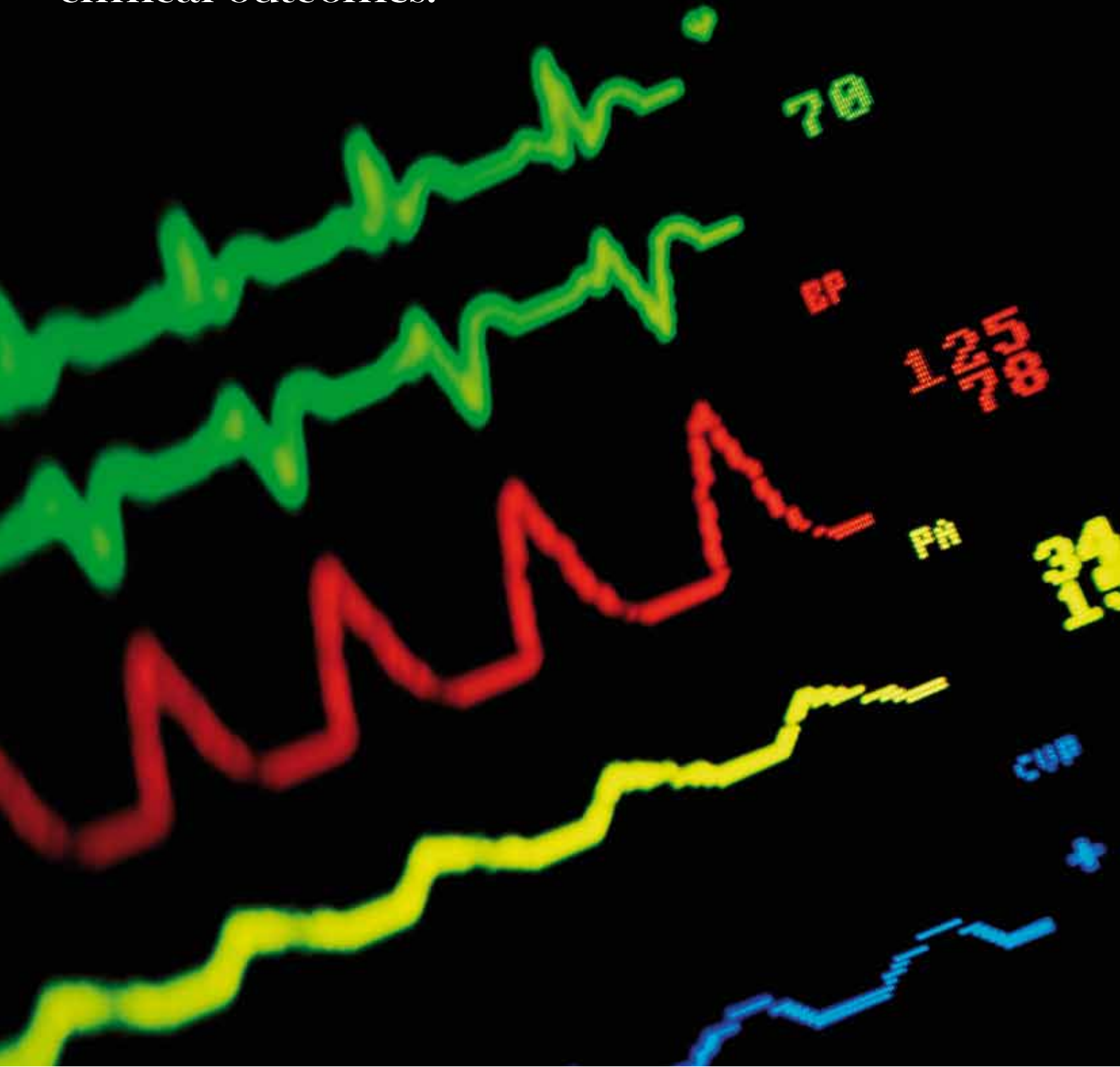


Real Time Monitoring (RTM)

Enabling providers and commissioners to benchmark and monitor clinical outcomes.



“Dr Foster’s RTM enables me to quickly understand and act on warning signs across every specialty and department and also recognise the areas where we’re doing well.”

Ruth Holland, Associate Director of Performance and Information, South London Healthcare NHS Trust

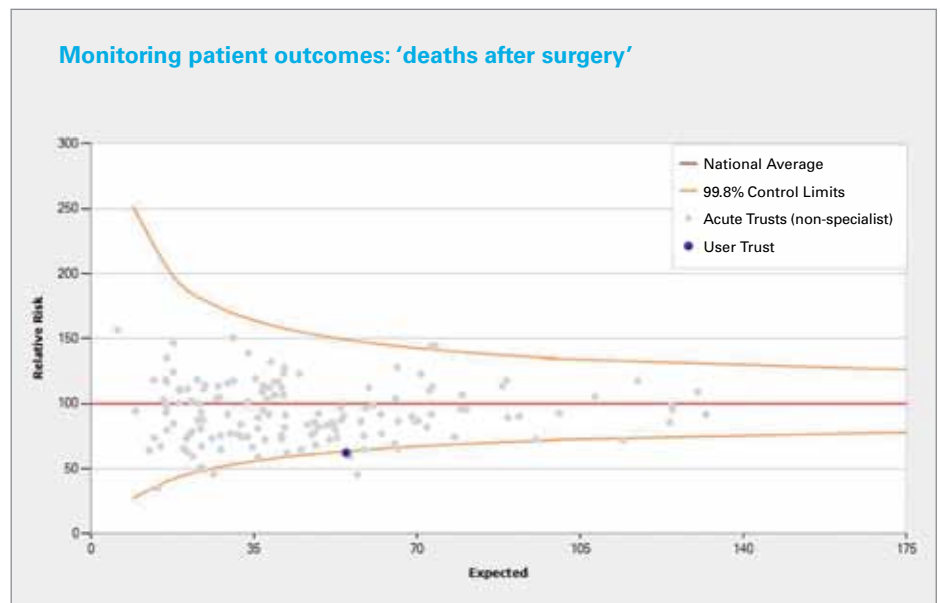
An overview

Real Time Monitoring (RTM) is a web-based solution that monitors and identifies potential process, clinical and coding problems around key indicators of clinical quality and effectiveness. It is used by around 70% of providers and a growing number of commissioners to drive improvements in the quality of data and care.

RTM enables providers to measure, compare and understand their performance, monitor activity using statistical process control charts (CUSUM) and drill down to patient-level data for detailed investigations. RTM enables commissioners to commission for quality, benchmark the performance of providers and monitor local CQUIN standards.

Through its intuitive user interface and a range of graphical representations, from charts to funnel plots, RTM highlights areas of high or low performance. RTM offers:

- The ability to monitor the quality of patient outcomes, around key indicators such as mortality (HSMRs, ‘deaths after surgery’ and deaths in high and low-risk conditions), length of stay, day case rates and 28-day readmissions.
- Intelligent analysis from an automated report function that highlights potential clinical issues as soon as they occur, eg changes in patient outcomes, case-mixes or coding quality.



- Statistical alerts using both CUSUM and relative risk to highlight areas of concern.
- Automatic letters and CUSUM charts that trigger an alert to the medical director and Care Quality Commission when there is significant divergence in expected clinical outcomes.

The RTM difference

RTM is the only quality benchmarking solution that provides:

- High quality risk adjustment and benchmarking to ensure like-for-like comparison.
- Extensive drill-down functionality that allows users to interrogate the data, including drill-down to patient records.

- Unrivalled national, regional and peer benchmarking delivered through the national Secondary Uses Service (SUS) data-set.
- The ability to view data by consultant team and link this back to the patient.
- Access to service line indicators that measure performance and outcomes across the stroke and orthopaedic pathways.

Developed with clinicians for clinicians

RTM has been developed through in-depth consultation with our customers and development work with leading academic centres. RTM incorporates methodologies from Hospital Standardised Mortality Ratios (HSMRs) designed by Professor Sir Brian Jarman and Dr Paul Aylin at the

“[RTM] gave us a comparative view of our performance, enabled us to identify where we were performing below average and helped inform and prioritise our service redesign.”

Tom Wainwright, Clinical Researcher in Orthopaedics, Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust

Dr Foster Unit at Imperial College London. The ‘deaths after surgery’ indicator, first published in the UK in the 2010 Hospital Guide, was developed alongside Imperial College London and King’s College London.

Benefits to providers

- Obtain both a trust-wide view and the ability to drill down to specialty and patient level, to quickly identify areas of concern and inform clinical audit.
- Benchmark performance against comparable providers nationally, regionally and at a peer group level.
- Externally assess standardised mortality rates, a key recommendation of the Francis report (Mid Staffordshire inquiry, February 2010).
- Manage the dual demands of quality and efficiency through a range of metrics, including length of stay, day case rates and readmissions.
- Identify avoidable readmissions – for patients readmitted to your hospital or any other hospital in England.
- Inform your performance improvement programmes, including HSMR reduction, Enhanced Recovery and care bundles.

Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust: Reducing length of stay

Challenge: The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust wanted to improve clinical outcomes and the efficiency of orthopaedics, while reducing length of stay (LoS) and helping the trust meet the 18-week targets.

Solution: The trust used Dr Foster’s RTM solution to benchmark its performance for LoS in orthopaedics against national peers. The ability to adjust for various factors, such as case-mix and demographics, gave an accurate view of the trust’s comparative performance.

RTM highlighted that the trust’s LoS for orthopaedics was, at eight days, well above the national average, after case-mix had been adjusted for. This insight was used to inform a service redesign programme around Enhanced Recovery.

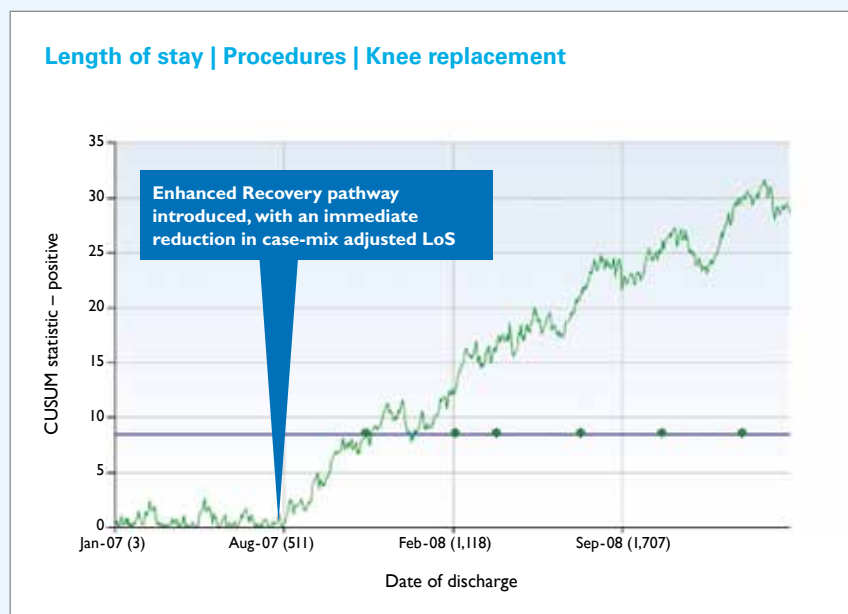
Outcome: As a result of identifying outlying performance using Dr Foster’s RTM and delivering a service redesign programme around the orthopaedics pathway, the trust reduced its LoS to just four days – well below the national average.

This meant an improvement in quality, patient experience and outcomes for patients. Significant savings were delivered as a result: £200 per patient per bed day equated to savings of over £1 million.

Dr Foster’s RTM is used on an ongoing basis to benchmark the trust’s performance around key indicators, such as LoS, to quickly identify any potential areas of outlying performance.

“Dr Foster software makes it possible to evaluate service improvements by adjusting for case-mix and allowing us to quickly assess statistical significance,” explained Tom Wainwright, clinical researcher in orthopaedics at the trust.

“It gave us a comparative view of our performance, enabled us to identify where we were performing below average and helped inform and prioritise our service redesign. Now, Dr Foster’s RTM means we can continue to track the impact of our Enhanced Recovery programme.”



Benefits to commissioners

- Monitor and benchmark the quality of local provider services across a comprehensive range of indicators, including mortality, productivity, outcomes, patient safety and service line.
- Compare your providers' outcomes and productivity with peer trusts across England (based on performance, location or case-mix) to quickly identify outlying performance.
- Commission for quality and monitor local CQUIN standards.
- Facilitate joined-up working across the health economy.

The Dr Foster difference

Dr Foster Intelligence is the leading provider of health information in the UK. Our solutions enable the NHS to use information more effectively in order to provide better and more efficient patient care. Our analytical tools are used by nearly 80% of acute trusts and around 40% of PCTs.

Our unique access to the Secondary Uses Service (SUS) data, combined with our understanding of the NHS and experience in analytics, enables us to provide insight to NHS organisations that can support and underpin all areas of performance measurement and improvement.

“Dr Foster gave us impartial and expert support in improving our knowledge about, and monitoring of, HSMR. Our monthly meetings, supported by Dr Foster, have led to informed and prioritised actions to improve patient safety and reduce our HSMR.”

*Chris Wilkinson, Director of Nursing and Infection Prevention and Control,
Peterborough and Stamford Hospitals NHS Foundation Trust*

Peterborough and Stamford Hospitals NHS Foundation Trust: Reducing its HSMR from 'significantly high' to 'as expected'

Summary: Peterborough and Stamford Hospitals NHS Foundation Trust has taken a range of measures to reduce its HSMR from 112 for the year 2008/09 to 100 for 2009/10, moving from 'significantly high' to 'as expected' within a year. The trust used Dr Foster's RTM solution to identify key areas of concern, established a monthly 'mortality group' and focused on building relationships between coders and clinicians.

The process: The trust used Dr Foster's software solutions and analytical services – with the support of its local Dr Foster customer support manager – to significantly reduce its HSMR. The same customer support manager works in tandem with the newly formed monthly mortality group. Regular reports and analysis of HSMR comparisons across all the acute trusts within East of England SHA includes monitoring six significant diagnosis groups (those with a higher mortality than expected for the trust), any changes in HSMR and any areas of concern.

The trust uses RTM to identify any changes in order that these can be addressed immediately. The six areas include pneumonia, cerebrovascular

disease (stroke), congestive heart failure, acute myocardial infarction, septicaemia and urinary tract infections.

Identifying clinical coding errors has been very important in helping to reduce the HSMR. Over 600 patient health records were reviewed, as well as patient pathways of over 20% of the diagnosis groups. Two additional diagnosis groups were also reviewed: COPD and fluid and electrolyte management.

The changes: The clinical coding department has developed clear guidelines with full involvement of the clinicians on documentation of particular diagnosis groups, eg pneumonia. The trust was shown to be coding differently from other SHA acute trusts. Where problems with clinical coding were identified, corrections have been undertaken.

The ongoing work of the mortality group and the continued involvement of the Dr Foster customer support manager ensures the optimisation of the Dr Foster software solution, RTM, to identify potential issues and to address them collaboratively within the trust before they become a problem.

For more information:

Call 0800 288 9810 or email products@drfoster.co.uk

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