Preventing a Repeat of Mid Staffordshire
Putting the patient at the heart of the system
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Preventing a Repeat of Mid Staffordshire

The Francis Report demands all NHS hospitals eliminate “horrible” patient experiences, “shocking care” and routine neglect – or bear the consequences. But can NHS Trusts be sure they could spot another Mid Staffordshire in the making? Healthcare organisations worldwide already use SAS® to understand what is happening in their hospitals in real time, make evidence-based decisions to protect patients from adverse events, improve quality of care and be more accountable. Avoiding another high-profile NHS disaster need not be expensive or complex.

Francis Report: Information Is Key

In February 2013, the Francis Report exposed the “systemic deficiencies” of the Mid Staffordshire NHS Foundation Trust, and the ways in which it “lost sight of its fundamental responsibility to provide safe care”.

Robert Francis, QC made recommendations including improved nursing standards and stricter sanctions for individuals and organisations that fail to protect patients from harm and to deliver the quality of care they deserve.

The report recognised the central role that patient data can play in this safer, more effective NHS. Francis highlighted the need for:

- More accurate, useful and relevant information – on patient outcomes, risk, performance and best practice
- Compliance measured by evidence-based methods – not gut instinct, out-of-date information or arbitrary metrics
- Improvements to core information systems – which are often slow, unreliable and not accessible by all that would benefit from their use.

SAS welcomes these recommendations: we have been campaigning for better use of patient data for decades. However, we would change the first point and add a further requirement:

- More accurate, useful, relevant and timely information – on patient outcomes, risk, performance and best practice – for prompt, responsive care
- Deliver information promptly to the appropriate people – based on medical data and care requirements, for evidence-based decision making.

Robert Francis, QC made recommendations including improved nursing standards and stricter sanctions for individuals and organisations that fail to protect patients from harm and to deliver the quality of care they deserve.

1 Robert Francis, QC, Inquiry Chairman, speaking and in the publication of the Final Report of the Independent Inquiry into Care Provided by Mid Staffordshire NHS Foundation Trust
NHS Core Systems: Not Fit For Purpose

Unfortunately the existing NHS systems are not fit for purpose. Information is often:

- **Paper-based** – time consuming to complete and analyse, fragmented or incomplete, and not available to all in real time
- **Manual** – subjective, prone to human error or omission
- **Retrospective** – dependent on memory, often inaccurate or unreliable.

Improvements must be made immediately if NHS Trusts are to get a reliable picture of the performance of their hospitals – by ward, surgeon, disease or patient segment. They need information to be captured automatically, used often, and accessed by all that need it.

Without this, they cannot rapidly make effective decisions to improve quality of care. Put another way: without better use of patient data, it is only a matter of time before more patients suffer and another hospital makes the news headlines for the wrong reasons.

Patient Data: An Operational Asset

Fortunately, it is neither difficult nor expensive for the NHS to improve existing systems. Complementary capabilities already exist to integrate patient data and transform it into an operational asset: the building block for reduced risk, improved quality and ease of compliance.

Below is a snapshot of the solutions that could rapidly make a significant difference to patients’ lives.

Improving patient safety: enhancing the NHS Acute Trigger Tool

It is the responsibility of NHS Trust Boards to understand and reduce the levels of risk patients are exposed to in their care – for example, infection rates on individual wards or surgery mortality rates.

The existing NHS Acute Trigger Tool produces a monthly risk scorecard on well-defined triggers. However, the information on which scores are based is collected via monthly adverse event questionnaires, filled out retrospectively by Head Nurses – often on paper. The information is therefore prone to errors, can be incomplete or not detailed enough, and limited in its view of the patient’s clinical pathway.

It is easy to see how crucial data can fall through the gaps – giving an inaccurate picture of how adverse events have happened and the preventative actions that must be taken. And the monthly nature of information collection prevents immediate interventions.
Working with SAS, hospitals can ensure the completeness and quality of their information, including structured data such as questionnaires and electronic record templates, and unstructured data such as free text, notes, patient feedback and more. This information can be integrated with disparate sources from across the hospital, the Clinical Commissioning Groups (CCGs), social services, voluntary organisations or even the region, if applicable.

This complete information can be fed into the NHS Acute Trigger Tool to enable real-time identification of triggers, based on real-world evidence, and help Trusts take effective – and immediate – action to reduce risk and prevent future harm to patients.

**Karolinska University Hospital**

SAS supports Karolinska University Hospital in developing an automatic, reliable tool to improve patient safety.

The reduction of avoidable patient injuries is the highest priority at Sweden's Karolinska University Hospital (KUH). The hospital used the IHI Global Trigger Tool (GTT) to measure the extent and types of injuries patients experienced, but had a manual review system that was incredibly time consuming. It could take up to 20 minutes to identify triggers in each record, even before validation work could begin. This delayed the implementation of quality improvements and risked further preventable accidents occurring.

KUH wanted an easily managed, computerised system to search for positive triggers and free up time for working to address safety risks. The system needed to provide comprehensive summaries of findings and enable measurement of the action taken. Working with SAS, the Public Healthcare Services Committee and Stockholm County Council, KUH carried out a benchmarking exercise to test the viability of such a system.

Randomly chosen records were first reviewed using the manual GTT method and the results recorded. SAS then built an automated system to search for the same GTT-defined triggers in the relevant, structured, electronic medical records and unstructured sources: for example, an A&E admission developing pneumonia overnight. An interface was created for the initiation of the trigger search, documentation of the findings, and validation of the injuries found. Another interface was created for the presentation of results and overview of the efficacy of actions.

KUH found the results of the automated tool to be “well in accord with manual reviewing” and that “the time needed for manual trigger search was eliminated”. As a result of this exercise, the automated SAS® tool is now being introduced in parallel to the GTT across Stockholm County hospitals and nationwide.

The KUH found that the new, automated system “will make it easier to introduce the GTT method as a standard procedure in hospitals, and will provide an efficient and effective complementary tool to improve patient safety”.

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2 An automated and modified version of the Global Trigger Tool facilitates detection of patient injuries, Karolinska University Hospital
Quality of care: creating the “right” culture

The Francis Report highlighted the fact that quality is about more than improving outcomes and hitting targets; it is about developing a culture of patient-centred, compassionate and responsive care.

That means staff must be supported to deliver the best care to every patient and be able to make decisions based on accurate information – not just experience or gut instinct. And Trusts must be able to continuously monitor and analyse the performance of every ward and department to ensure patients are receiving the quality of care they deserve.

This might seem obvious, but in the case of Mid Staffordshire, the Trust’s Board were “disconnected from what was actually happening in the hospital and chose to rely on apparently favourable performance reports by outside bodies, rather than effective internal assessment and feedback from staff and patients.” It seems unlikely that Mid Staffordshire was an isolated case.

The same SAS capabilities that improve patient safety (above) can also help NHS Trust executive boards proactively monitor the performance of their hospitals based on actual outcomes, as well as feedback from staff and patients. They can build a real-time picture of deficiencies, understand causes, and make evidence-based decisions that rapidly drive improvements.

At a clinical level, SAS enables hospitals to pull together disparate patient data for a single view of individual needs. This information can be accessed by – and actively pushed out to – all staff responsible for patient care, enabling them to give the right care at the right time. This simple enhancement could not only improve patient experience of care, but also save lives (see box).

Board unaware of systemic failures that led to patient’s unnecessary death

A shocking example of neglect identified by the Francis Report was that of an elderly woman who died 11 days after being admitted to Mid Staffordshire Hospital with a broken leg and pelvis. Despite the patient being recorded as insulin-dependent, and the doctors prescribing insulin, the report identified a catalogue of issues that led to her death:

- Failure to administer prescribed drugs
- Failure to undertake nursing handovers properly or at all
- Failure to complete nursing records or at all
- Failure to conduct medical ward rounds properly
- Failure to make adequate notes of ward rounds and care plans
- Failure to give the patient a diabetic menu
- Failure to report this Serious Untoward Incident in a timely fashion
- Failure to report to the Coroner.

SAS enables hospitals to pull together disparate patient data for a single view of individual needs. This information can be accessed by – and actively pushed out to – all staff responsible for patient care, enabling them to give the right care at the right time.
Francis commented that not only were these fundamental failures not known to the Mid Staffordshire NHS Trust Board, but also it was clear that "similar issues were occurring regularly".

A system that reports accurate, timely information would avoid failures of this kind, and NHS Trust executives could access and review the standards of care being provided and gain real-time insight into the patient experience.

**QIPP and compliance: an evidence-based approach**

From 1 April 2013, responsibility for the Quality, Innovation, Productivity and Prevention (QIPP) agenda will move from the Department of Health to the NHS Commissioning Board and other relevant organisations.

However, QIPP will only succeed if commissioners and providers have the ability to collect, analyse and use the insight from data about both patients and spending. Because SAS helps to collect and analyse data in real time, our solutions can help NHS Trusts understand how resources are being used now, not in the past. Predictive analytics can be used to make fact-based decisions on what is most likely to happen in the future. And executives and commissioners can easily assess how an entire Trust, hospital or ward is performing.

In addition, the Francis report recommends that NICE provides evidence-based guidelines for compliance, and NHS Trusts become more accountable by making "accurate information about performance available to staff, patients and public regulators".

Using existing information systems, demonstrating compliance will be time consuming and not always reliable. But, by taking the SAS approaches outlined in this paper, NHS Trusts will automatically become accountable.

Using SAS, compliance reports, based on reliable data, can be automatically generated. And SAS® Visual Analytics will help trusts analyse large volumes of data and present it in a meaningful, relevant way to the general public and staff alike.

Many health organisations already use SAS to analyse large volumes of data to make better operational and clinical decisions (see box on next page) – the same technology can be applied to support QIPP, or any future quality of care or compliance agenda.

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4 Robert Francis, QC, Inquiry Chairman, speaking and in the publication of the Final Report of the Independent Inquiry into Care Provided by Mid Staffordshire NHS Foundation Trust
Nordic health authority uses data to improve governance and make faster, better decisions

A major regional health authority in a Nordic country wanted to enhance its data management and data quality to improve hospital governance, and make faster decisions based on ad hoc analysis of large volumes of data.

The authority had a range of administrative and clinical systems, and management reports were time consuming to produce and considered unreliable. It also wanted to improve its monitoring of quality of care and patient outcomes. This meant it would be collecting and analysing larger volumes of data, something its existing systems could not handle.

The organisation chose SAS as its preferred partner. SAS drove the simplification of the authority’s IT systems architecture, helping it ensure data quality and integrity. A tool for the automatic scanning of patient records and medical journals helps the authority to collect and monitor more real-world information. Finally, SAS Visual Analytics allows non-analytics staff to quickly and easily analyse vast amounts of data to receive meaningful results – empowering evidence-based decisions in real time.

SAS®: Effective, Scalable Patient Data Strategies

SAS has been working with healthcare organisations from across the globe for more than 30 years. Our proven capabilities help healthcare executive boards to collect, manage and analyse both internal and external data, and to make better decisions that ensure quality of care and patient safety are at the core of everything.

With SAS, NHS Trust Boards can:

• Enhance data credibility
• Access information in real-time
• Identify and understand the cause of poor care
• Rapidly learn from and prevent adverse events
• Understand and respond to individual needs and risks
• Monitor and continuously improve
• Demonstrate compliance
• Adopt patient risk scoring
• Promote openness and transparency.
As highlighted by the Francis report, NHS core systems are in dire need of improvement if the above benefits are to be reaped. However, SAS capabilities can be quickly and easily implemented to make these systems fit for purpose. SAS solutions are:

- **Cost-effective** – can be seamlessly integrated with the NHS IT infrastructure
- **Proven** – tried and tested by public and private organisations worldwide
- **Scalable** – flexible, modular and adaptable
- **Easy to use** – with little or no training required.

Learn more about how SAS is the powerful success behind many public and private sector initiatives across the globe. SAS recognises that tackling prevention and intervention in health should not be one-size-fits all and offers a modular approach that combines risk and patient insight, operational improvement and better outcomes.

Learn more about SAS software and services for the public sector:
www.sas.com/uk/public_sector
SAS is the leader in business analytics software and services, and the largest independent vendor in the business intelligence market. Through innovative solutions delivered within an integrated framework, SAS helps customers at more than 60,000 sites improve performance and deliver value by making better decisions faster. Since 1976 SAS has been giving customers around the world THE POWER TO KNOW®.