

Mechanising assurance case study: The Royal Wolverhampton NHS Trust

The Royal Wolverhampton NHS Trust is one of the largest providers of acute and community services in the West Midlands. The Trust has more than 800 beds on its New Cross site, including intensive care beds and neonatal intensive care cots. In addition to the New Cross site, the Trust also provides services from West Park Hospital, which delivers rehabilitation inpatient and day care services, therapy services and outpatient services. The Trust has also taken over Cannock Chase Hospital from Mid Staffordshire NHS Foundation Trust, when the latter trust ceased to provide healthcare services. Cannock Chase Hospital provides general surgery, orthopaedics, breast surgery, urology, dermatology, and medical day case investigations and treatments. The Trust employs more than 8000 staff, making it the second largest employer in Wolverhampton, and is currently hosting the West Midlands Local Clinical Research Network. The Trust has also implemented vertical integration with a number of GP Practices in order to redesign services from initial patient contact through on-going management and end of life care.^{1, 2, 3}

The Trust first implemented a *mechanised assurance system*⁴ in 2012, and in the early stages was using the system only for self-assessment, and therefore the use of the system was relatively 'centralised' to the Compliance team. However, in March 2013, the Trust undertook a review of its assurance processes during March 2013. This review identified that 'the reporting and flow of information relating to quality performance was dis-jointed and not clearly mapped to the governance / assurance structure' and that 'quality information presented to committees needed to be reviewed and revised to ensure the right level of detail and information is being received by the right committee.'

It was also identified during this review that, at that time, 'the Board reviewed a more detailed quality dashboard than the sub-committees. The expectation is that the sub-committees would review more detail than the Board or review the same reports in a more detailed manner to reduce the amount of time the Board spends analysing information.' The review

recommended that the Trust Board dashboard should be supported by a pyramid of more granular data in similar format dashboards aligned from ward to board which are discussed at sub-committees, as well as at divisional, directorate and ward level. In addition, the flow of quality information should be aligned to good practice within the NHS Operating Framework and National Quality Board guidance.

During this period, the Compliance team were also considering how to implement a sustainable system for monitoring of indicators with regard to the NHS Litigation Authority (NHSLA) standards. It was felt that as an organisation there was a need to ensure both organisational memory and sustainability of the processes and reporting implemented for monitoring practice against policy and to identify how this could be linked to monitoring to the CQC outcomes. This would facilitate the use of data in a smart and effective way, providing data that could easily be reviewed, analysed and acted upon. The Trust also wanted to move away from the first line of assurance and move towards a process that would support the second line of assurance, through cross referencing and reviewing different indicators provided from different data. It was hoped that this would then more easily allow data to be provided in a way that would mean challenge or confirmation of assurance could be identified.

1. <http://www.royalwolverhampton.nhs.uk/about-us/>
2. CQC, The Royal Wolverhampton NHS Trust: Quality report, December 2016
3. <http://www.royalwolverhampton.nhs.uk/about-us/primary-care/>
4. <http://www.allocatesoftware.co.uk/HealthAssure/>

CASE STUDY

The decision was therefore made to roll out the mechanised system more broadly, in a workstream led by the Compliance Manager and Quality Assurance Lead. This was managed via the Quality Information Project Group (QIPG) that involved stakeholders from across the Trust in order to review the flows of information/data. The broad objectives of the project were:

- To ensure ward to board information is robust
- To enable reports/data to be aligned with the Trust committee structure
- To map and agree internally produced indicators
- To develop a mechanism for 'early warning' including tolerance levels
- To have a central system which receives all the agreed quality and safety indicator feeds.
- To relieve some of the time burden from the clinical teams in terms of collating/reporting of the data.

The project objectives were all supported by a relevant phases and activity plan in order to achieve them.

Part of the success of the implementation of the mechanised system lies with the efforts to ensure buy-in from all levels of the organisation. At staff level, initially there was a lot of scepticism around the system, as there had been limited engagement from clinical end users with previous use of the system and it felt 'clunky'. However, the approach and vision put forward through the Quality Information Project Group was signed up to by all levels of the organisation, particularly given the recommendations of the review from 2013. The initial metrics focused on were the nurse-led ward performance metrics which had historically been captured and reported through 'bulky' spreadsheets by the wards/sisters and matrons. The mechanised system therefore reviewed and captured these indicators, which relieved the clinical areas of the task, and also meant that they could receive the reports on a monthly basis automatically and were ready to 'act' on the data and outcomes. This also freed up a large portion of administrative time the nurses were expected to undertake. The Trust now receives feedback at staff level that the system works much better for them, while at Board level, the clinical directors and non-executive directors all support the use of the system.

The Trust now uses the mechanised system to provide assurance on nursing key performance indicators (KPIs), alerts from the National Institute for Health and Care Excellence (NICE) and the Central Alerting System (CAS), national guidance, CQC standards, and internal reviews. This is implemented comprehensively and provide reporting from ward to board. It is also beginning to be used in non-clinical areas, for example, with the Estates and Facilities directorate starting to utilise the system for managing compliance, for example on waste audits. We were told that a significant benefit of mechanising assurance is that it brings the ability to align any one of the metrics to any one of the standards or compliance areas that it supports, which allows the Trust to use data in a much smarter way, avoiding challenges relating to duplication or data quality.

However, to ensure the system adds value, we were told that is necessary that those using the system have a real understanding of the data and what will add assurance value, as well as an understanding of the quality of the data being collected, as well as what the data is telling us, both in isolation and when looking at the wider picture. Furthermore, there were challenges to negotiate in the implementation of the assurance system. These included:

- A need to standardise the approach to identification and agreement a metric or indicator, as well as data quality. Therefore, the Trust developed a one page 12 question form for each indicator that has to be completed and approved for the organisational 'data manual' which provides an organisational memory as to what/when/why an indicator is in place. The process for management of the indicator also includes a process for 'retiring' a metric and why, the historic data remains available within the 'archive' ready to be re-established if the need arises.
- Data provision and reporting: The Trust identified a number of departments that needed to take steps to improve information flow and so the workstream leads met with each of those departments or specialist leads to review what they were currently reporting, and to who, and then mapped the flow of the data they were currently investing in and helped them to identify the gaps in reporting level. They considered how that information could be utilised with other data to provide more of an overview in terms of assurance as well as creating a 'picture' of quality, if managed differently
- Accountability: The Trust identified that there had to be a clear accountability framework published alongside ward performance indicators to provide clarity to all levels of the organisation as to what their responsibility is when receiving reports and acting on the results
- Change Management: Unsurprisingly, there was some resistance in changing the status quo. This required a much more facilitative approach in engagement using a trial process to demonstrate the benefits before rolling out for their area and demonstrating the benefits of collecting the data once and using numerous times (COUNT) methodology. In addition, the Trust found that when challenging the measures being reported against the 12 standardised questions this really made those colleagues think and review what was being reported and why, leading to greater engagement and clearer indicators.
- Reporting: As the data can be used at many different ways and across different levels, the Trust worked with stakeholders across the trust to establish the type of reports that would be useful and add value, as well as supporting quality and improvement
- Ownership of data: The Trust sometimes faced an attitude that the system was the responsibility of the governance team, however have tackled this by making sure that there is clarity around who is the 'data provider', therefore if there are any challenges to the data from the clinical areas they are clear on who they need to speak to and clarify with. This is also supported by making those areas 'data providers' that can upload to the system directly for the purposes of reporting ensuring they retain 'ownership' of that data

Now that the mechanised system has been in place for several years and has become part of the 'status quo', the Trust have found that the system has helped make achievements in the organisation. These includes an improvement in data quality as, because reports are now scheduled and circulated automatically and there is a clear accountability framework which is supported by the system, wards are much more proactive in terms of the quality of the data being reported and captured. There has also been an improvement in the 'measures' being reviewed:

'The system has essentially supported the improvement and development of metrics and brought real clarity to what is being measured and why. This means that the data can be used in a more intelligent way really helping those receiving the data to be able to question the differences and variations and establish a reason for these'.

Finally, the mechanised system brings in useful trend reporting at various levels across the Trust again to identify any variance and differences against alongside levels of staffing and patient experience. This means that the data can be used as one layer of intelligence rather than stand alone and helps to bring focus to areas that require improvement and in some cases helps to identify the potential reason for the variances.

Ultimately, the Trust believes that mechanising assurance has enabled them to ensure that assurance is progressive, not just retrospective:

'What this system does is flag to all levels with accountability for either one or many metrics where there is a potential cause for concern or conversely identified those areas that are doing something really well, enabling cross ward discussions.'

The system provides organisational memory in terms of performance, as well as helping the organisation to challenge where the variations can be identified and identifying where improvements can be made.

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