

## Case Study: AQuA

How CHKS helped AQuA's Mortality Collaborative better understand the reason for variation and reduce down mortality rates'



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Rachel Dennis, Programme Manager  
AQuA

### Summary

The Advancing Quality Alliance (AQuA) is a membership healthcare improvement body for North West England. Its mission is to stimulate innovation, spread best practice and support local improvement in health and in the quality and productivity of health services. Between April 2010 and March 2011 AQuA set up a programme called the North West Reducing Mortality Collaborative to drive down mortality and improve quality of service provided by its members.

### Starting point

Lesley Massey, Director for Quality Improvement & Development, AQuA explains the drive to make improvements at scale across trusts in the North West led them to look at avoidable hospital mortality rates, as one of the challenges for improvement. The Chief Executives of nine acute trusts agreed to participate in an improvement collaborative and the work began in March 2010 when a steering group was set up. This included the Medical Directors from all nine of the participating Trusts and core AQuA staff. The nine trusts were:

- Blackpool, Fylde and Wyre Hospitals NHS Foundation Trust
- Calderdale and Huddersfield NHS Foundation Trust Central
- Manchester University Hospitals NHS Foundation Trust;
- East Lancashire Hospitals NHS Trust
- Mid Cheshire Hospitals NHS Foundation Trust
- Pennine Acute Hospitals NHS Trust

- Royal Bolton Hospital NHS Foundation Trust
- Stockport NHS Foundation Trust
- Tameside Hospitals NHS Foundation Trust.

## Project outline

The nine participating trusts were asked to identify two teams from within their organisation: an executive team to focus on a system-level strategic approach and a front-line team to focus on improving care at the front-facing dimension of care.

Executive teams met three times to discuss strategic approaches to managing and reducing mortality and front-line teams met for three 'Learning Sessions' to expand their improvement skills, share results, and plan changes. Between meetings, regular emails, web-based virtual meetings, front-line and executive conference calls with the AQUA project team and monthly reporting were all used to support the work. Teams were encouraged to use the Plan-Do-Study-Act (PDSA) model to test changes on a small scale and adapt them to local circumstances.

The Collaborative identified a number of work streams it wanted to look at in supporting care and improvement which they believed may support the fight to drive down avoidable mortality. These were developed into a Driver Diagram. Around 50 front-line staff and 20 executive leads were involved across the nine participating trusts with work centering on the Driver Diagram.

The aim was that each participating hospital would reduce adjusted mortality by 10 points. CHKS consultants worked with the Collaborative to help the team understand the true picture of mortality (using Hospital Episode Statistics, or their own data) at each trust and for every condition identified in the project plan.

Lesley says: *"Many trusts already had strategic action plans in place but we wanted to bring everything together as a collaborative and also understand what the influences on mortality rates were. Some of the participating organisations had comparatively high rates of hospital mortality over a number of years and wanted to examine whether common factors were involved and how best to make further improvements."*

The four primary drivers were: **clinical care; end of life care; documentation and informatics and leadership.** For clinical care the aim was to provide safe, evidence-based care by implementing care bundles/patient pathways. For end of life care the aim was to provide patients an excellent experience at the end of life in a setting of their choosing. In respect of documentation and informatics, the aim was to ensure patient documentation and coding was accurate and was used effectively to set aims while focussing on areas for improvement. Lastly for leadership the aim was to ensure each organisation could access the data, reporting and leadership skills it needed to manage and improve standardised mortality.

*"Understanding what the data was telling us was an important part of the work that CHKS carried out. Knowledge at board level was the starting point for asking questions of the clinical teams," says Lesley. "CHKS was considered a virtual expert faculty in many respects by helping to transfer knowledge across the Collaborative."*

Using tried and tested improvement methodologies, such as PSDA, was a key factor in the success of the programme. Sub groups were also set up to look at specific issues in-depth. *"For example one group wanted to look specifically at how coding would affect mortality rates whilst another would look at care bundles,"* says Lesley.

## Key benefits

**Adjusted mortality for the nine Collaborative teams was reduced by more than the national and North West regional average during the financial year 2010/11 using both the CHKS Risk Adjusted Mortality Indicator (RAMI) and the Hospital Standardised Mortality Ratio.** The largest decline by a single team was 22 points and on average Collaborative teams reduced adjusted mortality by 13.6 points. Steep reduction was taking place before the Collaborative began and the relatively high rates for some teams at the beginning of the work provided added motivation to improve.

Leaders of the nine teams were positive about their participation, saying that the opportunity to discuss the complexity of mortality adjustment models and strategies to improve clinical care was welcome. Improving together, teams agreed, was better than improving alone.

## Future developments

Lesley says she was delighted that the Collaborative ended up with a significant rate of improvement in mortality ratios and that the pace of improvement was better than the national average. *"Now we have published the outcomes we have been asked to submit the work so that it can be showcased. For instance we have been selected to present a poster at the 2012 Institute for Healthcare Improvement's/BMJ's European Forum. There is a real appetite to learn from these trusts and we have over fifty members who are anxious to find out more about the work here."*

As well as taking the work forward with individual work with organisations there will be a continued focus on themes within 'action learning sets' as well as more work around the key drivers. Rapid update of new learning is the key to success. The Collaborative is also considering looking at the implications for mental health care services and the challenge of shortened life expectancy alongside enduring and complex mental illness."

Rachel Dennis, programme manager says: *"The data support we have received from CHKS for our reducing mortality work has been invaluable. The professionalism, enthusiasm and flexibility to co-work with organisations across the North West region has helped lead to great improvements in mortality rates. The experience has been very positive and one we look forward to continuing our work."*

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