FOR HEALTHCARE LEADERS

HSJ PATIENT SAFETY



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PATIENT SAFETY

WHAT'S ON THE AGENDA

Why the future is getting safer

As hundreds of board executives, managers, nurses, doctors and other clinicians gather for our annual Patient Safety Congress and Awards, we are pleased to publish this supplement exploring some key issues on the safety agenda.

There has certainly been no shortage of national developments in this area. The Healthcare Safety Investigation Branch is being established and is due to become operational by the autumn. Patient safety collaboratives are already operating, designed to tackle the leading causes of avoidable harm.

Conversations over safe nurse staffing levels continue, with National Institute for Health and Care Excellence work in the area ceasing and NHS Improvement seemingly developing new guidance.

In the face of these national conversations, it can be easy to lose sight of the good practice already happening at the local level across our NHS. This supplement – and the Patient Safety Congress and Awards, with which its publication coincides – is designed to refocus our attention.

Both of course cover the national picture but they also highlight how nurses, midwives, allied health professionals, medics and healthcare leaders are collaborating to reduce avoidable harm.

The articles that follow cover everything from how technology can assist the detection of sepsis, to how patient experience can be considered in the context of safety, to how better design can lead to decreased risks. Together, they highlight important actions that can be taken – and which must be taken – to further improve the safety and reliability of healthcare. Few things could be more critical.

Jenni Middleton is editor of Nursing Times and Shaun Lintern is senior correspondent, HSJ

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IMAGE, ALAMY

HUMAN FACTORS

BACK TO THE DRAWING BOARD

A misunderstanding of what 'human factors' means often leads organisations to try to change their people rather than the processes that could transform patient safety, finds Claire Read

Janet Anderson is used to misconceptions about the area in which she works. A senior lecturer in the faculty of nursing and midwifery at King's College London, Ms Anderson seeks to apply human factors to improve the quality and safety of healthcare.

While she feels awareness of the area has grown significantly in recent years, she says the next challenge is ensuring nurses, medics and managers actually understand what the field is all about.

"Human factors' has that connotation that people immediately think it's something to do with people – and it's something to do with humans, perhaps, that makes them prone to error or not able to do the right thing. But that's really not what it's about," says Ms Anderson, who will be speaking at the 2016 Patient Safety Congress, run by *HSJ* and *Nursing Times*.

"It's really about supporting people to optimise their work and remain safe. It's not about trying to change something necessarily about humans."

This is a nuance she fears is often missed amid discussion about patient safety. "Often in healthcare, we find that efforts to improve quality come down to encouraging people to be careful and be aware of the risks.

"That's focused on somehow changing people, whereas human factors would be about how we can design the task – or the devices, or the packaging, or whatever it happens to be – to make it more likely that people are able to do it correctly."

Professor Peter Buckle, principal research fellow at Imperial College London and another of the experts speaking at Patient Safety Congress, puts the distinction simply: "I always argue that the human completes the system," he says. "Whatever you're doing, you actually have to complete the system, and you're doing so with all the bits and pieces you've been given – it could be software, it could be hardware, it could be a poor working environment where you can't see properly – and you have to make up for all the deficiencies elsewhere.

"What we really need to do is to turn it around and say: how would we design



Human factors is about designing tasks, devices or even packaging to help people to act correctly

'As humans, we normally find ourselves having to overcome the deficiencies of the designs around us' things to make you work at the highest possible level of your performance? Instead of which, as humans we normally find ourselves having to overcome the deficiencies of the designs around us."

In other safety critical industries, such as aviation, there has been a long term effort to consider the scientific discipline that is human factors.

Trevor Dale, a former pilot who now offers safety training to healthcare organisations, says it first became a key area of focus for British Airways following the Kegworth air disaster in 1989. The plane involved was new and, unknown to the pilots, had a different ventilation system to previous models. When smoke appeared on the flight deck, their knowledge of the previous design

led them to shut down the wrong engine.

"If you were generous, you'd say healthcare is 10 to 15 years behind [on this agenda]," reports Mr Dale. "A friend, who is shortly to leave British Airways, recently sat in on one of our training courses for anaesthetists and operating department practitioners. He listened and at the end said: "They're 20 to 30 years behind us."

That is not to say progress has not been made. In 2003, Professor Buckle co-authored a report entitled *Design for Patient Safety*. Commissioned by the Department of Health and the Design Council – and written with a professor of engineering at Cambridge University and a professor of design at the Royal College of Art – the paper served to underscore "how little human factors design was actually taking place in the healthcare system".

Adds Professor Buckle: "After that there was an explosion of research around this, which I think has led to some very interesting, different approaches to how you incorporate the human in the design of equipment and systems right from the beginning."

His own current work at Imperial centres on in vitro diagnostic devices.

"Companies come to us with ideas that they want to follow up, and we're able to look at the usability of it, we're able to look at the cost effectiveness of it, we're able to do clinical trials because we're based within a huge healthcare trust and we've got academic clinicians who lead different areas," he explains.

"What comes across very, very clearly is that people often come up with well intentioned designs, but hadn't really thought through where they're going to be used and how they're going to be used."

Conventional wisdom

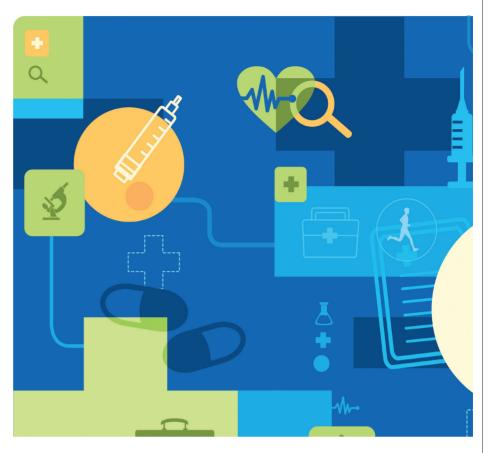
He gives the example of miniaturisation and portability, often seen as highly desirable but which is not always appropriate in a healthcare setting. "When you examine it in detail, you realise actually you often don't want that because you can't see the device properly or your fingers are too big to input information.

"For most of us, the worst [outcome] is perhaps you turn up at your meeting at the wrong time, or you send something rude to a friend when you meant to say something polite. But in the context of healthcare, that could be a bit of information that's now electronically in a system which someone else will act on.

"It could be anything from the wrong drug dose to predictive text misspelling the name of somebody or, more often, a dropdown menu where you've accidentally selected the wrong thing.

"What we do is actually start from the point of view of how can we make this thing more usable to the point whereby it's very hard to make mistakes?"

Another area of focus in human errors research is understanding how people overcome the problems they encounter in system design. Ms Anderson, for instance, is



'You shouldn't buy anything, you shouldn't design anything, unless you've really had a conversation with the people who are doing the job – or with patients'

currently looking at the issue of resilience.

"It's particularly pertinent in healthcare, because it's really about looking at how we can help systems and organisations to adapt to pressures," she argues.

Interestingly, the outcome may be a slight deviation from conventional wisdom. "Previous approaches to patient safety are much more about: let's standardise this, let's make sure it's done exactly the same way, every time, and it's associated with this mindset that if people just followed the rules, everything would be okay.

"Resilience is about saying well, there's a reason people don't follow the rules and that's usually because the situation they're faced with doesn't fit the rules, and therefore they have to adapt. So the focus of our resilience work is how we can help them to adapt safely rather than keep emphasising that you shouldn't have adapted, you should have just followed the rules."

Suggests Mr Dale: "If you're getting repeated breaches of procedures, you've got

a few possibilities – one is that your training's poor, another is that your staff have become demotivated and it's become normalisation of deviancy, or the third thing is your procedures might not be fit for purpose."

Ask Professor Buckle what key point he hopes nurses, medics and managers would take away from his Patient Safety Congress presentation, and he offers one word: participation. "You shouldn't buy anything, you shouldn't design anything, unless you've really had a conversation with the people who are doing the job – or with patients themselves – about whether it's going to make things better," he says. "You can't impose something without consulting and working with others to participate."

He continues: "It sounds a bit fluffy, but without it you've got a disaster on your hands. And it's not easy to do. I think people think, well, that's fine, we'll have a focus group. That's not how it works – actually, you do need trained professionals who know how to develop this participatory idea and come out with proper design constructs. It's not just a 'nice to have', it's an essential to have – and the expertise is available."

FACTOR IT IN TO YOUR DIARY

The Understanding Human Factors session runs on day one of the Patient Safety Congress (5 July) and will be chaired by Jane Reid, independent consultant to the Clinical Human Factors Group. King's College London senior lecturer Janet Anderson will speak on the role of organisational resilience from 2.50-3.35pm; Imperial College London principal research fellow Peter Buckle's presentation on using the design process to improve safety runs from 4.15-5pm.



TECHNOLOGY

SEPSIS FACES A NEW FRONT

Daloni Carlisle looks at how technology is helping clinicians to detect sepsis earlier, something which is key to combating this often undetected killer

With 150,000 cases a year and 44,000 deaths – many of them preventable – sepsis has to be a critical safety issue for all NHS providers.

The challenge is to recognise sepsis in its early stages, before multiple organ failure sets in (see box) and to implement rapid treatment. Left untreated even for an hour and the chances of death rise rapidly.

Neither is easy. Sepsis in its early stages is easily dismissed as something less sinister and many hospital systems for alerting doctors – such as bleeps – are prone to delays.

That's why there is so much attention on sepsis right now. With a focus on timely intervention, NICE has developed some very clear guidelines for health professionals on how to spot sepsis from vital signs and routine blood tests. Due out this month [July 2016] the guidance aims to help speed up diagnosis so that treatment can start quickly.

According to Paul Volkaerts, chief executive and founder of healthcare technology company Nervecentre, this is welcome and provides a stepping stone to a safe, reliable solution. Preventing sepsis deaths, he says, is an area where technology really can play a part by automating the recognition of affected patients and rapidly escalating their treatment.

Right now two large acute trusts – University Hospitals Leicester (UHL) and Nottingham University Hospitals (NUH) – are testing a tool developed with Nervecentre that does just this. The evidence so far is that the tool recognises sepsis accurately in individual patients. The next step is building a safety case to support automated alerts.

Nervecentre is known for two types of technology. One is e-observations, in which nurses record patients' vital signs on handheld devices. In this electronic format and with the ability to import lab results, software can apply the NICE rules for spotting sepsis automatically in the background and alert the nurse if a patient shows features consistent with sepsis.

"We have developed algorithms based on the NICE draft guidance that can be rapidly updated should the guidance change," says Mr Volkaerts. "It works in the background and it takes into account the realistic perspective that not all clinicians will have the exact details of NICE guidance instantly to hand."

The other is e-alerts that replace bleeps with an automated system for alerting doctors and nurses to issues that require immediate attention. It is a technology that has been proven to reduce delays and improve safety in hospital at night systems.

Recognise and rescue

Applying this to sepsis enables staff nurses to spot the patient whose vital signs indicate sepsis via an alert on their hand-held device. They can then alert a senior nurse for a rapid screening before escalating as required to doctors to implement treatment.

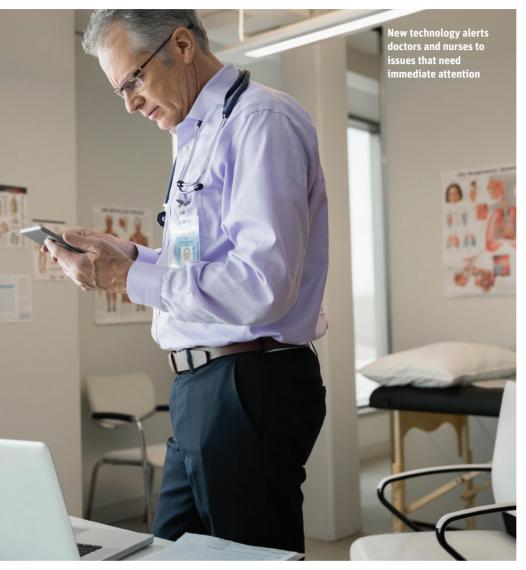
That's the theory, at any rate. Right now, clinicians are putting it to the test.

At NUH, the algorithm is running in the background against a selection of the 7,500-plus daily observations to measure the accuracy of identification of sepsis, ensuring both that patients with sepsis are not missed and that there are not too many false alarms.

Mark Simmonds, consultant in acute and critical care and the trust's "recognise and rescue" lead is in charge of this work. He helped write the NICE guidelines and he says: "Screening patients for sepsis is incredibly complicated. For us to expect all 16,000 staff to be able to understand this in detail and apply it every day – well, it's just not going to happen. We need the support of electronic tools."



'The tool does not take away from professional judgement and accountability and we are emphasising that'



NUH has been working hard to crack the sepsis nut for several years, he says, and the challenge has always been making sure systems are reliable. Now with 5,500 mobile devices at ward level already running Nervecentre's systems, he hopes this trial might be the breakthrough he needs.

"It's not that clinicians do not know what to do, it is that they do not always do it," he says. "We do not want patients to slip through the cracks. This tool makes it easier to do the right thing every time. The cracks get smaller."

Dr Simmonds runs through the work at NUH in brief: "We are screening patients in real time now [May 2016] to test the system. We need to be sure it will not raise too many false alarms as we know from human factors work that too many false alarms risks alerts being ignored."

Assuming this goes well – and he expects it will – it will be on to phase two. "The next step will be bringing in nursing and doctor alerts and because we already have 5,500 devices on our hospital floor that is not a big deal – we can upgrade the devices remotely and they will start to get the functionality

within a couple of months. Phase three will be bringing in the lab data that will help us to refine the screening. The tool supports all of this today but it is important that we implement this following a safe and controlled and process."

Using the electronic tool does not do away with the need for training and education on the new NICE guidance. Nor will it replace the clinical judgement of senior clinicians – the tool is simply ensuring that clinicians are alerted quickly and are presented with the current guidelines.

UHL is also helping to develop Nervecentre's sepsis tool, with go-live planned for this month. The technology is already well embedded – in 2014, the trust won an *HSJ* award for work with Nervecentre developing e-handover; e-observations are now routine and work is under way to roll out e-alerts.

Julia Ball, assistant chief nurse, says all three electronic components contribute to the sepsis tool. E-observations flag up potential sepsis patients; e-alerts make sure the right clinician is brought in quickly; e-handover makes sure all the right information moves with the patient along the sepsis treatment pathway.

Sarah Odams is lead sepsis nurse at the trust and would be one of those receiving alerts. "The beauty of this is it's all on mobile devices," she says. "I could be anywhere in the hospital or on another site and I can receive an alert to look at a patient's observations and I can do it there and then, give the ward nurse advice and alert the next set of people on the pathway."

Ms Ball says there are two more benefits to the electronic system – and ones that are particularly important to clinicians and senior managers.

First is the ability to have a real time overview of the sickest patients in the hospital. This can support senior clinicians' daily conference to manage these patients and help identify training needs – or indeed areas of excellence.

Second is the ability to generate CQUIN reports automatically. A new national CQUIN is due to be released this year that will reward hospitals for starting IV antibiotics within an hour of identifying sepsis.

"Reporting this is one of the real strengths of the system," says Ms Ball. "Currently we have to do this manually by going round the wards to highlight which patients are red flag for the CQUIN. In future, we will be able to do it automatically. The quality of the reports from the Nervecentre system is exceptionally good."

At both sites, developing the sepsis tool is a work in progress and evaluating the impact will be a key part of that work – including measures of speed of treatment after diagnosis, reducing the number of patients transferred to ICU with sepsis, length of stay overall and length of stay in intensive care.

Mr Volkaerts is keen to let clinicians at the test sites speak for themselves. After all, the tool was developed collaboratively with them. And in both Nottingham and Leicester, hopes are high that this is technology that will make clinicians' lives easier and help them to do the right thing every day.

As Ms Ball points out, the sepsis tool does not replace clinical judgement – but should make it easier for clinicians to exercise it. "It's technology," she says. "It does not take away professional judgement and accountability and we are emphasising that." ●

WHAT IS SEPSIS?

Sepsis is a potentially life-threatening condition, triggered by an infection or injury. In sepsis, the body's immune system goes into overdrive as it tries to fight an infection. This can reduce the blood supply to vital organs such as the brain, heart and kidneys. Without quick treatment, sepsis can lead to multiple organ failure and death.

FIRST DO NO HARM

Legal processes must never get in the way of supporting staff, reducing risks to patients and doing the right thing, says Helen Vernon of the NHS Litigation Authority

The NHS Litigation Authority has managed around 160,000 claims for clinical negligence over the course of its 20 year history, relating to incidences of harm dating right back to the creation of the NHS. Typically, we receive around 1,000 new claims a month but even today it is not unusual for us to receive claims that relate to events back in the 1950s and 60s.

Our aim is to deliver compensation as quickly as we can where it is due, whether that be a few hundred pounds due to an extended stay in hospital or a multi-million-pound settlement to someone who has suffered lifelong harm.

As every penny paid is tax payer funds that could otherwise be spent on patient care, claims are investigated thoroughly and over 50 per cent of cases brought against the NHS are turned down. It will be of no surprise either that given the NHSLA's mission to eliminate unnecessary legal costs, we frequently find ourselves at loggerheads with claimant lawyers over their bills.

Our ambition is to reduce the need for expensive litigation and for resolution to be achieved in its broadest sense with families and healthcare staff where something goes wrong. This means increasing the use of mediation in the NHS, early transparency, saying sorry and demonstrating that lessons have been learned to prevent the incident happening again.

Rich in learning

Fear of litigation should never stand in the way of learning or transparency. We will always encourage and support trusts in doing what is right, regardless of the potential for a claim. We are a not-for-profit part of the NHS rather than a commercial insurer and have never denied a claim because an honest explanation has been given to a patient. It is our experience that an incident, handled well is more likely to prevent, rather than encourage, litigation.

Learning from claims is a challenge as they are a skewed picture of harm, driven by other factors such as the legal environment and with an inherent time-lag. Often, it takes time for the full extent of an injury to manifest itself.

The principal driver of the £4.5bn paid out in the five years to 2015 in England is the lifetime costs of caring for children who



The NHS Litigation Authority typically receives around 1,000 new claims a month

'We will always encourage and support trusts in doing what is right, regardless of the potential for a claim'

tragically suffer brain injury at birth. This involves a complex assessment of care needs which may not be fully clear until some years after the event and so families have an unlimited time to bring their claim.

Nevertheless, claims can be rich in learning as they often involve a detailed analysis of events, from a 360 degree perspective, often with expert input. They are the visible tip of a large iceberg of avoidable cost and given the direct relationship between that cost and the bill for indemnity cover, we are increasingly engaged in working with trusts to understand the causes of claims at a local level.

Members of our indemnity schemes (the

whole of the NHS in England) can use our tools to see their claims at a detailed level and work with us to analyse trends by specialty, type, cost and number and various other cuts. This is particularly insightful when viewed alongside incident and complaints data. We are publishing analysis at a national level on areas of high claims frequency or severity and are increasingly using the risk pool as a platform to share learning across the NHS.

Last year, we awarded £18m of incentive payments as part of the Sign up to Safety campaign to support 67 local safety improvement plans to address the causes of the harm which leads to claims. By bringing together trusts with the royal colleges, procurement experts and others, we directly supported the ambition of the campaign to reduce avoidable harm by half.

The scope to do more is huge and the direct financial imperative to do so very visible in our accounts. But more importantly, our aim is to do whatever we can to make the NHS safer for patients and to support staff in doing what is right without legal process getting in the way. • Helen Vernon is chief executive of the NHS Litigation Authority

QUALITY

LET PATIENT EXPERIENCE TAKE CENTRE STAGE

What the patient experiences is a central pillar of healthcare quality – but much needs to be done to bring it to the forefront of the agenda, writes Helen Mooney

There is strong evidence that good patient experience is associated with clinical effectiveness and patient safety. Patient experience is one of the central pillars of quality in the NHS alongside safety and effectiveness.

And yet many of those directly involved in trying to advance measuring and improving patient experience do not believe it has achieved the prominence it deserves.

As Neil Churchill, director of patient experience at NHS England, notes: "Patient experience is still the new kid on the block. We have had quite some investment in clinical effectiveness and patient safety but patient experience has not had that."

The NHS, it seems, has yet to put the patient experience into patient safety.

This is more than just a feeling – there is now both global and UK research to back the assertion.

A joint inpatient survey by The King's Fund and Picker Institute Europe published last December concluded that much more needed to be done on this front.

The study *Patients' Experience of Using Hospital Services: an analysis of trends in inpatient surveys in NHS acute trusts in England, 2005–2013* found that over the past nine years trusts have seen only a modest improvement in quality of care as judged by patients.

This was the first longitudinal study of patient experience by trust and it found that while overall there had been small improvements in patient experience



Evidence suggests patient safety in the NHS is still lacking a focus on the patient experience

reported between 2005 and 2013, the results showed a tendency towards inertia or regression to the average.

Mr Churchill says: "Patient experience starts with human factors as patients and carers see them and links back to clinical care and how services are provided.

"The NHS has got a very solidly entrenched medical model in terms of who makes decisions and on what basis so a move towards a patient experience model will require an enormous culture change."

It is not just the UK that has identified culture change as critical.

The Beryl Institute's 2015 global research report *State of Patient Experience* attempted to benchmark patient experience excellence in healthcare organisations across the world.

The largest study of its kind, the researchers interviewed over 1,500 respondents from 21 countries to create a

10 THINGS LEADERS CAN DO TO HELP IMPROVE PATIENT EXPERIENCE

- 1. Drive the patient experience agenda and offer strong direction and leadership.
- 2. Ensure that leadership is visible and accessible.
- 3. Ensure staff are empowered to make changes to improve a patient's experience.
- 4. Model good management from the top. Embody behaviour that reflects the patient experience vision and values: kind, compassionate, caring, empathic, respectful, informative, efficient and professional.
- 5. Enable patients to tell their story of care.6. Set up work processes that allow time and
- space to achieve the improvement objectives. 7. Ensure that feedback from patients is turned
- into action plans that are carried out.
- 8. Enable staff to gather feedback from patients and make improvements.
- 9. Set up processes so that staff have a means of capturing feedback in real time.
- 10. Include real time data as part of organisational patient experience data.



detailed picture of challenges and opportunities in addressing the patient experience across all healthcare settings from GPs to hospitals to long term care.

It highlighted "purposeful leadership and a strong culture" as "critical" to achieving great patient experience and encouragingly it found that staff development and culture change efforts are top areas of investment with an increasing focus on patient and family engagement.

The study found that while patient experience remains a top priority and that structures for addressing patient experience are widely present, organisational definition still lags behind. That can be hard to provide organisational focus.

Soft and fluffy

Jason Wolf, president of the Beryl Institute, says that although healthcare organisations are often very good at forming committees and structures to address patient experience, on average less than 50 per cent of those organisations have a definition of patient experience.

"And although more and more places have committed to having leadership on patient experience (42 per cent in 2015), only 33 per cent of those leading this commit 100 per cent of their time to it," he explains.

Mr Wolf questions how, if the majority of organisations do not have a dedicated patient experience leader, they can claim that patient experience is the most important issue for their organisation?

'Getting patient experience right makes a big impact on hard metrics like finance and mortality'

DEFINING PATIENT SAFETY

The US based Beryl Institute defines patient experience as "the sum of all interactions, shaped by an organisation's culture, that influences patient perceptions across the continuum of care."

THE LINK BETWEEN PATIENT SAFETY AND EXPERIENCE

In 2013, the *British Medical Journal* published a systematic review of 55 studies and concluded the data presented display that: "Patient experience is positively associated with clinical effectiveness and patient safety, and support the case for the inclusion of patient experience as one of the central pillars of quality in healthcare".

"Many organisations have the chief nurse, for example, as the patient experience lead. That's like having the chief financial officer running housekeeping. Yet all organisations have a dedicated HR or finance function.

"Strong patient experience leadership means ensuring that roles are not diluted. Moving an organisation to a state of strong and sustained patient experience performance may well be one of the greatest culture change efforts a healthcare organisation can and should take on," he says.

Ruth Evans, founder of the UK-based Patient Experience, agrees. Getting patient experience right is crucial and makes a big impact on "hard metrics like finance and mortality".

She says: "The eternal challenge is that we are often preaching to the converted, although events such as the Patient Safety Congress where patient experience is now being discussed."

"The (government's) family and friends test is a bit like Marmite, some people love it and some people hate it," she says. "But one thing is sure, it has transformed metrics at board level in terms of patient experience because now boards have to talk about it."

Uphill struggle

Some of the best examples of patient experience do not need large sums of money to get them started. Rather, they start with boards and leadership.

Ultimately she would like to see all NHS organisations with a board director responsible for patient experience.

Christine Morgan, a patient member on the People and Communities Board for the Five Year Forward View and co-production group member of the Coalition for Collaborative Care, says it is still an uphill struggle to "break in" at board level.

"Patient experience is still seen as the soft and fluffy stuff but it is a patient safety issue if patient experience is not taken seriously," she says.

Ms Morgan would like to see all boards recruiting not just people with the right skills to put patient safety at the heart of the board agenda but also those with the experience of being a patient.

While the new emphasis on incorporating patient experience into the fabric of the healthcare organisations is to be welcomed, the consensus is that the NHS has much more to do before it can truly be said that the experience of those it serves is at the forefront of the agenda. •

TIME TO NURTURE BETTER SERVICES

More government funding has been promised to increase specialist mental healthcare for mothers in the perinatal period but this is just part of the action required, writes Claire Read

Catherine Beard started suffering from anxiety at the age of four, but it wasn't until she reached university that she was diagnosed with obsessive compulsive disorder (OCD).

Worries that her food might be spiked led her to stop eating; concerns she might inadvertently harm someone in her sleep meant she stopped sleeping. She was given medication and therapy, but when she had her first baby found her mental health deteriorated hugely.

"It's like my OCD was amplified," explains Ms Beard. "I had four miscarriages before my son was born, so my worries were all about keeping him safe – I was worried what I was eating might hurt the baby, and became obsessed about the baby's movement. When it came to labour it was very difficult to have a natural delivery because I was so anxious, so it was an emergency c-section."

Following the birth, she was discharged home – in large part because the local specialist unit for mothers experiencing mental health problems had no beds available. She received care from a community mental health team, but one which had no specific expertise in perinatal mental health. When she had her second child, a daughter, her mental health took an even worse dip. By 24 weeks she was suicidal, yet a midwife assessed her as "emotionally well".

Ms Beard's story is a common one. The Maternal Mental Health Alliance – a coalition of professional and patient organisations – has created maps which show the provision of specialist perinatal mental health services. The one detailing community teams uses a red, amber and green system. If it were shown during election night coverage, it would be immediately clear to viewers there had been a Labour landslide.

That the result is potential patient safety issues is equally clear. Following the Morecambe Bay investigation – which established a series of failings led to the avoidable deaths of one mother and 11



'Following Morecambe Bay there has been a strong spotlight on safety in maternity' babies – there has been a strong spotlight on safety in maternity. Jeremy Hunt has indicated he will ask the new Healthcare Safety Investigation Branch to initially focus on maternity issues. And following the February publication of the National Maternity Review, the government declared an ambition to halve the number of stillbirths, neonatal and maternal deaths by 2030, as well as the rate of brain injuries that occur during or soon after birth.

There is little doubt cutting the maternal death rate will necessitate a strong focus on mental health in the perinatal period, generally defined as lasting from conception to a baby's first birthday. A study shows almost a quarter of all maternal deaths between six weeks and a year after birth are related to mental health problems, and one in seven women who died in this period committed suicide.

Increasing specialist provision is seen as an important part of the attempt to reduce that figure: the government has pledged additional funding to try to eliminate current gaps. Yet the situation is still a complicated one. "Mother and baby units are funded through specialist commissioning, so central money, while the community perinatal services are funded through a combination of acute provision – so maternity provision, mental health, and children's," explains Jo Maitland, coordinator of the London Perinatal Mental Health Network, founded in 2013 to improve outcomes.

"It's a complex area which requires joined up thinking, joined up planning, joined up commissioning. Providers need to build their relationships with commissioners to make sure there's an understanding of why these services are needed and where the gaps are."

Multi-faceted issues

Clinical understanding will also need to be boosted. "All the issues surrounding perinatal mental health are multi-faceted," suggests Janet Fyle, professional policy advisor at the Royal College of Midwives. "So you would look at training, awareness, referral pathways and the confidence of the midwives who come across women [with mental health problems] to be able to refer them onwards."

Argues Ms Maitland: "Midwives and maternity services are absolutely key in this, because a large aspect of the safety component is picking issues up early in pregnancy. All women when they have their first appointment should be asked about their mental health history, and referred on to the right services or given the right support.

"Women with more severe mental health problems should be monitored throughout their pregnancy, even if they're well. And all women with mental health problems should have birth plans which incorporate their mental health needs."

For Ms Beard, that sort of planning allowed her to feel much more supported during the birth of her second child. Given her history, she was referred to an antenatal psychiatric liaison clinic and had a planned caesarian section.

"I'd had three months of involvement by the psychologist, and I had a perinatal community psychiatric nurse who came to my home," she explains. "The fact they were willing to make that investment in me gave me my life back."

Better management of women with known mental health problems is only one part of minimising avoidable harm, however. There is also a need for a swift and appropriate response in the event of new illness, of the kind Ellie Ward experienced following the birth of her son.

"On the evening of my son's third day I went up to bed but I don't think I went to sleep," recalls Ms Ward. "Then I remember being in the bathroom, but I couldn't remember how I got there, and I couldn't work out what was real and what wasn't. It was like I was in a nightmare, and I thought I'd killed my son in bed."

Her partner called the labour ward, who in turn called for an ambulance. After 12 hours in accident and emergency, Ms Ward



'The value of having staff who are attuned to perinatal mental health issues – and who can refer to specialist services – cannot be understated' was diagnosed with postpartum psychosis. She spent four months in a mother and baby unit. It was an incredibly difficult time for her partner as well, who had a two and a half hour trip to visit her and their baby. "I think partners really struggle," she says.

Mark Williams agrees. He experienced his first panic attack during the birth of his son, and would go on to develop post-traumatic stress disorder. "It was the thought of my wife and son dying," he explains. "All these doctors came in, and they said to me: 'Mr Williams, your wife needs an emergency c-section.' She looked across, saw me anxious, so I think she became anxious and obviously that affected the baby as well."

His wife had also never previously experienced mental ill health, but she became very unwell following the birth. Living in Wales, where there is no mother and baby unit, they were unsupported by specialists. He has since founded Fathers Reaching Out, which campaigns for improved perinatal mental healthcare for fathers as well as mothers.

Through this, he has met other dads who have had similar experiences and has become convinced good communication from midwives can help reduce the trauma of difficult births.

"What doesn't seem like a stressful time for a midwife can be a traumatic time for a father. One father said to me that the midwife said: 'Say goodbye to your wife' when she was going on a trolley down to a caesarian section. So he instantly thought his wife was going to die. Communication is massive: even seeing the tools during the C-section can be traumatic."

Reduce the risk

The value of having staff who are attuned to perinatal mental health issues – and who can refer to specialist services – cannot be understated, according to Pauline Slade, professor of clinical psychology and consultant psychologist at the University of Liverpool's Institute of Psychology, Health and Society.

"This is the time when we can actually influence the development of the foetus, we can influence the relationships that the mother is able to make with her new baby, and this is fundamental to the mental health and wellbeing of subsequent generations," argues Professor Slade, who is immediate past chair of the British Psychological Society's perinatal faculty.

"This is not just about a woman herself, it's not just about the implications for her partner which are also significant, but it is so important for the wellbeing and development of her baby and their relationship, and hence the mental health of society for the future."

Ms Maitland says the risk of women committing suicide during the perinatal period can never be completely eradicated. "But through the provision of services, through good training, through good understanding of one's role within the care pathway, we can reduce those risks. We can reduce those rates."

PERFORMANCE

CLOUDS, SILVER LININGS AND STORM DESMOND

University Hospitals of Morecambe Bay Foundation Trust had done its homework on preparing for emergencies but, even so, Storm Desmond tested the organisation to its limits, as Helen Mooney discovered

Saturday 5 December 2015 was quite unlike any other day that Sue Smith, executive chief nurse at University Hospitals of Morecambe Bay Foundation Trust, had ever experienced.

An extreme weather warning was already in place across Cumbria as Ms Smith went to bed the night before. She knew that the rapidly approaching threat of Storm Desmond was likely to have some impact on the region and on NHS services.

But she says she never could have imagined the events that unfolded.

At 2am she woke to find her house in complete darkness as the storm wreaked its havoc. Hers was one of at least 60,000 homes left without power as whole towns and villages across the North West were completely cut off.

Across Cumbria the storm flooded over 6,000 properties and left in its wake huge disruption to the county's transport network, with many roads closed due to flooding and structural damage. By the end of the night, over 1,000 bridges required inspection or work to repair them.

Off the scale

Ms Smith says that once she realised the seriousness of the situation she decided to phone the hospital to find out what was happening. She was unable to get through as phone lines and much of the mobile network had gone down, along with the power lines.

Driving into the hospital on her usual route it became clear that streets and roads had been turned into waterways as the storm lashed parts of Cumbria and Lancashire with more than a month's worth of rain in just 24 hours.

Ms Smith phoned 999 and, once she explained who she was, the operator was able to put her through to the hospital.

She eventually reached the main hospital at 5am – nearly three hours after setting out on what would usually be a 30-minute journey. On arrival, she found NHS staff working side by side with the army, fire services and mountain rescue teams from across Cumbria and beyond.



'We had no way of contacting patients at home who were on ventilators and oxygen that required electricity'

"When I reached the hospital there was some flood damage and all electricity was out so the back-up generators were on," she recalls. "We had enough fuel to keep us going for five days."

Like any hospital trust, Morecambe Bay had done its fair share of disaster planning and practice (see box, bottom of next page). But the impact of Storm Desmond was, quite simply, off the scale.

The biggest challenge – and one that was both unprecedented and had not been planned for – was that all forms of communication had been brought down.

"The hospital and its staff had no way of communicating with each other or with the outside world as all the phone lines were down. The most worrying thing was that we had no way of contacting patients at home who were on ventilators and oxygen that required electricity," she says.

The trust quickly organised teams responsible for making sure these patients were safe. One drew up lists of those affected and worked with the army and fire and mountain rescue teams to make sure those patients who depended on electricity for survival were brought into the hospital.

Another team set up a "home care ward" to welcome these patients and help them plug into the hospital power supply.

"One of the other challenges was that staff could not get into work, so once we did have phone lines back up and running we set up a dedicated emergency line for staff and we used local television and radio stations to advertise the number," says Ms Smith.

Working alongside the army and communicating with staff again through local television and radio, the trust set up staff collection points dotted around Cumbria in order to bus them into work.

The trust was also forced to cancel all planned surgery for several days following the storm. The key considerations were how best to use the generator power and the continuing lack of certainty about which staff could get into work and whether patients would be able to make it to the hospital for their operations.

Ms Smith says that the surgeons who could not do their operations instead went to help out in A&E.

"Although it looked like we got back to normal quite quickly, a lot of operations and tests could not be done because people could not get in for routine outpatient appointments, so there was a lot going on in the background which meant we did breach some of our mandated targets," she admits.

However, she says: "Our staff were amazing. All the planning and practice we had done for an unexpected major incident fell into place."

Senior nurses rolled up their sleeves and went back on to the wards to make beds and free up capacity. The chief executive took bacon butties round to staff and patients.

"Canteen staff worked 24/7 and the army helped with getting supplies through," says Ms Smith. "People were so adaptable and worked in ways and in teams they had never worked in before... Most staff went above and beyond what was expected of them and many off-duty staff came back in to help."

She says that staff from neighbouring trusts in areas that were less affected by the storm also came in to offer their services.

"We found ways to quickly remove the



LESSONS LEARNT FROM STORM DESMOND

- Make sure that you have phones available that will function, don't rely on digital technology for everything
- Staff are flexible but they need the basics. Plan to provide food, somewhere to sleep and showers
- People in the local community will turn up to use electricity and some will need a place to stay and to be fed as well. Establishing

communication with social services is a priority

- Staff may not have clean uniforms so have plenty available as a back-up stock
- Set up clear lines of communication with all staff and remember staff can be flexible so even non-medical staff can help. HR staff can help with providing meals, for example
- Preparing for an extreme weather incident can also help with planning for winter resilience.

'People were so adaptable and worked in ways and in teams they had never worked in before' usual bureaucracy in order for them to work with us immediately, and that has helped us to understand how to improve the speed of our recruitment process for the future," she adds.

Gradually, things did get back to normal and Ms Smith and her team set about learning the lessons from Storm Desmond (see box above).

One of these was the communications challenge. She says: "We found out that it was possible to use old style mobile phones so one thing we learnt is to keep a stock of those available in future."

More broadly, it has taught the trust management a lot about the people who work at Morecambe Bay. Ms Smith spells this out.

"What this incident has shown us is we do have a very flexible workforce," she says. "It has given people the confidence to work in areas that they had never worked in before and shown us all that we are more adaptable and flexible than we realise because our professional and medical skills are generic."

So while Ms Smith would rather not repeat the night of 5 December, at least some good has come of it. ●

NHS ENGLAND'S EMERGENCY PREPAREDNESS, RESILIENCE AND RESPONSE FRAMEWORK

NHS organisations and providers of NHS funded care must:

 Have suitable, proportionate and up to date plans which set out how they plan for, respond to and recover from emergency and business continuity incidents as identified in national and community risk registers

- Exercise these plans through:
- a communications exercise every six months
- a desktop exercise once a year
- a major live exercise every three years
- Have appropriately trained, competent staff and

suitable facilities available round the clock to effectively manage an emergency and business continuity incident

• Share their resources as required to respond to any kind of emergency or business continuity incident.

