff plus a top-up, CQUIN withholds a proportion of the tariff until quality thresholds are met. The University of Manchester's Søren Rud Kristensen, who led the study, believes this could explain the results.

Ms Kitchen is not sure of the impact that this had. 'Our clinicians felt the money was a useful incentive, but none of them participated in it because of the financial incentive,' she says. 'They did it because AQ gave them the means to identify where care wasn't quite up to standard

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and action change. The incentive monies were also reinvested back into their clinical teams to make further improvements and it also gives them a voice at the board table because of chief executive and finance director buy-in.'

There are no plans to 'retire' any of the original nine areas in AQ. 'We are now at a stage – with acute myocardial infarction or heart bypass, for example – where the data shows we are more reliable and consistent in delivering these interventions every time. Every year we look back at the clinical literature, the best practice and the NICE quality guidelines to see if we need to refresh our measure set. We will continue to do that,' says Ms Kitchen.

Expanding the programme

Indeed, AQ is so confident about the benefits of the programme that it announced in September an expansion to cover five new conditions – acute kidney injury, sepsis, hip fracture, diabetes and alcohol-related liver disease. The newly expanded programme will continue to cover the 23 acute trusts in the region. Its scope could also be widened to include community and primary care.

'The new areas are aligned to the original principles of AQ in that they will have a large impact and are relevant to the population. This is the next big set of conditions relevant to an ageing population,' Ms Kitchen says.

Acute kidney injury and sepsis are high on the current agenda, she explains, with the focus on safety and the need to stop a worsening of existing conditions after admission to hospital.

Beefing up prevention in acute settings will give the local NHS a platform to encourage self-management. In diabetes, for example, this could mean focusing on a relatively small subset of patients, with prevention possibly extending into primary care, she adds. 'Over the next 12 to 18 months it might be interesting for us to take the principles we have in the acute setting and apply them across the wider care pathway, work with the GPs and hopefully replicate our success.'

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Lesley Kitchen AQ

The lack of electronic patient records in every hospital and all specialties is one factor limiting progress. 'As we move into additional areas, there is a balancing act in how much we focus our resources on the original conditions,' Ms Kitchen says.

'But if we shift our focus there is a risk that perhaps we won't manage to deliver the same consistency as now.

'The research has been useful and helps to determine where we go next as a programme; whether or not we need to consider the model.'

Further research on AQ is being carried out – for example, the team that conducted the *New England Journal of Medicine* study is looking at the cost effectiveness of the programme.

Its earlier research concluded that AQ was a cost-effective means of quality improvement, bringing an eight-fold return on investment. Despite the findings of the most recent study, AQ believes that it can deliver value and quality.

The US experience

Advancing quality is based on a US pay for performance programme, but projects in the US that pay individual physicians or institutions report mixed results.

An assessment of a six-year demonstration project for Medicare patients (largely those aged over 65) found initial quality improvements compared with a control group. However, these were short-lived and in the fifth year there were no significant differences between the demonstration and control groups.

A five-year study analysing 30-day mortality rates for patients with heart problems and pneumonia showed no difference between the demonstration group and non-participating hospitals.

However, pay for performance schemes are popular with public policy makers and insurers, including Medicare and Medicaid (the social healthcare programme for those on low incomes). The *Affordable Care Act* – popularly referred to as Obamacare – expands pay for performance in Medicare in particular – withholding a small percentage of fees should quality thresholds not be met.

President Obama's *Affordable Care Act* expands pay for performance

Commercial and not-for-profit insurers are also interested – in 2012 they had more than 40 incentive programmes.

'The effects of pay for performance, or financial incentives, have been mixed, with some studies showing positive effects and some showing no or little effects,' says Naomi Bardach, assistant professor in the University of California San Francisco department of paediatrics.

'There are few studies showing a negative effect, though there is concern that financial incentives can widen existing disparities between safety net providers, which are under-resourced to invest in quality improvement, and already well resourced hospitals caring for patients of higher socio-economic status.'

She led a study, published in the *Journal of the American Medical Association* in September, which concluded that paying doctors for their performance in specific procedures and examinations led to better health outcomes than the traditional fee-for-service model. The study was carried out in New York City in areas with high proportions of Medicaid patients. The programme rewarded physicians who used preventative healthcare to reduce long-term risks of heart attack and stroke. She hopes to carry out further research to see if the results continue over a longer period.

Dr Bardach says there is some evidence to suggest that providers that are not being incentivised, but are aware that others are, and are shown their own performance, are motivated to improve. But more research is needed to understand why this happens.

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