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What makes a top hospital?

QUALITY AND CHANGE

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Part of the CHKS Thought Leadership Programme

CHKS
Insight for better healthcare

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Editorial advisory group

CHKS has worked with healthcare organisations across the UK to inform and support improvement for almost 25 years. This is the first of five reports which highlights examples of best practice from the UK's top-performing hospitals which we will share throughout the NHS. We would like to thank the expert panel that is advising us on each report:

- Helen Bevan, director of service transformation, National Institute for Innovation and Improvement
- Ian Dalton, managing director of provider development, DH
- Chris Ham, chief executive, King's Fund
- Simon Pleydell, chief executive, South Tees Hospitals NHS Foundation Trust

Foreword

CHKS has judged the HSJ Acute Organisation of the Year since its inception. In addition, CHKS celebrates success with its annual Top Hospitals programme — now in its 11th year. As a result, we have seen many examples of excellence in the delivery of healthcare by acute sector organisations. The idea behind this series of five reports is simply to share these examples of success in the hope that other organisations can take something from each of them.

While there are many examples in the literature of high-performing healthcare providers, they are often drawn from international comparisons, where the environment is very different. These reports reflect excellence in healthcare in England that has been recognised within the past few years. Our aim is to share the energy and enthusiasm for providing high-quality care we have found in the English NHS.

The reports are based upon the collective view of the judges of the 2010 HSJ Acute Organisation of the Year award who produced an overview of what they had seen across the successful trusts (see panel below). No single trust was excellent across the board but, together, they provided a set of themes from which we can share insight. These themes provide the focus for each of the five reports. While there may be little of surprise about the themes, it is important to recognise that they are based upon current observation and, as such, this is not a definitive guide to good management.

Much of the focus and energy for NHS leadership has understandably centred on making improvements in those trusts where performance is below average. This often means the best organisations are left to get on and move their organisations forward as they see fit.

Being left to make your own way can lead to isolation. It is often difficult to find out what is going on in other high-performing organisations. This series is designed to help people get a better understanding of what is happening in other trusts.

Getting an organisation to a good place is one thing — positioning it to ensure that it is fit for the future, in a changing landscape, is another matter entirely.

What makes a top hospital: the observed themes

Quality and change
- Cost reduction through quality improvement
- Disciplined execution of change at scale
- Using data for improvement, not judgment

Safety
- “Getting to zero” — zero tolerance of harm
- Deliberate focus on reducing mortality/ other safety measures

Leadership
- Strong, stable leadership with continuity of chief executive
- Distributed leadership model, with both empowered clinical leaders and shifting power to patients and families
- Investment in development
- The totality of the approach

Organisational culture
- Profound sense of mission and direction
- A mobilised workforce with a passion to get things right for patients
- Defining and promoting values and living them every day

External influence
- Seeing the hospital as part of the wider community
- Corporate social responsibility
- Risk sharing with commissioners
- Learning from other healthcare providers and other industry sectors
- Comparison, not just with peers but worldwide

Executive summary

When Barts and The London hospital first opened its doors in 1123, the drive to improve the quality of patient care was just the same as it is in every hospital in Britain today. This hasn't changed in over 800 years. What has changed is the environment in which hospitals operate.

Today, hospitals are striving to improve the care they provide against a background of heightened media sensitivity fuelled by instances of poor care, growing popular angst about NHS cuts, the need to make efficiency savings and the desire to succeed in an increasingly competitive environment.

Improving the care hospitals provide means embarking on quality improvement initiatives, and the traditional view is that improving quality comes at a cost. However, continuous quality improvement programmes can lead to cost savings. In 2009, the Health Foundation carried out a review of the evidence and asked: does improving quality save money? It concluded: "At a national level, the evidence suggests that the Department of Health and strategic health authorities could improve chances of success by providing NHS organisations with expert support, supporting the development of skills and addressing the barriers created by the financial and performance management systems." [1]

The evidence also suggests that these programmes need to run for a number of years before savings are made. The challenge for the NHS is straightforward: savings have to be made now. The pressure to reduce costs and improve productivity has intensified and organisations are asking themselves: how do we improve quality and reduce costs in the short term?

Improvements in quality of care and productivity can be achieved in many different ways. As the examples highlighted throughout this report show, there is no single formula. They all differ in their approach. The uniting factor in every case is that the conditions have been right.

The NHS is great at innovation but it is very poor at spreading good practice and diffusing ideas that work. We don't share enough examples where organisations have been successful at improving quality — it doesn't get passed on

Tim Straughan, chief executive, NHS Information Centre

Introduction

I have been fortunate enough to see, at first hand, how healthcare providers throughout the world are facing up to the challenge of improving quality and managing associated change.

The uniting factor is that they all have a culture of quality improvement. In some organisations, the focus is on reducing "unwarranted variation" in clinical practice by engaging doctors and other clinicians in the process of continuous quality improvement.

Continuous quality improvement means challenging and involving clinicians to lead improvement work through engaging front-line staff in realising the vision. This extends throughout the organisation to all employees, as this report highlights.

Clinical engagement in quality improvement is underpinned by investment in information technology. Constant measurement and comparison of performance are important: medical leaders use data on comparative performance to challenge their colleagues and to promote the adoption of best practice. The role of education and training in building capabilities for quality improvement is also important.

The evidence suggests that improving quality does not lead to increased costs. In fact the opposite can be the case. For example, examination of the patient pathway reveals that certain steps — such as patient hand-offs — can be removed.

The challenge for NHS acute providers is the need to reduce costs now, not in 10 years' time.[2] Where I have seen continuous quality improvement working, it has not been a quick fix; it has taken several years to have an impact. The focus on quality does not always provide a quick solution.

So, the NHS must find ways of learning from the best, from high-performing organisations committed to improvement-led change from within and capability building. By using this shared insight it is possible for acute sector organisations to effect change that leads to quality improvement and at the same time reduce costs.

Chris Ham
Chief executive,
King's Fund

Cost reduction through quality improvement

There was a time when we talked about improvements in quality of care at the expense of improvement in the bottom-line performance of a hospital. The two were seen as mutually exclusive. While it is now generally accepted that improving quality of care can deliver efficiency savings, dissemination of best practice is not as good as it could be.

A significant number of trusts are now demonstrating that it is possible. South Tees Hospitals NHS Foundation Trust turned around a deficit of £56 million in two years by focussing on quality of care (see case study 1). Five other hospital trusts that received judges' commendations in this year's HSJ Awards have also shown that savings can be delivered by focussing on quality efficiency (see table opposite).

One of the factors they all share is good clinician engagement. In other words, clinicians on the front line are encouraged to get involved in making changes that will lead to improvements in quality. Quality is close to every clinician's heart. If the hospital doesn't communicate the need for improvement in the right way, it can come across as simply an organisational or financial issue and this does not help to engage clinicians.

One trust that has gained recognition for its clinician engagement is Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust. The trust is one of seven identified as having high levels of medical engagement on the National Institute for Innovation and Improvement's medical engagement scale (MES).

Research has shown that medical engagement is one of the key factors influencing organisational performance.[3, 4] The MES offers NHS trusts a greater insight into the level of engagement of doctors in their organisation and ways in which this engagement might be improved. It is designed to assess medical engagement in management and leadership in NHS organisations and differentiates between the individual's personal desire to be engaged and the organisation's encouragement of involvement.[5]

Chief executive Tony Spotswood says the need for the latest, significant efficiency savings was identified three years ago and the trust recognised that this would require a significant shift — a different way of working. "The target was to save £25 million over three years," says Spotswood. There were a number of strands to this work which included: reducing length of stay; improving theatre utilisation; transforming procurement; changing front-of-office services; and making improvements in diagnostics. Each of these areas had direct links to improving outcomes for patients.

There are lots of really powerful examples around of things we can do to improve quality while improving productivity

David Nicholson, NHS chief executive

"We have found ourselves ahead of our planned efficiency savings by having a blend of strong clinical engagement with precise information about how we are using our resources and ensuring that every member of our staff has the skills to execute the change," says Spotswood.

"We've been very clear about supporting clinicians to ensure that they provide the lead." Indeed, he says the changes to clinical practices and processes would not have been possible without this.

He cites the trust's new day-of-surgery unit as an example of pushing up quality while making cost savings. No patient now comes into hospital the day before surgery, which has freed beds. Another example is the clinical pathway for hip and knee replacement, which has been completely revised, leading to an average length of stay of three days.

The trust's success in making sustained improvements in quality while managing to make cost savings have shown that it is the small changes that count. For example, in

HSJ Awards 2010 — winner and highly-commended trusts

Trust	Chief executive/contact	Email
Calderdale & Huddersfield NHS Foundation Trust	Diane Whittingham	diane.whittingham@cht.nhs.uk
Derby Hospitals Foundation Trust	Sue James	sue.james@derbyhospitals.nhs.uk
Northumbria Healthcare Foundation Trust	Ann Farrar	ann.farrar@nhct.nhs.uk
Salford Royal Foundation Trust	David Dalton	david.dalton@srft.nhs.uk
University College London Hospitals Foundation Trust	Sir Robert Naylor	robert.naylor@uclh.nhs.uk
CHKS 40 Top winners for 10 consecutive years		
Countess of Chester Hospital NHS Foundation Trust	Peter Herring	peter.herring@coch.nhs.uk
Kingston Hospital NHS Trust	Kate Grimes	kate.grimes@kingstonhospital.nhs.uk
The Newcastle upon Tyne NHS Foundation Trust	Len Fenwick	len.fenwick@nuth.nhs.uk
South Tees Hospitals NHS Foundation Trust	Simon Pleydell	simon.pleydell@stees.nhs.uk
Western Sussex Hospitals NHS Trust	Marianne Griffiths	marianne.griffiths@wsht.nhs.uk

some wards there has been a focus on reducing pressure sores. These wards display charts showing how they have performed in reducing pressure sores so that everyone can see what progress is being made. Wards that have managed to reduce the number of bed sores don't stop putting their charts on display.

The Quality Innovation Productivity and Prevention (QIPP) programme, launched in 2009, has helped to showcase instances where hospitals have managed to improve quality and productivity. QIPP has shown that the best hospitals are managing to make improvements in productivity without having to cuts jobs at the front line, which could otherwise jeopardise the quality of care being provided.

In its recent report, "Improving NHS Productivity — more with the same not more of the same", the King's Fund suggests that the overall approach should be one of "doing

CASE STUDY 1

Turning around a deficit with a continued commitment to quality

South Tees NHS Hospitals Foundation Trust manages the James Cook University Hospital and the Friarage Hospital. The trust has earned national recognition as a centre of excellence. However, as chief executive Simon Pleydell explains, it had a large deficit: "We have turned the £56 million deficit around in two years, but quality has improved at the same time. Our intention was not to slash but, rather, to take money out over a longer period."

Pleydell says the trust used clinicians as drivers for change. However, he stresses the importance of making it clear that there was a continued commitment to quality.

"We were absolutely focussed on improving quality but we had to take costs out."

Every clinical division is led by a full-time clinician and has its own plan to reduce costs while developing services.

One improvement made as a result of the programme was the introduction of the first 24/7 primary angioplasty service.

The trust has started seeing savings, although, so far, these have only been expressed in terms of reduced length of stay. The projects that have led to this reduction have included reducing healthcare-acquired infections, pressure sores and falls. The saving in bed days equates to £1m last year alone.

We concluded that, with no productivity improvement and no real rise in spending, the funding shortfall could still be around £21 billion by 2013/14. The inescapable conclusion from The King's Fund/Institute for Fiscal Studies analysis was closing the gap would inevitably involve major improvements in NHS productivity, with year-on-year gains of up to 6 per cent for six years

The King's Fund

CASE STUDY 2

Deep levels of staff engagement to improve quality and reduce costs

University College London Hospitals (UCLH) is one of the largest NHS trusts in the UK and provides acute and specialist services in six hospitals.

It has been responding to the quality-and-efficiency challenge over the past year. Tara Donnelly, project director, Quality, Efficiency and Productivity, explains that, although international evidence points to the highest-performing healthcare organisations typically finding this to be a 10-year journey, UCLH had started it some years ago. It has already made significant improvements prior to the quality-and-efficiency work starting.

The trust has made some quality gains, such as having one of the lowest HMSRs in the NHS. It wanted to ensure the drive for efficiency did not affect its clinical services, so focused on reducing waste, increasing effectiveness and learning from other organisations that had made significant step-changes.

"We found that successful organisations nearly always addressed the clinical pathway with the help of strong clinical engagement," says Donnelly.

In January 2010, UCLH launched a programme called Quality, Efficiency and Productivity (QEP). The purpose of the QEP programme was to achieve significant savings over five years, while retaining the high quality of care for which UCLH is known. Donnelly says the size of the challenge cannot be underestimated — the planned savings for 2010/11 were £32 million.

In terms of structure, QEP has five strands: workforce; productive clinical services; procurement; back office; and asset utilisation. Within clinical services, there are three areas of focus: ward efficiency; creating innovative models of clinical support; and outpatient efficiency. Each is energetically led by one of the trust's three board-level medical directors, and the clinical services strand is forecast to save over £12 million this year. Changes taking place in outpatient efficiency are:

- Improving outpatient utilisation rates
- Reducing outpatient cancellations
- Implementing paperless clinics
- Introducing self-check-in kiosks
- Changing process to create lean clinics

In the workforce strand, monthly agency spending has been halved, from £2 million in December 2009 to £1 million in November 2010, and the trust is on track to save £11 million this year.

Donnelly says: "Our single most successful move has been with regard to agency staff. There has been lots of action at ward and department level, and our workforce team has reduced the time to recruit. It has gone down well with staff, who prefer to work with colleagues who know the trust."

Reducing length of stay has also been important for ward efficiency. One of the ways UCLH has tackled this is to maintain contact with the patient after discharge. The trust has also increased the percentage of patients discharged before 11am from 12 per cent to 25 per cent. One driver for this was patient satisfaction; patients reported good care but then having to wait on the day of discharge for decisions, transport or prescriptions.

The QEP programme relies on what Donnelly calls deep levels of engagement. The communications effort has been considerable, ensuring that everyone in the organisation is aware of the vision. UCLH sends all staff a daily email and this includes updates on the QEP programme, including reminders about initiatives such as the "on time" campaign. This is an attempt to start every meeting, theatre appointment and clinic on time. "We looked at the cost of things not starting on time, which feeds into patient experience as well."

UCLH is on course to make £32 million in savings. Donnelly says this is due to:

- Strong and visible clinical and local leadership
- Project management and high-calibre change support
- Trust-wide events getting everyone involved and making it easy to share good practice
- Use of information to support improvement
- Top-level leadership showing commitment to achievement and the personal involvement of an executive director with each strand

Quality, efficiency and productivity

Securing leadership and engagement through medical and corporate directors leading strands and CEO sponsorship

Sharing knowledge through delivering master classes, external visits, trust-wide mobilisation events, an intranet site and QEP best-practice studies

Building expertise by training clinical staff to use lean techniques and establishing a team of experts to support improvement

Changing the mindset of teams — from a focus on growth to delivery of cost reductions

The QEP programme office has provided an improved programme-management and reporting structure, co-ordinates strands and supports the work taking place at the local level across the trust

things right and doing the right things". The King's Fund outlines a number of strategies to reduce production costs, improve outcomes and release resources that can be used more productively, which all inevitably lead to cash savings. The report says: "Many of the most significant opportunities to improve productivity will come from focussing on clinical decision-making and reducing variations in clinical practice across the NHS. Reducing variations in clinical service delivery (as highlighted by the Better Care, Better Value indicators) and improving safety and quality should be key priorities for providers."

Small tactical projects have been integral to improvements in quality and releasing efficiency savings at Calderdale and Huddersfield NHS Foundation Trust, winner of the HSJ acute organisation of the year award 2010. Chief executive Diane Whittingham says its Co-Creating Health programme (CCH) is producing savings in outpatient attendances, inpatient stays and high-cost drugs estimated at approximately £1,000 per patient. In addition, thanks to the input of its clinical leaders, the trust has a commissioning for quality and innovation incentive scheme. This sees payments being made on a divisional basis for demonstrable quality improvements.

CASE STUDY 3

Reducing costs by scaling up projects that have been shown to work

Salford Royal NHS Foundation Trust is a large teaching trust with approximately 850 inpatient beds, providing a comprehensive range of services to the population of Salford, as well as a wider range of services across Greater Manchester, the North-West and nationally.

Chief executive David Dalton is adamant that organisational change can deliver savings, but says that all too often savings are extrapolated from figures to give impressive numbers that are impossible to achieve in reality.

"Take harm for instance," says Dalton. "Harm happens uniformly across any hospital. Patients who are harmed in this trust will have an average length of stay 1.8 times longer than patients who aren't harmed. So, if we aim to reduce harm by 50 per cent, the maths would tell me that I could liberate 78 beds."

"However, these beds are spread over 40 wards, which then works out at around two beds for each ward. In practice, there is virtually no cost released from closing two beds. A lot of what is written about the relationship between cost and quality is simply wrong because the difficulty of extracting the cost savings is overlooked," he says.

Dalton says that his approach is different and what Salford is working towards is harm-free care. "We have taken four wards where we think we can apply what we already know works well in terms of harm reduction. The intention is to liberate two four-bed bays across the four wards, rather than two beds on each ward. This would enable a staffing reduction which would not be achieved through the closure of one or two beds."

Quality improvement has to be driven by several factors, according to Dalton. These include: staff engagement; leadership; and accurate information. "Using data is at the heart of quality improvement — you have to know whether the change in practice or behaviour will result in improvement and the only way to do this is to collect information from the bedside.

As for staff engagement, Dalton says mandates from the top are not effective. "Your staff has to be engaged. Harm happens at the bedside and you have to make sure the people responsible at ward level are driving change. In addition, you have to be sure that change works on a small scale before taking it across the organisation."

For Dalton, leadership is about making sure every member of staff has the confidence to make changes and that they understand the contribution they make. It also means ensuring that the board has the ability to see whether the changes that are being made at the bedside and then subsequently scaled up really are producing system-wide improvements.

"In the three years that we have been pursuing our quality-improvement strategy, we have seen dramatic improvements, but there comes a point where the law of diminishing returns starts to come into play with a project-based approach." Dalton believes that what will now have the greatest impact on harm reduction is achieving cultural change with an emphasis on aligning the behaviour of clinical staff with the goals and values of the organisation.

He is convinced that cultural change with a disciplined method of quality improvement will yield not only further harm reduction but also savings.

Execution of change on a large scale

Ten years ago, many hospital trusts employed change specialists to help them make changes to the way they worked. These days almost all hospital trusts have their own change specialists, which shows how important this issue has become.

Managing change on a large scale is something hospital trusts have had to get used to. They often run myriad change projects at any one time. The board of South Devon Healthcare NHS Trust has been monitoring around 400 individual change-management projects (see case study 4).

Paula Vasco-Knight, chief executive at the trust, believes that there are prerequisites for ensuring quality improvement. A formal governance structure to recognise quality improvement is the starting point — in the trust's case this is a continuous improvement office. But she says it is not enough merely have a programme office and governance without the commitment and energy of the people in the organisation to deliver it.

Stephen Ramsden is the former chief executive at Luton and Dunstable Hospital NHS Foundation Trust. When talking about change at scale, he refers to the patient-safety transformation at his former trust. He agrees with Vasco-Knight that change at scale requires commitment and the will to succeed. In a letter to staff explaining why the trust had embarked on the journey to make patient safety a priority, he made a call to action he hoped would echo down every corridor in the trust.

He wrote: "We are all here to improve patient care. I hope you see the vision of leading the NHS in patient safety as one that inspires you and maintains your pride in the Luton and Dunstable. Tell this story to your family and friends. Talk up the hospital."

He remembers how consultants came on board with the idea over eight years ago. "The turning point was when a consultant anaesthetist did a major review of deceased patients' case notes using a global trigger tool. He presented case after case where the system had failed. It wasn't an academic exercise; it was a warts-and-all catalogue of failures, ranging from patients not being observed to a simple breakdown in communication between staff. There was shock in the room and, afterwards, about 15 consultants came forward to say they wanted to lead on individual aspects of the patient-safety programme. Confrontation with truth was the catalyst — the patient story is important in moving people," says Ramsden.

With the junior doctors, it was a different journey. He was presenting the plan to a room full of clinicians with junior doctors sitting at the back. When he asked if they had any questions, one of them said she hadn't understood a word because it was in management speak; furthermore she and Ramsden operated in different worlds. This was a wake-up call. He went on to spend time with them explaining the transformation and understanding the challenges they had. A handful were taken away from clinical audit and put on patient-safety improvement initiatives as part of a rolling programme.

The change at Luton and Dunstable Hospital NHS became known as the "transformation story" which Ramsden wanted every member of staff to understand. According to Ramsden, communication is vital in ensuring continuous improvement on a large scale. This meant taking groups of staff away from the trust every three to four months to ensure that the idea was embedded.

"We became the England pilot site for the Health Foundation's Safer Patient Initiative (the forerunner to the England Patient Safety First national campaign) and we saw dramatic successes," he says. "We reduced cardiac arrest by 50 per cent and our

mortality ratio from 110 to 90. We eliminated central-line infections in ITU. We changed the culture to one in which patient safety was everyone's highest priority."

Reconfiguring services to improve health outcomes was a key challenge for the trust but was critical to its success. Chief executive Diane Whittingham supports the view that good communication is the key alonside strong clinical leadership.

For her trust it also meant explaining change to the public. "We initially had two district general hospitals that we merged and then reconfigured services across the sites. This meant centralising services — particularly surgical and women's and children's — while maintaining access for the local population. The challenge was to convince the public and staff that the changes were necessary to improve care, particularly when they were seen as a reduction in services."

Whittingham accepts that, although the changes have now been in place several years and clear improvements in health outcomes have been demonstrated, the trust did not take "all of the public with them."

"How we communicate the case for change to the general public and local politicians is critical and I think we need to do more to convince the public of the need for changes of this kind. There is a great deal of evidence to show that reconfigurations have resulted in improved health outcomes and we need to use this information widely to support future service strategies."

CASE STUDY 4

Putting patients at the heart of continuous improvement

South Devon Healthcare became a foundation trust in 2007 and has a large public membership. It runs a general hospital, Torbay Hospital, serving the South Devon area. As part of its quality improvement initiative it set up a continuous improvement office with a full-time director. In addition, there is a continuous improvement programme board, chaired by the trust's chief executive Paula Vasco-Knight. The board includes senior clinicians and the programme work has a wide scope. The projects are linked to ensure that there is no overlap and that one does not have a negative effect on another.

Vasco-Knight says the governance structure alone is not enough to ensure success in improving quality. She says it is the drive and commitment of staff that make the improvement possible.

"Recently some of our porters came to present to the continuous improvement programme team on how the changes they are making will lead to improved quality. Every single budget holder within the trust is part of the programme and it is built in to their objectives," says Vasco-Knight.

At the heart of the improvement initiative is a clear focus on doing the right thing for patients — there has to be a tangible patient focus. "Every one of us is working to deliver excellence as part of the provider system," she says. "Even though cost saving is the end result, we focus on quality first and foremost. It's this that delivers efficiency savings."

"We focus on working in an integrated way with our primary and social care partners. We deliver the best improvement in care when initiatives are shared across the system. This means GPs and consultants working together — we have formed a clinical cabinet to shape the improvements that are needed."

CASE STUDY 5

Clinician involvement with leadership from the top team to improve quality

Gateshead Health NHS Foundation Trust provides a full range of local acute services for elective and emergency care including inpatient, outpatient, day-case and day care. In addition, it provides sub-regional breast screening services, covering Gateshead, South Tyneside, Sunderland and parts of Durham. It is also the north-eastern hub for the National Bowel Cancer Screening Programme.

Ian Renwick, chief executive, Gateshead Health NHS Foundation Trust, says the trust looked at other organisations that had managed change at scale. One of these was the Virginia Mason Medical Center, in Seattle (www.virginiamason.org), which has received awards and recognition for its efforts to improve patient safety and quality of care.

The trust then adopted an Improving Clinical Performance programme, which Renwick says provides the tools to reshape services to meet the challenges of delivering high-quality healthcare in a tough financial environment. The programme priorities are:

- Tackling local variation
- Supporting high-quality healthcare
- Improving productivity
- Supporting new ways of organising services/transforming pathways
- Supporting local integration
- Delivering national and local targets

The first area where the programme has had a significant impact is in stroke care. "We examined length of stay and found that, compared to the average, we did not fare well," says Renwick. "We looked at other key indicators, such as patient hand-off, and realised that improvements had to be made."

As part of "Gateshead Lean", the trust held a process-improvement workshop and discovered that patient hand-offs were adding to the average length of stay. They also found that patients had multiple entry points (some via A&E, others via medical assessment) before they were placed in a stroke ward.

The key targets for improvement were:

- Streamlined pathway
- Reduced length of stay
- Reduce number of patients hand-offs/ transfers
- Increase number of transient ischaemic attack (TIA) patients receiving CT scan in less than 24 hours
- Increase percentage of patients on stroke unit

Stroke unit and improvements in care

	2008/09	2009/10	Current	Target
Average length of stay	21 days	20 days	14.3 days	13 days
Median length of stay	7 days	8 days	5 days	5 days
Patient hand-offs	Average: 3 Range : 0 - 6	Average: 3 Range : 0 - 7	Average: 1.84	<2
CT scan <24 hrs (TIA)	Not available	74%	63%	100%
Percentage of TIA patients on stroke unit	Not available	78%	91%	90%
Beds	48	48	24	24

Working with its clinicians, the trust set up an integrated stroke unit. "Clinical involvement along with top-level leadership is the key," says Renwick. "This isn't me saying, 'This is what you should be doing'; it's about giving clinicians the opportunity to identify problems that exist in the system."

The improvements speak for themselves (see table, left). Patient satisfaction levels have stayed high and Renwick estimates that the trust has saved £400,000. The figure would have been higher but some of the savings were reinvested.

Using information for improvement

For an organisation to be effective and to be able to improve quality of care, it has to understand what is going on in every ward, in every specialty and every patient pathway. Information is the key to this, but it is just the starting point for further investigation, rather than an end in itself. Often, the process starts with looking at data and discovering inconsistencies — this does not necessarily indicate a problem, but offers a reason to look further and understand the cause of the variation.

One lesson from leading hospitals is that the culture of improvement has to be embedded at the same time as information is being used to improve quality of care. If anomalies are discovered and the organisation has a blame culture, the use of information can backfire and it can quickly become a finger-pointing exercise. So, there is a delicate balance between establishing a no-blame ethos and ensuring that staff understand that, where there are problems, they will be dealt with.

One example of an organisation that has successfully embedded a culture of

CASE STUDY 6

Embedding a culture of quality improvement

Northumbria Healthcare NHS Foundation Trust manages 10 hospitals in North Tyneside and Northumberland with a population of 500,000. Chief operating officer Ann Farrar has overseen a significant change in culture that is improving the quality of care provided by the trust.

One of the key drivers was the work done by Sir Ian Kennedy on serious incidents and the major flaws in culture. She says the learning point for the board and the clinical policy group (with 50 clinical leaders) was the need to change culture to become more open and transparent.

The board decided that, although it was initially likely to take them out of their comfort zone, they had to start discussing safety incidents at board level. Farrar says this meant getting the message across that this was about improving care, not apportioning blame.

They had the same discussion at clinical policy group level. The reaction here was very positive, akin to "pushing at an open door", according to Farrar. The group said that, to improve transparency, the trust should consider incidents that were not covered by the regulatory regime. In other words, there were more incidents that clinicians could learn from than were being reported. The group estimated that there were 10 times more learning events than there were reported serious untoward incidents.

The trust trained 150 staff in learning the right tools and every serious incident was investigated, and the learning reported to the clinical policy group. From this emerged some priorities (for example, hospital-acquired infection, responding to a deteriorating patient and reducing errors for high-risk medicines). This local determination by the clinical leaders sent a strong message throughout the organisation of the board of directors' commitment to better understanding the causes and finding solutions from the staff.

The benefits are measurable and are best described by outcomes based on safer care, effectiveness of care and patient and staff experience. MRSA fell by 79 per cent in three years, Clostridium difficile fell by 44 per cent in two years and the trust moved from the bottom quartile for surgical site infections to the national average in two years. In addition, 90 per cent of patients who are deteriorating have the necessary observations recorded and the appropriate action taken.

Farrar says: "With infection control, we have been able not only to prevent deaths but reduce length of stay. Each initiative is not in itself a driver for taking costs down but, if you have the right culture and continually embed the philosophy of transparency, inevitably improvements in care lead to better use of resources. There is a cost saving to be made but each improvement can't be seen in isolation; it has to be seen as part of the bundle of care."

improvement is Northumbria Healthcare NHS Foundation Trust (see case study 6). Chief operating officer Ann Farrar says it has managed to engineer a culture of safety, not blame, which runs throughout the organisation from the board down.

Tim Straughan, chief executive, NHS Information Centre, says acute sector organisations have to be very clear about the question they are trying to answer. "There is often so much data around that it is difficult to see the wood for the trees. It means asking, 'What is the problem?'"

"We also have to focus much more on outcome measures rather than input measures. Two thirds of our current measures of quality improvement are process measures rather than output measures," says Straughan.

One of the issues that concerns the NHS Information Centre is the belief that indicators have become black-and-white success criteria. Quality indicators are just that: they are "indicators" telling you something is worth looking at in more detail.

Using information in the right way

Using information to maintain performance

- Information has an important role to play in making sure a hospital continues to make improvements. Putting information in the public domain is part of this, but just how much information should be made public? This has yet to be properly debated and there are hospitals at either extreme — some put lots of information on their websites and others precious little. The key issue is public understanding and interpretation.

Ensuring timeliness of information

- A good hospital understands the value of information, and information that is out of date is not useful. This is particularly the case when it comes to benchmarking against peer hospitals. Data not only needs to be timely but complete — so the latest data is not always useful if it is incomplete.

Using information to grow market share

- One factor that should also be taken into account is the current climate where there is a need for hospitals actively to market themselves. They need to have good evidence about performance and quality of care to maintain and grow their reputations. Safety is a key aspect of care and information can help the public to make an accurate comparison between hospitals.

Ensuring the right people own the information

- Clinicians and coders do not inhabit the same worlds. Clinicians will often question the quality of the data because they are not involved in its collection. Yet, once these barriers are broken down, clinicians begin to understand that there is insight in the data that can be used to improve quality of care. Most clinicians will change their behaviour once they can see a pattern.

Information for benchmarking

- Benchmarking allows a hospital to see where its performance is either better or worse than its peers. The hospital can see where the best opportunities for improvement lie, and often this means identifying areas where the most improvement can be made, rather than trying to tackle everything.

NHS Information Centre's tips for success

- Choose the right peer group. Find trusts where the business model is most like your own
- Ensure you have the capability to act, once you have decided what action needs to be taken
- Encourage the development of local measures and, where you see good local indicators, include them

Conclusion

This report, and the four following, are based on themes that we have seen time and time again in high-performing trusts in England. The themes could have been examined in any order but we felt quality improvement and change was particularly timely, given the challenges facing the NHS. In the current political and financial landscape, the ability to deliver real cost reductions takes precedence.

There are many aspects to quality improvement in healthcare and we decided to focus on those that we have found are most common among the trusts that win awards.

We believe these organisations, and many others, should be proud of the high quality of their services overall. All of them will be able to highlight services that need improvement — no trust would ever consider that everything is perfect. Each should be taken as examples of just how much improvement has been, and can be, delivered.

The trick is getting the right overall environment within the organisation and, as our examples show, there is no single path to achieving this. Our four forthcoming reports will investigate four themes:

- Safety
- Leadership
- Organisational culture and
- External influence

We hope this report will help encourage the belief that focussing on quality can be one of the most significant drivers for change. Providing good patient care is a unifying concept across the health service, making it readily acceptable to all staff groups. More importantly, in these financially challenging times, it can produce significant savings.

CHKS Top Hospitals programme 2011

The CHKS Top Hospitals programme celebrates the best in UK healthcare. There are a number of awards, including those that are open to all UK hospital trusts and those that are made to hospitals and other organisations that are working with CHKS.

For the open awards, all UK NHS hospital trusts are included in the analysis and entered automatically for the awards, which are judged using nationally available datasets. There are three categories:

- Quality of care: recognising excellence in providing high-quality care to patients that is appropriate to their diagnosis
- Patient safety: recognising outstanding performance in providing a safe hospital environment for patients
- Data quality: recognising excellence in clinical coding, which plays an essential role in improving the quality of care provided to patients

Data quality award

The awards recognise the importance of clinical coding and data quality, and the essential role they play in ensuring appropriate patient care and financial reimbursement from commissioners. We present three data quality awards recognising the best performers across the UK based on the following indicators:

- Percentage of uncoded episodes
- Percentage of episodes coded with signs and symptoms as a primary diagnosis
- Depth of coding
- Percentage of invalid codes (generating HRGs in the "U" category)
- Number of episodes with blank or invalid specialty code
- Number of episodes with blank or invalid consultant code

Shortlisted organisations 2011

Data quality award (England)

- East Cheshire NHS Trust
- Gateshead Health NHS Foundation Trust
- Ipswich Hospital NHS Trust
- North Middlesex University Hospital NHS Trust
- Northumbria Healthcare NHS Foundation Trust

Data quality award (Northern Ireland, Scotland, Wales)

- Cardiff and Vale University Local Health Board
- Hywel Dda Local Health Board
- South Eastern Health and Social Care Trust

Data quality award (specialist trust)

- Clatterbridge Centre for Oncology NHS Foundation Trust
- Liverpool Heart and Chest NHS Foundation Trust
- Nuffield Orthopaedic Centre NHS Trust

Winners

Data quality (England)

Northumbria Healthcare NHS Foundation Trust

Data quality (Northern Ireland, Scotland, Wales)

Cardiff and Vale University Health Board

Data quality (specialist trust)

Liverpool Heart and Chester NHS Foundation Trust

Patient safety award

A national award for outstanding performance in providing a safe hospital environment for patients, it is based on over 20 criteria, including rates of hospital-acquired infections and mortality. The indicators for 2011 include:

- Rates of deaths in hospital within 30 days of a heart bypass
- Rates of deaths in hospital within 30 days of non-elective surgery
- Rates of deaths in hospital within 30 days of elective surgery
- Deaths in hospital within 30 days of emergency admission for hip fractures
- Rate of death in hospital within 30 days of emergency admission with a heart attack
- Deaths in hospital within 30 days of emergency admission for a stroke
- Deaths in low-mortality HRG 3.5
- Risk-adjusted mortality index
- Readmission rate within seven days of delivery
- Emergency readmission within 28 days of discharge following hip fracture
- Infection rate following caesarean section
- Obstetric complications for delivery spells
- Rate of elective caesarean section deliveries
- Birth trauma injury to neonate
- Decubitus ulcer
- Post-operative wound infection
- Complications of anaesthesia
- Foreign body left in during procedure
- Post-operative pulmonary or deep-vein thrombosis

- Accidental puncture or laceration
- Post-operative sepsis

Shortlisted organisations 2011

- Basingstoke and North Hampshire NHS Foundation Trust
- Bradford Teaching Hospitals NHS Foundation Trust
- Chelsea and Westminster Hospital NHS Foundation Trust
- Heatherwood and Wexham Park Hospitals NHS Foundation Trust
- Homerton University Hospital NHS Foundation Trust
- Western Health and Social Care Trust

Winner

Patient safety

Western Health and Social Care Trust

Quality of care award

Awarded nationally for excellence in high-quality care to patients, appropriate to their diagnosis, the quality of care award is based on a number of criteria, including the length of time patients stay in hospital, the rate of emergency re-admissions and whether the care pathway proceeded as originally intended. The indicators for 2011 include:

- Risk-adjusted mortality index
- Readmission rate for patients over 16 years
- Risk-adjusted length-of-stay index
- Proportion of day-case overstays (basket of 25)
- Percentage of elective inpatients admitted on day of procedure
- Percentage of pre-operative bed days for operative spells
- Percentage of elective inpatient admissions with no procedure
- Admitted patients: maximum time of 18 weeks from point of referral to treatment
- Maximum waiting time of four hours in A&E from arrival to admission, transfer or discharge
- Percentage of patients seen within two weeks — all suspected cancers
- Discharge to usual place of residence within 56 days of emergency admission with stroke
- Discharge to usual place of residence within 28 days of emergency admission with a hip fracture (neck of femur) for patients aged 65 and over
- Proportion of patients aged 65 or over with fractured neck of femur operating on or within two days of admission

Shortlisted organisations 2011

- Dorset County Hospital NHS Foundation Trust
- Royal Berkshire Hospital NHS Foundation Trust
- Royal Devon and Exeter NHS Foundation Trust
- The Queen Elizabeth Hospital King's Lynn NHS Trust
- West Hertfordshire Hospitals NHS Trust
- West Suffolk Hospitals NHS Trust

Winner

Quality of care

West Suffolk Hospital NHS Trust

Quality improvement award

Our only international award recognises significant improvements in patient care and patient experience, as well as staff welfare, safety and morale. The CHKS quality improvement award 2011 is open to all healthcare organisations accredited by CHKS in 2010. All submissions are evaluated by the CHKS Accreditation Awards Panel

Shortlisted organisations 2011

- Alliance Medical Diagnostic Imaging Ltd, Ireland
- Centro Hospitalar de Setúbal, EPE Hospital São Bernardo, Portugal
- Cuan Mhuire Teoranta, Ireland
- Divino Espírito Santo Hospital of Ponta Delgada, EPE, Portugal
- Galway Hospice Foundation, Ireland

Winner

Quality improvement

Galway Hospice Foundation, Ireland

The government has made it clear that every hospital is accountable to its patients, their families and carers, as well as the local community, to provide a safe environment, where effective care can be delivered. Our national awards recognise the important part that data quality, safety and quality of care play in this respect

Jim Coles, director of research, CHKS

40 Top Hospitals award

The 40 Top Hospitals award is not open to all UK hospital trusts but is awarded to the 40 top-performing CHKS client trusts. It is based on the evaluation of 21 indicators of clinical effectiveness, health outcomes, efficiency, patient experience and quality of care.

Revised annually to take account of newly available performance information, this year's indicators include:

- Risk-adjusted mortality
- Risk-adjusted length of stay
- Rate of emergency readmission to hospital — 28 days
- Rate of emergency readmission to hospital following treatment for a fractured hip
- Day-case rate for target procedures (case mix adjusted)
- Day-case conversion rate (case mix adjusted)
- Overall data quality
- Rate of emergency readmission to hospital following AMI within 28 days
- Rate of emergency readmission to hospital within 14 days — COPD
- Percentage of elective inpatients admitted on day of procedure
- Pre-op length of stay for fractured neck of femur
- Pre-op length of stay for elective surgery
- Percentage of elective in-patient admission with no procedure
- Reported MRSA bacteraemia rate
- Reported C. difficile rate for patients aged 65 and over
- Procedure not carried out — hospital decision
- Inpatient survey
- A&E survey
- Patient misadventures
- Obstetrics complications for delivery spells
- Outpatient DNA — first attendance

40 Top Hospitals 2011

Airedale NHS Foundation Trust
Ashford and St Peter's Hospitals NHS Trust
Basingstoke and North Hampshire NHS Foundation Trust
Bedford Hospital NHS Trust
Burton Hospitals NHS Foundation Trust
Calderdale and Huddersfield NHS Foundation Trust
Cambridge University Hospitals NHS Foundation Trust
Colchester Hospital University NHS Foundation Trust
Countess of Chester Hospital NHS Foundation Trust
County Durham and Darlington NHS Foundation Trust
Dartford and Gravesham NHS Trust
Dorset County Hospital NHS Foundation Trust
East Cheshire NHS Trust
East Kent Hospitals University NHS Foundation Trust
Frimley Park Hospital NHS Foundation Trust
Heatherwood and Wexham Park Hospitals NHS Foundation Trust
Hinchingbrooke Health Care NHS Trust
Kingston Hospital NHS Trust
Lewisham Healthcare NHS Trust
Medway NHS Foundation Trust
North Cumbria University Hospitals NHS Trust
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust
Northumbria Healthcare NHS Foundation Trust
Royal Cornwall Hospitals NHS Trust
Sheffield Teaching Hospitals NHS Foundation Trust
South Tees Hospitals NHS Foundation Trust
South Tyneside NHS Foundation Trust
South Warwickshire NHS Foundation Trust
The Newcastle upon Tyne Hospitals NHS Foundation Trust
The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust
The Rotherham NHS Foundation Trust
The Royal Surrey County Hospital NHS Foundation Trust
University College London Hospitals NHS Foundation Trust
University Hospitals Bristol NHS Foundation Trust
West Hertfordshire Hospitals NHS Trust
West Suffolk Hospitals NHS Trust
Western Sussex Hospitals NHS Trust
Weston Area Health NHS Trust
Wye Valley NHS Trust
York Teaching Hospital NHS Foundation Trust

Appendix

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