ISSUE ONE | 2019

hospital times

AMR: Time is slipping away

Our antibiotics are failing and a global catastrophe will soon be upon us. What is being done about it?

INSIDE: EXCLUSIVE INTERVIEWS WITH PROFESSOR DAME SALLY DAVIES ON AMR AND SIR ROBERT NAYLOR ON NHS ESTATES

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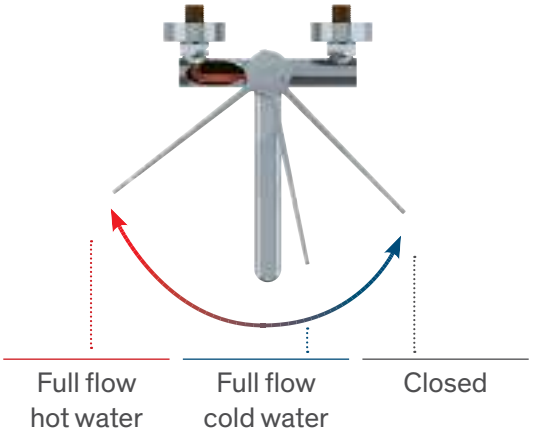

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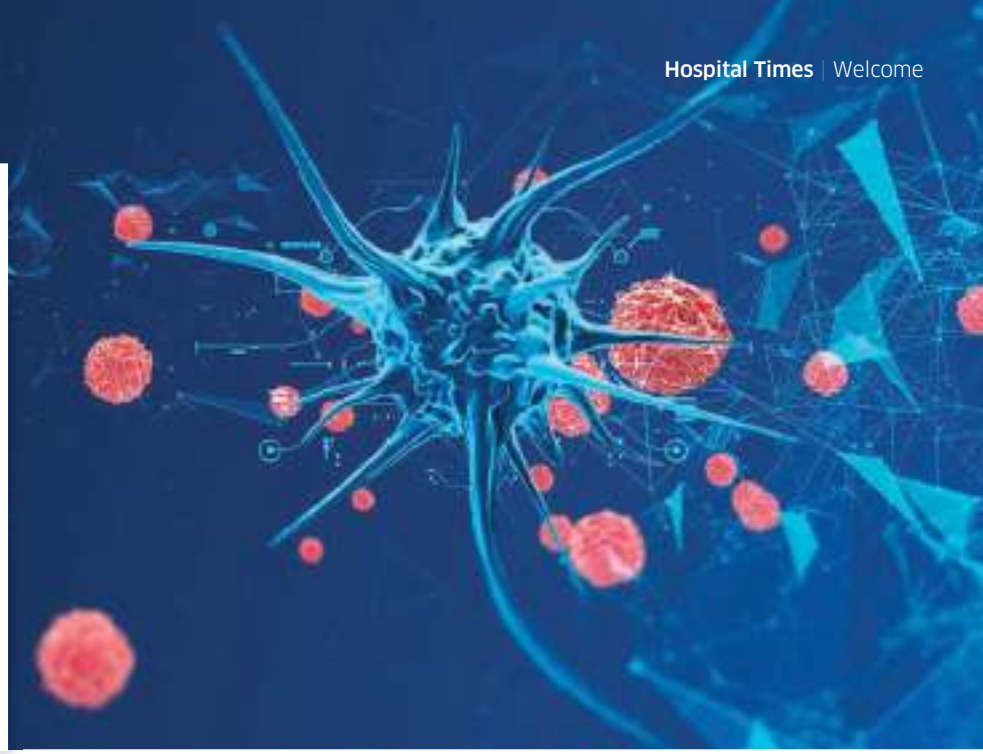

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With the ongoing debacle in Westminster, avoiding a Brexit-based conversation seems to become more difficult each day.

This is understandable as the last few years have brought seismic changes for the UK and the next few months will doubtless have a similar impact.

Hospital Times has not avoided the ongoing Brexit fever either. Inside this issue Niall Dickson, Chief Executive of the NHS Confederation, discusses the impact that each of the different potential outcomes of Brexit will have for the UK health sector.

But life goes on in spite of Brexit, and there are huge challenges that should be commanding greater attention than our prolonged divorce with the European Union, however extraordinary the events surrounding Brexit appear to be.

I can think of two issues that fit the bill - one is climate change and the other is the development of antibiotic resistant diseases. Antimicrobial resistance (AMR), as this is commonly referred to, is the predominant feature of this month's issue of Hospital Times.

If our antibiotics cease to function, then we go back to a dark age in which any infection could prove deadly and as a result, common surgical procedures will become too risky to perform.

The scale of the impending crisis is nothing short of terrifying. The World Health Organisation predicts a death toll of 10m a year by 2050. Yet this isn't exactly a recent development, nor can it be deemed as surprising.

Unfortunately, AMR is an inevitable by-product of evolution. Upon accepting his Nobel Prize for the invention of antibiotics in 1945, Alexander Fleming himself warned of an age in which this incredible drug he had discovered would become increasingly less effective.

Why then, in 2019, has this crisis been allowed to manifest itself so severely and what can be done about it? At this point, you will probably want the input of far more informed minds than mine. Dame Sally Davies, Chief Medical Director for England and a global leader in the fight against AMR has provided a comprehensive analysis into all aspects of the impending crisis for Hospital Times, read this on page 28.

Ensuring people fully comprehend the severity of the issue would be good start. The word cancer commands an instantaneously emotive response from people when they hear it but, while no less serious, AMR just doesn't have the same impact.

A sustained, collaborative global effort is required to tackle this. I hope that this month's Hospital Times will demonstrate this for you and will highlight the need for decisive action on this most deadly of issues.

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NEWS & VIEWS

Cancer screening targets failed across England

The National Audit Office (NAO) has today revealed that the three major cancer screening programmes in England failed to hit their targets last year. The NAO has found that the overall performance of screening tests is "below expected levels."

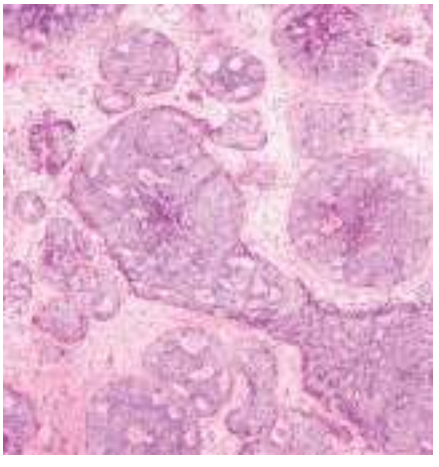
The report, which only accounts for screening services in England, comes after two recent incidents with breast and cervical screening that have raised concerns about oversight of screening programmes in general.

Four key areas were investigated by the NAO overall evaluation of screening tests:

1. Delivery of health screening programmes
2. Performance of health screening programmes
3. Oversight of health screening programmes
4. Progress in implementing change in screening programmes

A backlog of nearly 100,000 cervical screening samples has been reported, meaning that over half of women who were tested faced delays in receiving their screening results. Under targets set by NHS England, women should receive cervical screening results within 14 days of their screening appointment. The report has revealed that this target has not been met since November 2015, and in March 2018 only 33 per cent of women received their results on time.

The results from breast cancer testing also failed to hit the mark. Women who are tested for breast cancer should receive an additional appointment within 36 months of their initial test but it appears the 'standard' threshold has never been met. This means that almost 10 per cent of women did not receive their second test within 36 months.



The best performing test was for bowel cancer, which nearly achieved the target with coverage of 59.6 per cent against a standard target of 60 per cent of those tested.

The report has also revealed an alarming disparity of screening coverage in different parts of the country. In 2017-18, of those eligible for bowel screening, 60 per cent were screened nationally, but eight Clinical Commissioning Group screening providers screened 30 - 44 per cent of eligible people. The NAO's analysis shows that levels of coverage across the four screening programmes are inconsistent, with much of the lowest performance in London.

There are currently 11 national screening programmes in operation in England. The NAO investigated the four health screening programmes that offer screening based on a person's age rather than a particular condition or pregnancy: abdominal aortic aneurysm screening (AAA screening), bowel cancer screening, breast cancer screening, and cervical screening.

Government Clean Air Strategy to reduce pollutants and save lives

The government last month announced its Clean Air Strategy which is set to 'cut the costs of air pollution in society by 1.7bn every year by 2020' and then '5.3bn every year by 2030.' Furthermore, it seeks to save and lengthen lives, and prevent issues such as stunted lung growth in children and asthma.

The strategy spans policy areas to deliver a programme of work 'across government, industry and society. '

It is estimated by the World Health Organisation (WHO) that around 7m people worldwide are killed by air pollution every year. Therefore, the main aim of this 'world-leading plan' is to reduce the exposure society experiences to particulate matter (PM) which has been identified by the WHO as the 'most profound pollutant threatening our health. ' The plan comes in addition to the government's commitment to halve the number of people living in areas breaching WHO guidelines on PM by 2025.

In the Clean Air Strategy, the Department of Health and Social Care and the Department for Environment, Food and Rural Affairs focus on the idea that prevention must be a priority over cure, a policy consistent with the recently released NHS Long Term Plan. "Our health is unavoidably shaped by the environment we live in," says Rt Hon Matt Hancock MP, Secretary of State for Health and Social Care. "Environmental factors determine around 30 per cent of our healthy life expectancy."

In terms of devolution, the Clean Air Strategy will continue to examine how local authorities can use powers to catalyse upgrades of heating appliances considered to be polluting and inefficient. Environment Secretary Rt Hon Michael Gove MP said that the new strategy provides "new powers for local government and confirms that our forthcoming Environment Bill will include new primary legislation on air quality."

Policies outlined in the Government's Clean Air Strategy will be featured in the Environment (Principles and Governance) Bill which is expected to set out primary legislation on air quality. The Government has also announced that it will be taking action on agricultural pollution which is estimated to be accountable for 88 per cent of ammonia emissions and has been found to impact biodiversity.

The Government's modern industrial strategy claims to be aligning the UK at the apotheosis of low carbon innovation. Alongside this, the Government is investing in innovative ways to clean up the air with a joint £19.6m research programme in partnership with UK Research and Investment.

In order to prevent future air quality related diseases and to support the NHS Long Term Plan, the Government look set to make the Clean Air Strategy a key part of its 2019 policy.

NHS vacancy levels run at a 90,000 high per quarter

Latest figures from NHS Digital show that there were 93,964 full time vacancies in NHS England in the third quarter of 2018, spanning from July 1st to September 30th. This figure included 37,917 vacancies for nursing and midwifery posts alone.

Regionally there were 4,353 nursing vacancies in the East of England and 6,138 in the North West - the highest numbers of any other region in England.

"This is more evidence that teams across the NHS are under enormous pressure," says Chief Executive of NHS Employers, Danny Mortimer. He acknowledges a clear commitment to address this in the Long Term Plan, adding: "The NHS will need the support of other parts of government to improve the recruitment and retention of our people."

He insists that the Government needs urgently to address issues such as the apprenticeship levy, the immigration white paper, public sector pensions along with training and education budgets with clarity and additional investment.

NHS England has also cited the apprenticeship levy as a key area for NHS Trusts to benefit from. In addition to extending the timeframe that the levy is available to Trusts, NHS England states that the levy should be used to build their development and training facilities, in addition to funding employer costs for apprenticeships that require a certain degree of 'off the job' training.

Due to the uncertainty posed by Brexit over European Economic Area workers being able to immigrate to the UK, migrant workers wanting to work in the NHS could be becoming increasingly deterred from doing so.

It is claimed by The Welsh Audit Office that from 2017-18, NHS spending on agency staff peaked at £135.7m in Wales alone, with 82 per cent of this figure purely designed to cater for staff vacancies.

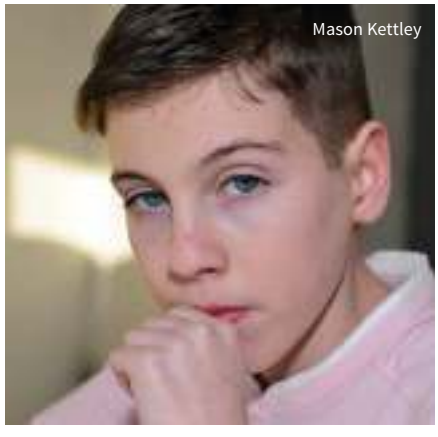
Credit: The Christie NHS Foundation Trust

Young person to begin world leading Proton Beam Therapy treatment

Mason Kettley, a 15 year old from Angering who was diagnosed with a brain tumour in October 2018, has begun treatment at the new Proton Beam Therapy Centre at The Christie Hospital in Manchester, a part of The Christie NHS Foundation Trust.

Proton Beam Therapy (PBT) is a specialist form of radiotherapy that targets cancers very precisely, increasing success rates and reducing side effects, which makes it an ideal treatment for certain cancers in children who are at risk of lasting damage to organs that are still growing.

The state-of-the-art treatment is only available in a handful of countries around the world. The centre at The Christie is now the newest and most up-to-date proton beam centre in the world.


Mason Kettley

Mason, who is currently in the midst of preparing for his GCSEs next year, said: "I'm nervous about what is going to happen, but I'm also excited to start this treatment. I'm so grateful to all the doctors involved in my care and I'd love to do what they do one day – it will be my way of giving something back."

Following investigations and scans at Worthing Hospital near his home in Angmering in West Sussex, it became clear the tumour – a pilomyxoid astrocytoma – was growing in critical areas of his brain, making it inoperable due to the risk of blindness and other catastrophic complications.

Professor Stephen Powis, Medical Director for the NHS in England said: "This is a hugely exciting development for the NHS and we are delighted that we are able to provide this life-changing treatment for patients like Mason."

Number of homeless people visiting A&E triples

The number of visits to England's emergency departments by homeless people has more than trebled since 2011, an investigation by the BMA has discovered.

Recorded visits to hospital A&E Departments by patients classed as having no fixed abode has risen from 11,305 in 2011 to almost 32,000 last year.

The BMA investigation reveals that some of society's most vulnerable people are being failed by the system – with health and social care cuts driving the problem. To make matters worse, homeless patients are presenting with increasingly complex physical and mental health conditions.

Some of the hospital trusts with the largest increases in A&E attendances by homeless people since 2011 include:

- Kings College Hospital NHS Foundation Trust London – 1,563 per cent increase.
- South Tees Hospital NHS Foundation Trust – 1,125 per cent increase.
- Royal Devon and Exeter NHS Foundation Trust – 847 per cent increase.
- Stockport NHS Foundation Trust – 310 per cent increase.

Admissions from Emergency Departments to hospital wards have also rocketed from 3,378 in 2011 to 9,282 in 2018.

The figures for attendance to A&E and hospital admissions represent a bill to the NHS of an estimated £47m over eight years. But the true cost to the health service is hidden due to shortcomings in the NHS's mechanisms for recording homeless patients. In addition, many hospital trusts did not respond to the BMA's request for figures.

Ambulance services have also experienced a significant increase in demand from homeless patients. Worryingly, only two of the country's ten ambulance trusts responded to a request for figures as most said they did not keep the data, but of the two that did respond, both reported a significant rise in the number of cases related to homeless patients.

- The South-Central Ambulance Service, covering Oxfordshire, Buckinghamshire, Berkshire and Hampshire, has seen the number of cases relating to homeless patients increase from 268 in 2015 to 1,834 in 2018.
- The South East Coast Ambulance Service reported an increase from 54 in 2014 to 339 in 2018.

As part of the investigation, a survey of GPs in England found that more than a quarter said they had seen an increase in the number of homeless patients during the last five years, with almost a fifth reporting that their surgery was having to devote greater time and resources to homeless patients than they did five years ago.

BMA public health medicine committee chair, Dr Peter English, said:

"If this was some disease causing all these problems it would be a much higher priority but, because victims can be blamed and stigmatised, it is easy for government to ignore. The growing numbers of rough sleepers and vulnerably housed people in our society is a continuing tragedy. To stand by silently as our NHS faces increasing strain and our society becomes increasingly unequal would be unacceptable."

Surgical Safety Checklist results in decade of improved patient outcomes

Since its launch by the World Healthcare Organisation in June 2008, experts believe that the Surgical Safety Checklist has saved countless lives and improved outcomes for patients in England and around the world.

The Surgical Safety Checklist is a simple tool designed to improve communication and teamwork by bringing together the surgeons, anaesthesia providers and nurses involved in care to confirm that critical safety measures are performed before, during and after an operation.

UK clinicians made a substantial input into the Checklist which was mandated for use in the NHS in January 2009 and is now in standard use across the world. Since its inception in 2008, numerous evaluations have shown that the checklist clearly reduces death rates and surgical complications by as much as one third in facilities where it is in use.

Pauline Philip, National Director for Emergency and Elective Care for the NHS in England, was previously Director for Patient Safety at the World Health Organisation where she led the development of the checklist.

Commenting on a decade of the checklist, she said: "The safety of patients should always be the number one priority for the NHS, and for any health system around the world. It was a privilege to work with Lord Darzi and some of the country's leading clinicians to develop this checklist to support safety in operating theatres around the world, and a source of pride that the NHS led the world in piloting and adopting it."

Cleaning Show set to showcase latest healthcare hygiene products

The Cleaning Show (Excel, London 19-21 March 2019), one of Europe's biggest trade events dedicated to commercial cleaning, is set to include a range of major exhibitors who work closely with the healthcare hygiene sector.

These include Polyco Healthline, which provides protection and hygiene products including reusable and disposable gloves, workwear and bags- and i-team who supply a range of healthcare cleaning equipment.

They will be joined at the show by Diversey, who offer a range of products which set out to reduce the risk of infection through a mix of cleaning, disinfection and hand hygiene solutions.

Other companies exhibiting who have products and services targeted at the healthcare sector include Greenspeed, who specialise in environmentally friendly cleaning equipment and products, and TTS – who manufacture cloths and mops designed specifically for healthcare environments including hospitals.

Cleaning chemical experts Evans Vanodine and disinfectant and sanitiser specialists Mirius will also be attending the three-day exhibition.

There are also two keynote presentations scheduled which are directly linked to the healthcare sector.

The first will be given by Dr Terry Tudor, Senior Lecturer in Waste Management at Northampton University. His session, entitled "A Healthy Solution – managing waste in hospitals" will look at the wide variety of issues and challenges faced by both clinicians and cleaning operatives when dealing with waste in a hospital setting.

Dr Tudor's session will be followed by a seminar by Keith Redway, Emeritus Fellow at the University of Westminster, called "The Impact of Hand Drying Options in Healthcare Environments."

This will focus on studies which prove that the hand-drying system offered in washrooms need to be carefully chosen, especially in healthcare environments such as hospitals, clinics and care homes where hygiene is paramount. Keith's presentation will also compare the hygiene of different hand-drying systems, including electric dryers and towels.

The Cleaning Show expo will also feature suppliers, manufacturers, training organisations and trade organisations who are all involved in the cleaning, facilities management and waste management sectors.

Stan Atkins from The British Cleaning Council, the national trade body which co-produces The Cleaning Show, said "Cleanliness in healthcare environments is always very high on the public health agenda and the consequences of getting it wrong are very serious.

"It's therefore critical that people involved in hospital, medical and care-home hygiene regimes keep up to date with the latest products, services and research in this area, and The Cleaning Show is great way to do that.

"I would therefore encourage anyone involved in clinical cleaning to register for a free ticket and attend the show in March."

Further details of The Cleaning Show, including the conference programme and how to register can be found at www.cleaningshow.co.uk

Digital management of GP appointments now possible

NHS England has announced that the NHS App is now available, with a web-based version to be released in the coming months. This follows an initial testing period between September and December 2018 with 3000 patients.

The App itself has been available to download on the Apple and Google app stores since December 31st. However, individual GP practices will still need to 'review some of their system settings before they can go live and all the functions of the NHS App will be available.'

When a GP practice is fully connected, patients will be able to use the NHS App to:

- book and manage appointments at their GP practice
- order their repeat prescriptions
- securely view their GP medical record
- check their symptoms using NHS 111 online and the health A-Z on the NHS website
- register as an organ donor
- choose whether the NHS uses their data for research and planning.

Health Secretary, Rt Hone Matt Hancock MP, said: "I love the NHS so I want it to use all modern technology to serve patients. The NHS App will give patients more control over their own healthcare and revolutionise the way we access services."

A SIGNIFICANT AND CONSTRUCTIVE STEP FORWARD

Professor Helen Stokes-Lampard, Chair of the Royal College of GPs, welcomed the launch: "Technology plays an increasingly important role in the NHS, and in our patients' lives.

"The new NHS App promises to be a significant and constructive step forward in using technology to support patients to manage their own care and wellbeing. We hope it will make navigating primary care services easier for patients by making it possible for them to book appointments, order prescriptions, and check their medical records on their smartphone, if they wish to."

As part of targets set out in the NHS Long Term Plan, the Government aims to give all patients the ability to have digital GP consultations within five years.

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HEALTH POLICY

The NHS Long Term Plan

With an overarching aim to make the NHS 'fit for the future,' the NHS Long Term Plan (LTP) outlines how investment will be used to address 'killer conditions,' including genomic tests for every child with cancer. In addition, the plans will seek to prevent 150,000 heart attacks, strokes and dementia cases with more than 3m people benefiting from improved stroke, respiratory and cardiac services over the next ten years.

Placing a focus on the use of digital technology and early detection, new tools will be used to prevent 85,000 premature deaths annually. This will include making digital GP consultations available to all.

In a first for the NHS, the plan will guarantee that investment for primary, community and mental health services will grow at a faster rate than the NHS budget as a whole. Through a new funding model, £4.5bn will be used to support 'joined-up' care services in partnership with local government.

The LTP will also invest £2.3bn a year in mental health services by 2023/24, delivering support to over 2m more people suffering from anxiety, depression and other mental health issues over the next decade. This will include support for new parents and ensuring NHS 111 offers round the clock access to crisis care for mental health issues.

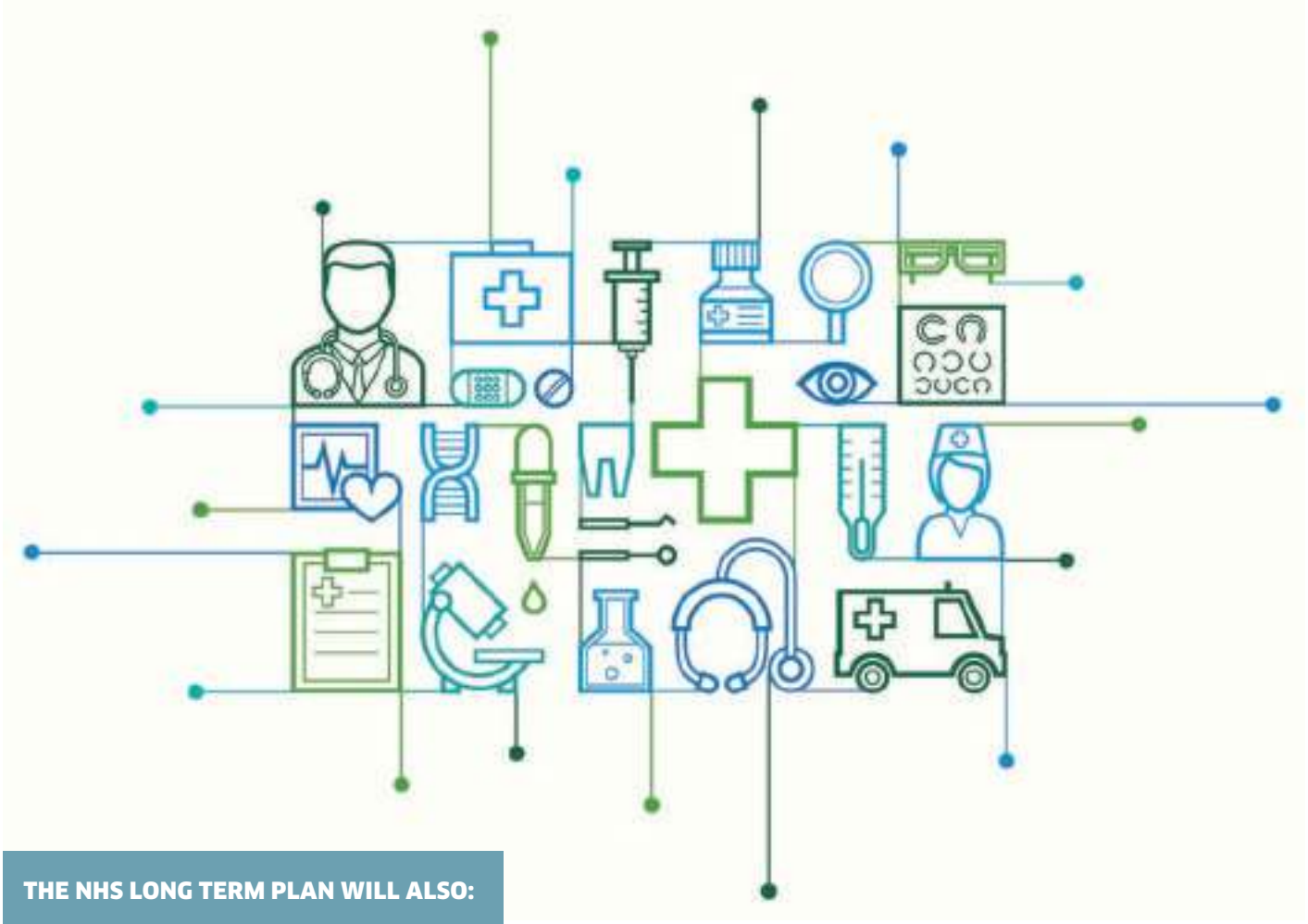
"The Long Term Plan represents vital progress towards parity of esteem for mental health services and has come through genuine and meaningful engagement with the sector," says Sean Duggan, Chief Executive of the Mental Health Network.

The plan has emerged in response to the 'three big truths' from NHS England:

- Pride – in the NHS's enduring success and shared social commitment
- Concern – about funding, staffing, increasing health inequalities and growing pressure from an ageing population
- Optimism – about medical advances and improving health outcomes for the future.

"It sets a practical, costed, phased route map for the NHS's priorities for care quality and outcomes improvement for the decade ahead," comments Simon Stevens, Chief Executive of NHS England. This, he says, will help tackle the "head-on the pressures our staff face."

The plan outlines the expansion of the Diabetes Prevention Programme, bringing mental and physical health services closer together for young people and the introduction of a healthy living and exercise programme for 100,000 patients with heart problems. However, it does not ignore the growing pressures placed on services by older people by also vowing to deliver more care in people's homes.



THE NHS LONG TERM PLAN WILL ALSO:

- Open a digital 'front door' to the health service, allowing patients to be able to access health care at the touch of a button
- Provide genetic testing for a quarter of people with dangerously high inherited cholesterol, reaching around 30,000 people
- Give mental health help to 345,000 more children and young people through the expansion of community-based services, including in schools
- Use cutting-edge scans and technology, including the potential use of artificial intelligence, to help provide the best stroke care in Europe with over 100,000 more people each year accessing new and better services
- Invest in earlier detection and better treatment of respiratory conditions to prevent 80,000 hospital admissions; smart inhalers will be piloted so patients can easily monitor their condition, regardless of where they are
- Ensure every hospital with a major A&E department has 'same day emergency care' in place so that patients can be treated and discharged with the right package of support without needing an overnight stay.

"The Long Term Plan sets a practical, costed, phased route map for the NHS's priorities for care quality and outcomes improvement for the decade ahead"

Simon Stevens
Chief Executive NHS England

Ian Dalton, Chief Executive of NHS Improvement, commented on the structural implication of the plan, which, he says, "means breaking down organisational barriers to take a more holistic approach to how care is delivered and paid for, embracing new and existing forms of technology, recruiting and retaining the right number of staff, and shifting the focus away from hospitals to prevention and care in the community."

ANALYSIS

Overall, the LTP is a highly ambitious set of commitments that set out a vision for a health system of the future. Given the level of ambition, the overarching gist of the LTP is a greater integration of services. In other words, it can be seen as a reaffirming the aims and goals set out in the Five Year Forward View.

Integration of health and care services is both the aim and the means by which the NHS will achieve the improved health outcomes it strives for. Aside from the target of expanding the Integrated Care System (ICS) model by April 2021, the LTP will begin to bring together primary, secondary and specialist care with local government. This will be carried out across all aspects of care delivery through the use of new technologies and frameworks aimed, above all, at reducing pressures on the acute sector.

The focus on 'place' will likely manifest itself in all aspects of health and care policy, bringing the accountability for ensuring wellness, as well as treating illness, as close to the patient as possible. This said, there are concerns as to the extent to which the NHS will be able to control factors outside of its control, namely social care.

As such, much of the success of the LTP will hinge upon the contents of the Social Care Green Paper, originally due to have been released in 2017. Cllr Ian Hudspeth, Chairman of the Local Government Association Community Wellbeing Board, described this as a 'missed opportunity' to release a Green Paper in conjunction with the LTP and said: "The current system of social care is unsustainable and will buckle under the weight of demand unless the Government urgently invests in these essential services which protect health, prevent sickness and are the surest way to reduce hospital admissions."

As UK demographics tilt our ever-ageing population towards increasing frailty, even more pressure is placed on social care services that treat people when they get ill. This, in part, falls on the prevention and integration agenda to deliver, but redesigned services must also account for how they work with services outside of the NHS.

CAN THIS PLAN ACTUALLY BE DELIVERED?

According to analysis from the Nuffield Trust, the extra funding that has been allocated for the NHS 'falls below the historic average,' reinforcing concerns over the deliverability of the plan given its ambitious nature. Whilst it is crucial that the NHS is given the support and funding it requires, social care and public health must not be neglected as health and care systems become increasingly integrated and therefore dependent on one another. The promised £4.5bn increase in primary and community care services is crucial. However, the Government should also be looking to reverse the £600m in reductions to council public health grants.

"The current system of social care is unsustainable and will buckle under the weight of demand unless the Government urgently invests in essential services"

Cllr Ian Hudspeth
Local Government Association, Chairman Community Wellbeing Board

Currently, there are 100,000 vacancies across the NHS - analysis from the King's Fund, Health Foundation and Nuffield Trust predicts a workforce shortfall of 250,000 clinical staff by 2030. The NHS LTP introduces a host of measures to create a more accessible environment for those in training and education looking to join the clinical workforce. This is in addition to creating part-time options and more flexible working arrangements in general. These range from clinical apprenticeships to the introduction of new courses designed to create additional routes for people to start a career in the NHS.

Internal disagreements have resulted in the announcement of the Government's planned workforce strategy being delayed until later this year. As such, many details on addressing the workforce crisis beyond education are largely absent from the LTP. Without action, the workforce crisis is only set to deteriorate further due to Brexit and the reliance of health and care services on staff from the EU and abroad, so the NHS planned workforce strategy needs to be delivered as soon as possible.

Preparing for a post-Brexit future in healthcare

Niall Dickson, Chief Executive of the NHS Confederation, discusses the impact of each potential Brexit outcome for the UK Healthcare Sector.

The events of the past few months have resulted in more uncertainty on issues such as health system supply chains, reciprocal healthcare, regulatory alignment, research programmes and public health systems. The Brexit Health Alliance (BHA) considers these topics to be top priorities if they are to achieve their overall goal: no negative impact of Brexit on patients.

Future cooperation on medical devices and medicines needs to be prioritised in the negotiations. This is so that patients and the wider public are not negatively impacted from disruptions in the supply of medicines and health technologies or from a reduction in safety standards.

Pragmatic solutions must allow patients and the public to benefit from the UK's participation in EU systems such as data sharing networks, pharmacovigilance and the new clinical trials infrastructures post-Brexit. This can be achieved by cooperation between the EU and UK for the benefit of patients. The UK Government has made these proposals; we are still waiting for the EU to fully respond.

If we leave the EU without a deal on 29 March 2019, there will be no agreed cooperation on any of these priorities, and patient safety will likely be at risk in the immediate and longer term. Even if a deal is achieved, the detail will need to be agreed during the transition period – and perhaps even beyond.

The BHA is working closely with government departments and agencies, including the Department of Health and Social Care and NHS England, to scope the issues, inform the government's Brexit negotiating position and support contingency planning. Their members liaise with their counterparts in the EU27, who have held meetings with the European Commission's Article 50

negotiating team and with members of the European Parliament, to highlight the consequences for patients across the EU and urge both sides to put patients first.

GETTING THE MEDICINES WE NEED

One focus of their work is access to new medicines and technologies. There could be additional delays for UK patients in accessing new medicines. In Australia and Canada new medicines come to market on average 6–12 months later than in the EU or USA. Despite having a number of bilateral trade agreements with the EU, it is estimated that Switzerland gains access to new medicines on average 157 days later than the EU. These delays in access to new medicines and technologies are largely due to the countries in question representing much smaller markets than that covered by the European Medicines Agency (which currently represents 25 per cent of the global pharmaceutical sales market). The UK currently has a 3 per cent market share.

A recent report by the Office of Health Economics (OHE) outlines the potential for delay in submissions of new marketing authorisations after the UK leaves the EU. Depending on the final outcome of the negotiations, this report considers that the potential impact on the UK could mean an average lag of submission for new drug approval of 2-3 months, and up to 15 per cent might not be submitted for more than a year after the EU27/EEA submission. Using the example of Australia, Canada and Switzerland to predict likely market behaviour, some new medicines available in the EU might never become available in the UK.

"Just as our relationship with the EU was not built in a day, nor will the terms of our divorce be"

Niall Dickson
Chief Executive
NHS Confederation

ALLOWING COLLABORATION ACROSS BORDERS

Another focus of their work is public health. Much has been gained in the past decades by collaborating against health threats across borders, and much would be lost were this to be discontinued. For this reason, the Alliance is seeking reassurance that public health issues will not fall by the wayside in negotiations on the future relationship between the UK and the EU, and that the health of citizens will not be negatively affected in subsequent free trade agreements. The BHA welcomes wholeheartedly UK Government commitments that there will be no diminution in standards of public health protection after the UK leaves the EU.

MAINTAINING OUR WORKFORCE

The BHA does not cover workforce but colleagues in the Cavendish Coalition, which includes the NHS Confederation, do. This coalition wants European colleagues in health and social care to know how much we value and respect them. Whatever the sector, employers need time to transition to a new way of managing workforce supply, and they also need both clarity and certainty on how a post-Brexit migration system will work.

The recent Migration Advisory Committee report on future immigration suggested a £30,000 salary threshold and no lower skilled worker exemption, with the exception of seasonal agricultural workers. Currently, doctors and nurses are temporarily exempt from the Tier 2 visa cap. Care workers are not.

It would be irresponsible for the Government to bring the shutters down overnight, especially for those in important lower wage roles, such as care workers, or for others performing vital services to the public but who are earning less than £30,000 a year, such as nurses. It is in all of our best interests to shape a future migration system that works for both business and health and social care so that we can continue to serve our communities to the best of our ability.

The BHA, therefore, has much to do before the vote on the deal is finally put to Parliament. Just as their relationship with the EU was not built in a day, nor will the terms of our divorce be. They call upon the Government to see that an orderly transition is agreed - and that it is amicable, for the sake of the patients."

How to make the Long Term Plan work

Nick Bosanquet, Professor of Health Policy at Imperial College, speaks to Hospital Times about implementing the objectives of the NHS Long Term Plan (LTP).

Professor Bosanquet has written extensively on the economics of healthcare for decades and, as an expert in this area, he is well placed to judge how feasible the NHS LTP is and what needs to change in order for its objectives to be accomplished.

In order to move away from piling pressure upon our already stretched hospital system, he identifies the first major challenge as intertwined with the changes to healthcare funding models.

"This is the watershed moment for Acute Trusts." Says Professor Bosanquet, "They have to work for a new era of funding and service. I set out some of the new and awesome challenges and how the Trusts need to move to new kinds of collaboration"

He continues, "The first part of the challenge will be addressing drastic changes in the ways in which hospitals receive funding," says Professor Bosanquet who, despite the NHS recent cash injection of £20bn, insists that in the long term hospitals will have to operate under ever restricting budgets due to the LTP outlining plans to reduce hospital outpatient rates by a third. Despite the fact that the budget is currently increasing by roughly 5 per cent, this increase is actually coming with a significant reduction in interest on specialised commission.

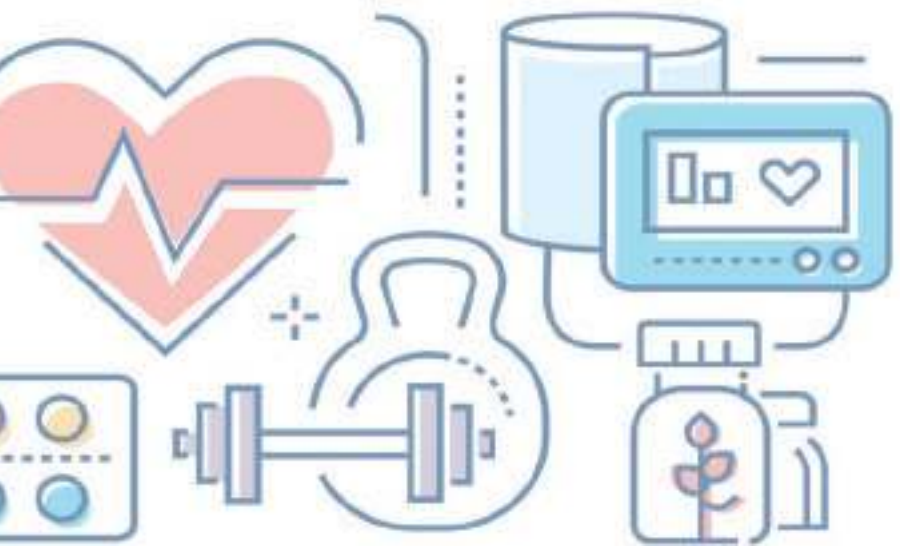
"This is the watershed moment for Acute Trusts"

Nick Bosanquet
Head of Health Policy
Imperial College

SIMULTANEOUSLY UPGRADING EXISTING SERVICE

However funding models are eventually adjusted over the coming decade, Professor Bosanquet insists the standard of our care should not and cannot drop. The second, and he argues the biggest, challenge is how we upgrade our existing services while simultaneously investing in new ones.

"We will most certainly require a significant increase in our capacity for technical innovation, and we will require an increase in specialised staff to accommodate this," he says. Whist workforce shortages across the NHS pose a significant risk to viability of the NHS LTP, he acknowledges that the LTP has diagnosed the problem correctly and that the actions proposed within the plan will help alleviate pressure.



LOOKING BEYOND THE HOSPITAL

The third priority is to join hospital services with primary care and community support services across the country to develop fully integrated models of care. Whilst this is not a new policy, the fact that the government has reaffirmed care integration as a priority over the coming decade is a clear sign of intent.

Professor Bosanquet sees both the challenge and opportunity of this. "Trusts need to get used to being co-partners in integrated care models, and not necessarily the main player." That there were key areas not fully incorporated into the NHS upon its inception in 1948 are a cause of frustration for him.

"The big mistake was not having integrated trusts from the start and it was an absolute scandal that GPs were not incorporated more fully into the NHS. As a result there was no pressure from the system to provide oversight and maintain quality for primary care until the 1990s."

In mental health too he recognises that there has been an over reliance on hospital services when it would have made more sense to include other parts of the community. "While mental health is talked about more often, like many other health issues it has been suffering from hospital syndrome. Two thirds of inbound patients are now being sectioned where several years ago this was only one third. Addressing this will be crucial for the NHS to move towards having an interconnected service."

> "The big mistake was not having integrated trusts from the start"
>
> **Nick Bosanquet**
> **Professor of Health Policy**
> Imperial College

UK WIDE COLLABORATION

With many of its aims being based upon the principle of preventing ill health, the success of the NHS LTP will be largely based upon the capacity in which the health and care sector can collaborate with other industries that impact upon people's wellbeing.

This is something that Professor Bosanquet is acutely aware of, and he has long called for the development of a more effective prevention agenda. "We need an all UK collaboration where people outside of the health services – such as pharmacies, fitness centres and gyms - collaborate with the aim of encouraging people between the ages of 40-60 to be much healthier."

Addressing these factors will help to ease the pressure on our hospitals by decreasing the number of people clogging A&E departments across the country.

BEYOND ADDITIONAL FUNDING

"I would describe the NHS as a 'black sheep' of sorts," he concludes. "While there is a constant demand from within the system to have additional funding, we need to pay more attention to its long-term progression in terms of its' actual social and economic delivery." In this regard, Professor Bosanquet believes that there have been massive inefficiencies within the NHS; however, with the new opportunities presented by the LTP there is scope for the NHS to navigate through what has been an incredibly difficult period of its history.

A mental health crisis for children and young people

In 2017, one in eight 5 to 19-year-olds had at least one mental disorder in 2017 – a significant increase over the last decade. Of these, 25 per cent of children and young people had no contact with any professional or informal support. In fact, local areas spend an average of 15 times more on adults compared with children suffering from mental health issues, writes Paula Timms, UK Assistant Director for Mental Health and Wellbeing Development at Barnardo's.

The current approach to mental health provision for young people simply isn't working and is indicative of a wider need for integrated care. Current funding priorities neither acknowledge nor reflect this. The Children's Commissioner for England recently established that less than 3 per cent of children in England accessed children's and adolescent mental health services (CAMHS) last year, a small fraction of those who need help.

The crisis is growing. An increasing body of evidence suggests that adversity and trauma impact on the needs of children and young people throughout their lives and into their adulthood. 'Adverse Childhood Experiences (ACEs)' are stressful events that, when experienced during childhood, can increase risks of poor health outcomes in later life. In order to do this, partnerships must be established to find solutions to address health inequalities for vulnerable children.

At Barnardo's they believe children and young people should grow up feeling happy, resilient and confident to take on life's challenges. No child or young person should have to experience a mental health crisis because they didn't have the help and support they needed earlier. Mental health and wellbeing support should be available and accessible to all children and young people, and yet all signs are that our current medical response to CAMHS is at breaking point.

WHOLE SYSTEM CHANGE APPROACH

Mental health should be on parity with physical health. Imagine if 25 per cent of all broken bones were never treated or healed, for example. Barnardo's believe that we need to build a societal approach to mental health and wellbeing. Support should be available to all children in schools to promote good mental health as we do physical health, to promote resilience and enable children to understand when they are experiencing poor mental health.

Resilience in childhood and teenage years is key to enabling the ability to cope with life's stress points.

A societal response and "whole school approach" would support parents to help them support their children's wellbeing holistically, alongside equipping teachers to spot early signs of children who may be struggling, so that all adults around a child can understand what impacts on children's mental health.

This is not new thinking. The words 'radical re-think' and 'transformational' abound in the debate around the mental health provision for young people. Yet, at its heart, this is a human approach and a common sense one. By building a society where we enable children and young people to be resilient, we have a real chance of impacting long-term mental health outcomes and creating a healthier public, less reliant on medical interventions. It is clear that integrated care sits at the core of this solution.

INTEGRATED CARE SYSTEMS, AN OPPORTUNITY FOR A BRIGHTER FUTURE

Birmingham and Solihull Mental Health NHS Foundation Trust, Barnardo's and Autism West Midlands work together to provide emotional wellbeing and mental health services for children and young people in Solihull. This partnership, known locally as SOLAR, creates a comprehensive system, designed around the needs of children and young people, which keeps children and young people healthy as well as treating those that are ill. The service prioritises resilience, partnership and co-production.

An integrated offering of mental health and wellbeing services for children, young people and their families should include universal wellbeing and resilience, early intervention and prevention, targeted support, counselling, therapeutic adoption and fostering provision, all integrated with CAMHS.

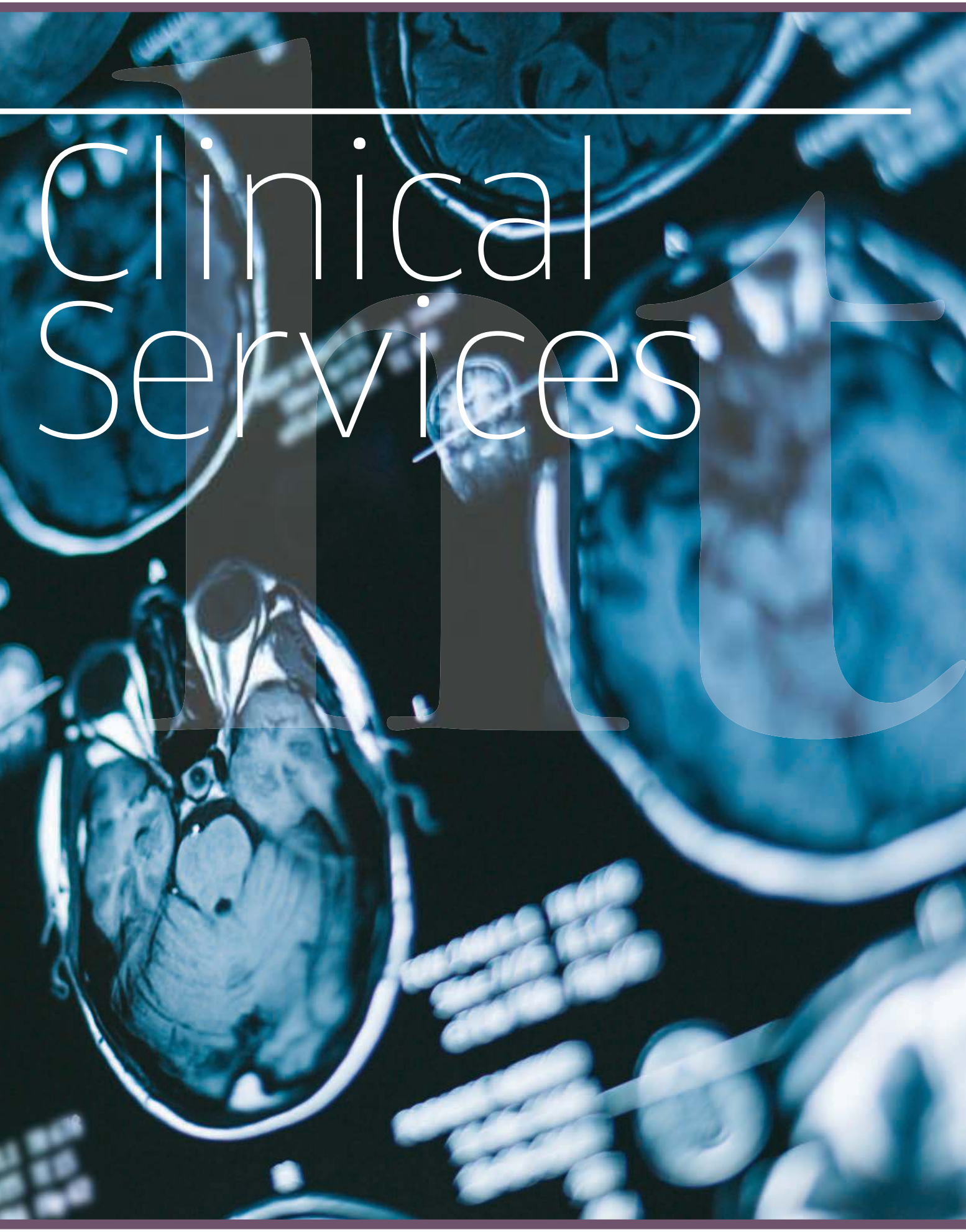
The SOLAR model brings a holistic and child-centred approach to its working culture – as well as knowledge and experience of working with children and young people from different work areas, including Child Sexual Exploitation, Family Support, Adverse Childhood Experiences, multi-agency working and the Thrive model.

BETTER OUTCOMES, BETTER LONG TERM VALUE

The rationale for transformational change within CAMHS is strong, clear and well documented in policy, research and government drivers. The economic argument is strong and proven and simply put; 'failure to support children and young people with mental health needs costs lives and money.

At Barnardo's, they believe that whole system changes and innovation in the way we offer mental health support to the current and future generation of children and young people will be key to preventing an increasing adult population plagued with poor mental health. We must work smarter, together with local authorities and commissioners, to ensure we are sharing best practice and innovating based on insights gained from working face to face with the significant problems children and young people face today.

Clinical Services



UK taking a stance against antimicrobial resistance

UK Secretary of State for Health and Social Care, Rt Hon Matt Hancock MP has called on world leaders to follow the UK's lead in the global fight against superbugs as he launches the UK 20-year vision for antimicrobial resistance (AMR).

Speaking at the World Economic Forum in Davos last month Mr Hancock made the case for AMR to be treated as a global emergency which can only be tackled by collaboration across borders. He painted a picture of a world where treatable infections become untreatable and routine surgery like hip operations become too risky to carry out without urgent global action. He believes antimicrobial resistance is as big a danger to humanity as climate change or warfare saying: "We are on the cusp of a world where a simple graze could be deadly."

The Secretary of State is backed by UK Prime Minister, Rt Hon Theresa May MP who believes that AMR is a threat that cannot be ignored. She says; "It is vital that we tackle the spread of drug-resistant infections before routine operations and minor illnesses become life-threatening."

"It is vital that we tackle the spread of drug-resistant infections before routine operations and minor illnesses become life-threatening"

Theresa May MP
Prime Minister

Since 2014 the UK has cut the use of antibiotics by more than 7 per cent and sales of antibiotics in food-producing animals has dropped by 40 per cent. However, the number of drug-resistant bloodstream infections has increased by 35 per cent from 2012-2017.

CHANGING THE PAYMENT MODEL

The UK plan calls for the drugs industry to take more responsibility for antibiotic resistance, citing the way drug companies are paid as a barrier to the development of effective new drugs. Under the plan, a new payment model will be underway within six months, designed to make investing in new drugs for priority infections more commercially attractive.

UK Government investment AMR related research and development awareness already tops £615m. In addition, 13 successful projects will receive funding £10m of funding as part of the Small Business Research to tackle AMR in humans.

However, the Plan acknowledges that AMR is not simply a human issue. Combatting resistance will take a 'One-Health' approach across humans, animals, the environment and food, in line with global ambitions and in collaboration with other nations, partners and the international community. The inappropriate use of anti-infectives and antimicrobials in human and animal medicine, in plants and crops is rapidly accelerating the pace at which it develops and spreads.

The Chief Medical Officer for England Professor Dame Sally Davies, who has been a powerful advocate for tackling AMR globally, welcomed the UK strategy commenting: "Too many people are already dying as a result of drug-resistant infections around the world" adding "this is not just a health issue; it is a social and economic one. The fate of modern medicine now rests on strong leadership, bold action and collaboration across nations. "

Leading the fight against AMR, Dame Sally Davies

Few can command as influential a voice in the healthcare sector as Professor Dame Sally Davies. Her 50 years' experience in healthcare has culminated as UK Chief Medical Officer since 2010. Her de facto influence over UK health policy has seen Health Service Journal rank her as the most influential woman in the NHS in 2015. In recent years she has become a globally recognised leader and advocate on fighting antimicrobial resistance (AMR). Here Dame Sally exclusively speaks to Hospital Times on all aspects of the crisis.

What is the likely scale of the impending AMR crisis? Where will be worst affected?

AMR threatens modern medicine – cancer treatments, routine surgery, caesarean sections – these all rely on working antibiotics. We risk returning to an age where simple, currently treatable infections, can kill. AMR currently is impacting, and will continue to impact every country across the world.

Currently, more than 1m people die every year due to AMR, which includes more than 2500 in the UK. The O'Neill Review predicted AMR to have a mortality rate of 10m people per year by 2050 – that is more deaths than caused by cancer. Put another way, AMR is expected to kill one person every three seconds by 2050. https://amr-review.org/

What can healthcare professionals do to stem the growth of Antimicrobial Resistance?

Healthcare professionals have a vital role to play in slowing down the emergence and spread of AMR. Healthcare professionals who prescribe antimicrobials have a responsibility to do so appropriately, which means only when a patient really needs them.

General Practitioners can also use PHE's fingertips which provides AMR data such as prescribing rates of specific antibiotics and incidence of certain drug-resistant infections. This is an important tool as it allows individual practices to compare themselves to others in the country to see where they need to improve.

Healthcare professionals also have a responsibility when it comes to Infection, Prevention and Control (IPC), especially in hospitals where a crucial component of tackling AMR is by preventing infections occurring in the first-place and preventing transmission when they do arise. This means simple things like adhering to hand-washing protocol.

What examples of best practice within the NHS are working to reduce antibiotic prescribing?

Since 2014, the UK has cut antibiotic use by more than 7 per cent in humans. At the same time the burden of infections is increasing and so reducing antibiotic use clearly becomes harder. Hence, there is a commitment in the new UK government AMR Action Plan to reduce the incidence of a specified set of drug resistant infections in humans in the UK by 10% by 2025 and halve the number of healthcare associated gram-negative blood stream infections.

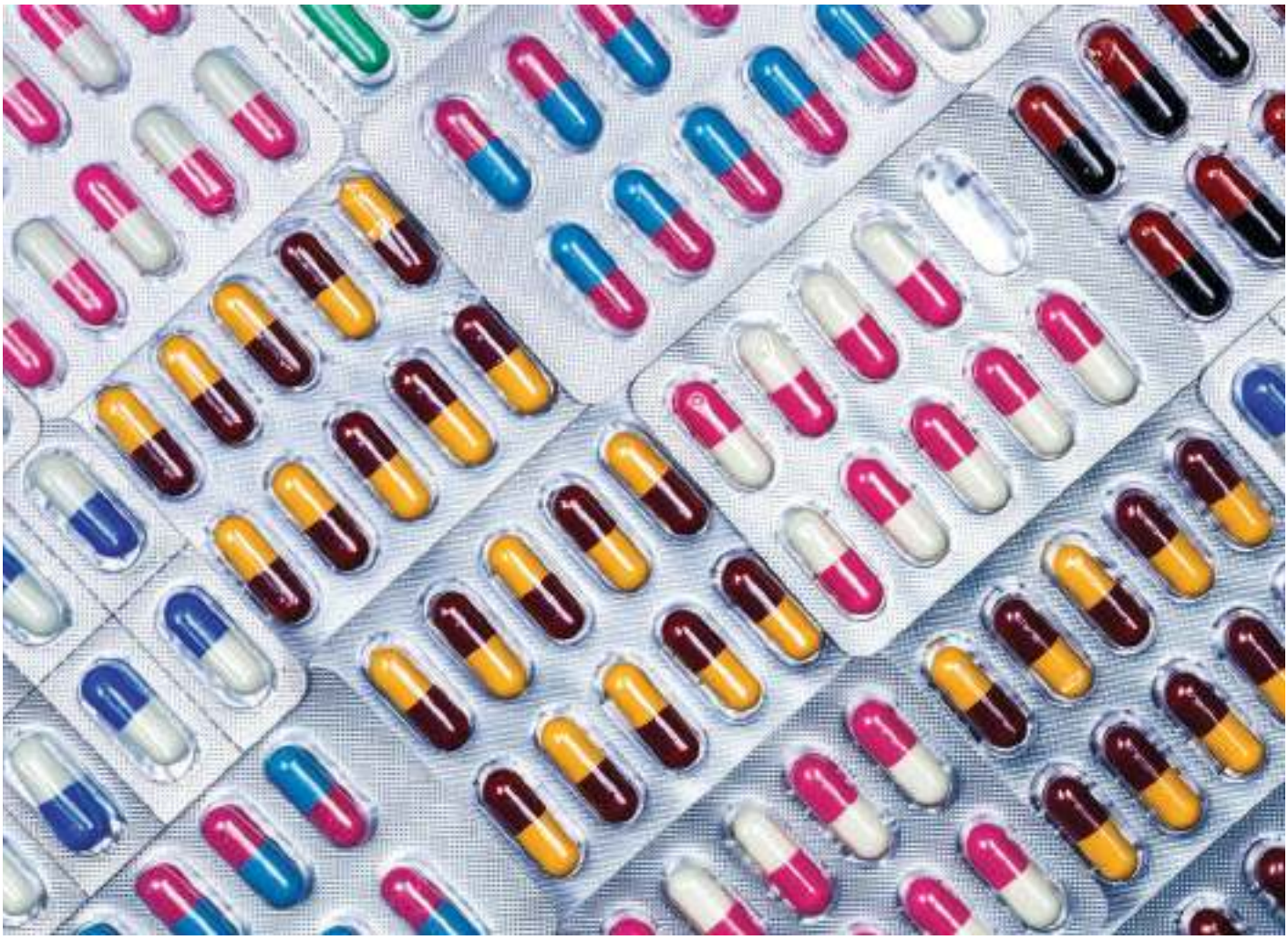
"Preventing infections occurring in the first-place and preventing transmission is a crucial component of tackling AMR"

Dame Sally Davies
UK Chief Medical Officer

Outside the NHS, we have had substantial success in the animal sector, with use of antibiotics in food-producing animals dropping 40 per cent in 5 years. This was all achieved through voluntary target setting by the industry which is hugely impressive.

Are there ways in which the process of developing new treatments can be increased?

Developing new treatments to tackle AMR doesn't just mean new antibiotics but also improved diagnostics and alternative therapies. We also need to ensure a resilient supply of old antibiotics globally. This requires investment from industry into R&D and access - which so far has been difficult to secure – as many pharmaceutical companies have left antibiotic R&D space.



Tackling this involves both push and pull incentives, both working domestically and as a global partner through the G7 and G20. The aim of these incentives is to encourage pharmaceutical companies to invest in replenishing the antibiotic pipeline which has run dry. If you're interested in reading more on push and pull incentives and what we need to do globally on AMR I recommend you read the O'Neill Review to start.

How do we incentivise more life science companies to invest in creating new antibiotics?

Incentivising investment into new antibiotics (and alternative therapies) is difficult as we have a situation called 'market failure'. Antibiotics become less effective the more they are used and so it is hard to incentivise companies to invest in producing them when we don't want them to be selling at high volume and the science is really difficult. This is why we need to investigate a new model that allows pharmaceutical companies to receive payment based on the value an antibiotic has to society, rather than linking payment to volume of sales.

Given technological developments and advances in machine learning, how are improvements in diagnostics helping to tackle AMR?

It is important that the right antibiotic is given at the right time, at the right dose, in the right route, for the right duration. To help ensure this, diagnostic tools can be hugely valuable.

Diagnostic tools are not however always a clinical test but can be an algorithm that leads to a diagnosis as well – these are often more cost-effective and impactful than shiny new clinical tests.

One challenge is a lack of data and evidence on this area. Therefore, the new UK AMR plan includes a commitment to be able to report on the percentage of prescriptions supported by use of a diagnostics test or decision support tool by 2024, with improvement targets set by 2025. The UK has also set

up the Diagnostics Collaborative to bring together healthcare professionals, academics and industry to support stewardship efforts.

As Chief Medical Officer, what are you doing to update the NHS AMR 2013-2018 Strategy following the publication of the NHS LTP?

The UK Government's new 20-year vision and 5-year national action plan for 2019 and beyond that was launched in January, is bold, ambitious and challenging, and it spans the whole of UK Government, so it isn't just a Department of Health and Social Care strategy.

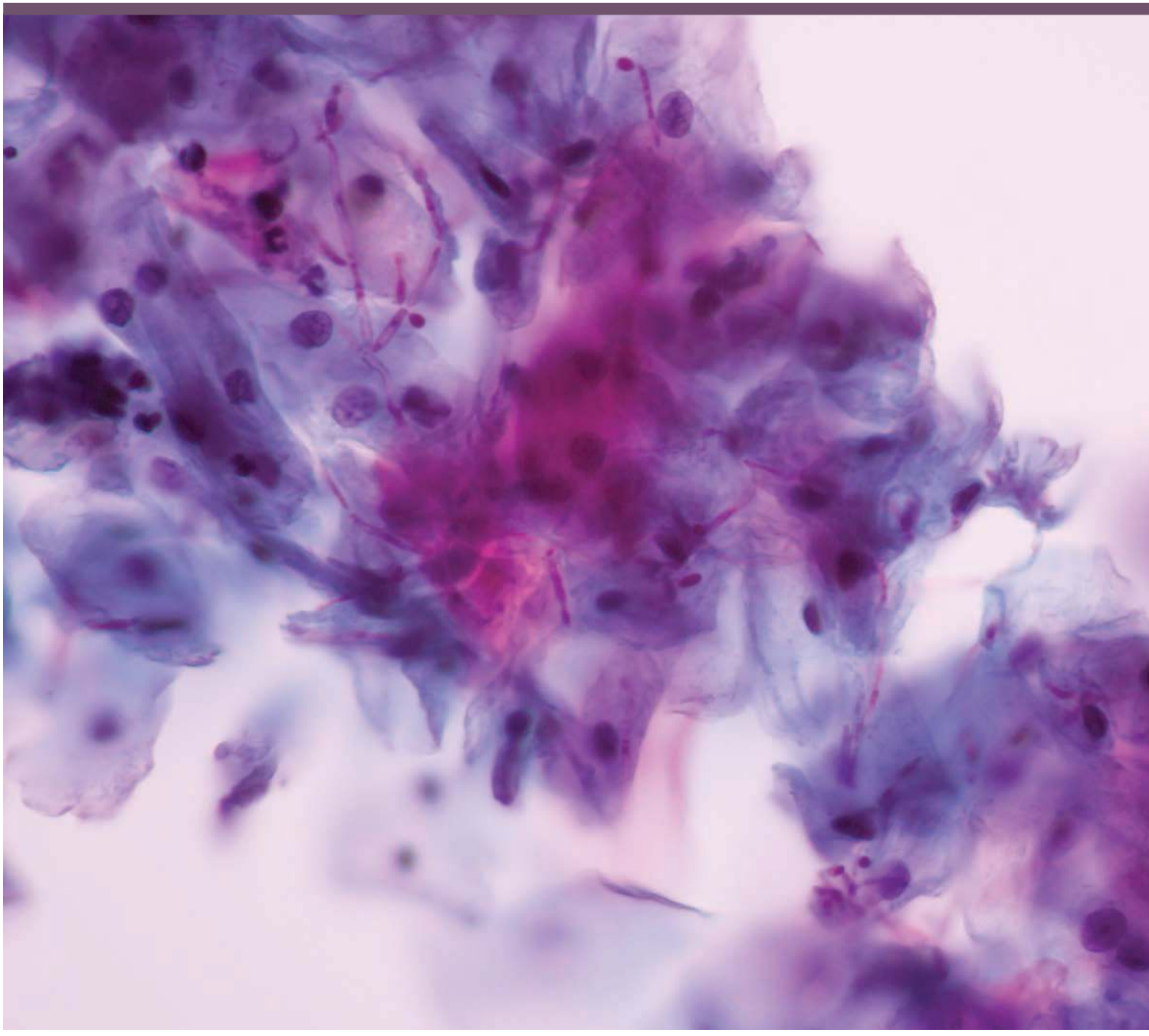
There are targets for all sectors and stakeholders relating to reducing infection rates, from promoting responsible and prudent use of antimicrobials in humans and animals, incentivising innovation of new drugs, promoting alternative therapies and diagnostics to being an effective global leader and partner and much more. These targets reflect the complex and One Health nature of AMR.

What will you be saying on the international stage in 2019 to tackle AMR?

People are slowly but surely waking up to the threat that AMR poses, not only to human health but to agricultural livelihoods, food security and the economy.

This year is an important year. The UN Inter-Agency Coordination Group (IACG) on AMR, of which I am a co-convener, will be submitting their recommendations around April time to the UN Secretary General, outlining next steps to sustain effective action globally. This is needed now more than ever; currently there is an ongoing outbreak of drug-resistant typhoid in Pakistan with more than 5000 cases so far.

Following the submission of the IACG's recommendations, I hope that AMR will be raised at the UN General Assembly in September 2019 and other international fora to highlight the urgency of tackling this unfolding tragedy so we can start to focus on implementing these recommendations. I really hope this won't just be another report on the shelf but will result in real change on the ground.



Combatting AMR through industrial collaboration

When Lord Jim O'Neill, architect of the 2014 Review on Antimicrobial Resistance, declared in 2016 that £40bn of global investment was required to curb the impending antimicrobial resistance (AMR) crisis, few could have complained of the £100trn return in savings he predicted for the global economy.

It is an issue that should transcend any form of health policy, but since the peak of activity following Lord O'Neil's review in 2016, many experts feel that the global focus on AMR may be waning, and that deeper collaboration is needed between governments and the business sector.

"AMR can never be addressed without the engagement of industry," says Gary Cohen, Executive Vice President of Global Health at medical technology company BD (Becton, Dickinson and Co.). In addition to advancing global health through the manufacturing of innovative technology, BD is committed to tackling AMR.

"The most visible and cited need from industry is to develop new antimicrobial drugs, but we already know we can't rely only on the drug pipeline," Cohen says. "This is why a focus on advancing infection control and expanding the use of diagnostics is so important to keep existing antimicrobials working for as long as possible."

Lord O'Neil cited increased use of diagnostics as among the highest priority recommendations from his 2016 review, even to the point of proposing that

it should become mandatory in high income countries. Despite this, present reimbursement mechanisms in most countries do not sufficiently incentivise use of diagnostic testing, particularly in primary care.

REDUCING UNNECESSARY USE OF ANTIBIOTICS

"Influenza is among the most common infections that presents in primary care, and it is viral so antibiotics have no effect. Rapid, point of care flu tests are simple to use and low cost, yet only three countries are presently using them," says Gary Cohen. "Rapid flu testing in primary care and in hospital emergency rooms can help reduce unnecessary use of antibiotics for viral infections and potentially reduce cost to the health system.

Beyond therapies and technologies, industry can play a major role in training and helping improve existing procedures and processes."

With this in mind, BD is collaborating with highly respected institutions such as the London School of Hygiene and Tropical Medicine. They are also funding another leading organisation, the Society for Healthcare Epidemiology of America (SHEA) to develop an in-depth training programme on infection prevention and control.

In addition, they are taking advantage of the advancements in software automation to alleviate many of the human barriers to overcoming AMR. "In the US, BD offers advanced information systems that collect, analyse and report relevant data on antimicrobial resistant infections," says Gary, "This information helps to identify patients at risk and optimise clinical workflow."

THE ANTIMICROBIAL RESISTANCE FIGHTER COALITION

However sophisticated and well researched technical and training initiatives may be, he acknowledges that nothing can be accomplished in isolation. The formation of the AMR Industry Alliance, which includes commitments from pharmaceutical and diagnostic companies, is an example of industrial collaboration that specifically targets AMR. In his opinion, approaches to tackling AMR must transcend industry, academia and health institutions all stakeholders must be engaged. In setting the up The Antimicrobial Resistance Fighter Coalition (ARFC), BD are hoping to help achieve this level of collaboration.

Gary Cohen, Executive Vice President of Global Health, BD

The ARFC is currently made up of a coalition of more than 100 members from 31 countries. "The methodology of the campaign is to 'recruit' antimicrobial resistance fighters and have them prepare in their own words messages on how they are combatting AMR." These 'fighters' are typically made up of clinicians, policymakers and patients whose messages are communicated through media platforms to raise awareness of AMR. Whilst the campaign is not viral yet, it has certainly gained good traction on social media, most notably gaining 400,000 views on a video made in collaboration with the China National Hospital Coalition.

BD's engagement on AMR builds on their history of collaborating to address other major global health needs such as HIV & AIDS, TB, maternal and newborn mortality, and non-communicable diseases such as diabetes and cancer. "It's a privilege to work with leaders from the public and non-profit sectors to tackle some of the world's most pressing health challenges, and it has been a particular honour to engage with UK leaders based on their global leadership on AMR," says Gary.

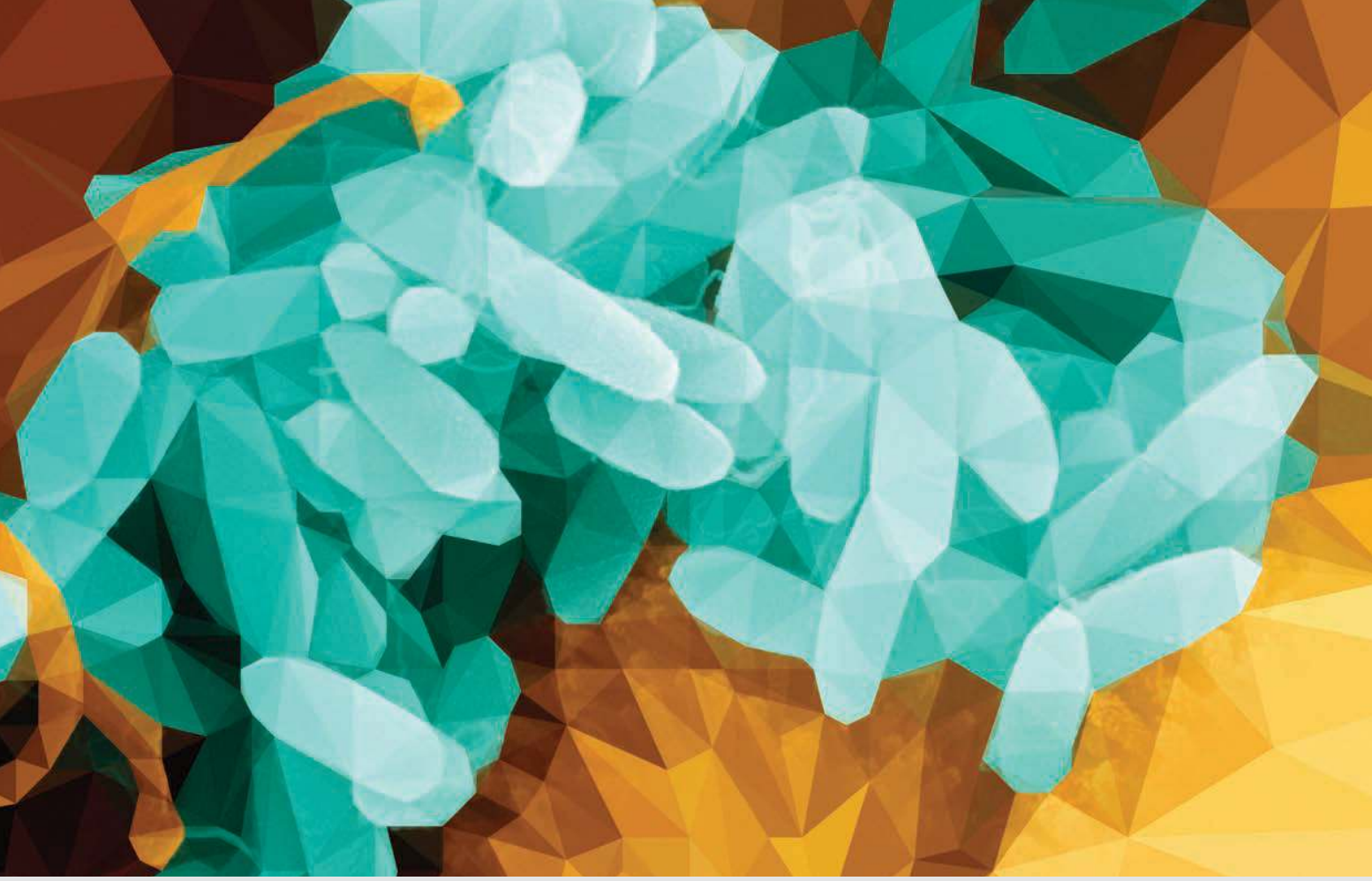
"AMR is one of the greatest threats to the health and well-being of the world's population"

Gary Cohen
Executive Vice President of Global Health, BD

"AMR is one of the greatest threats to the health and well-being of the world's population. We need to engage and unite people from all walks of society, raise their awareness and encourage them to take personal responsibility to combat this threat. This is the only way we will be able to deal successfully with this complex and challenging global problem."

CONTACT INFORMATION

BD W: **amr.bd.com**



THE DIFFERENCE WE MUST MAKE TOGETHER

ANTIMICROBIAL RESISTANCE THREATENS GLOBAL HEALTH, STABILITY AND ECONOMIC SECURITY. The rapid growth of antimicrobial resistance (AMR) transcends its devastating impact on human health. AMR is emerging among the world's leading global security and economic threats, demanding the attention of world leaders. Based on current trends, AMR will cause an estimated 10 million deaths annually by 2050, surpassing the number of deaths caused by cancer.1 BD joins with industry and world leaders in calling for mobilization of a global, collaborative alliance to address the threat of AMR. We stand ready to support this vital effort with 120 years of expertise in advancing medical practice and an extensive portfolio of products and solutions that facilitate infection prevention and control, diagnosis, surveillance and reporting, including infections resistant to antimicrobial treatment. We also bring decades of firsthand experience collaborating across the public and private sectors to advance global health in areas such as childhood immunization, HIV/AIDS, tuberculosis, sepsis and healthcare-associated infections. The threat of AMR requires full engagement and partnership among all stakeholders, including patients, clinicians, government and nongovernment agencies, academic institutions and companies. Together, we must be the first and final line of defense.

Vincent A. Forlenza
Chairman of the Board, Chief Executive Officer and President

Learn more about AMR at **amr.bd.com**

BD
Advancing the world of health

1 Review on Antimicrobial Resistance. Tackling Drug-Resistant Infections Globally: Final Report and Recommendations. 2016.

Getting the balance right: using technology to bring people closer together

In an increasingly paperless world, our smartphones have become such a given that it's hard to imagine life without them.

From the alarm going off to wake us up first thing in the morning until we've WhatsApp-ed our family halfway across the world before turning in for the night, we check our phone an average of every 12 minutes of our waking hours, according to a recent study by Ofcom. Waiting in a queue for a few minutes? Got on a train? Enjoying an Instagram-worthy meal? Our phones seem to go hand-in-hand with these regular everyday experiences.

Smart technology is changing the world for the better in a million ways - whether that's watching complex medical procedures live, monitoring life-threatening conditions through wearable tech, or using apps to stay on top of medication schedules.

Whilst the benefits are indisputable, there has been concern around how it is affecting human interactions, with people spending less time with each other, and more with technology.

In an interesting paradox, healthcare professionals find themselves balancing the human-requirements of their roles, with their dependence on technology. Treating patients with empathy, kindness, and respect are at the heart of the NHS, all delivered through human interaction. Their working lives however, are expected to be run on various fragmented pieces of technology, some accessible only from a computer terminal, and on-site.

Organisational communication is often received via multiple sources including intranet, email, printed newsletters and social media. To book and manage shifts, a plethora of websites, systems and apps have to be navigated. For the latest on health news, professionals end up spending executive time sifting through numerous sources, all the while spending less time actively interacting with colleagues or patients.

BRINGING IT ALL TOGETHER

As a technology start-up driven by a passion for supporting the NHS, Ryalto has created a solution that helps serve healthcare professionals' needs from one platform. Many of the Ryalto team have worked across critical NHS functions for many years from Trust Leadership and Strategy, to Nursing, Communications, and Digital. They have an acute understanding of the challenges being faced by both staff on the ground, and the leadership teams looking to drive positive change.

The Ryalto app has been conceptualised to help healthcare professionals take control of their working lives. From the latest Trust news and announcements, and a curated health newsfeed, to a secure messaging platform where colleagues can be instantly found and reached, the app helps staff manage every aspect of their working day from the palm of their hand. They can browse and book the latest bank shifts, or search for colleagues via the address book, saving them precious time going through multiple downloads, sheets, and often outdated databases. In what is an attempt to bridge gaps and encourage two-way communication, staff can send anonymous feedback to Trust management, or even text someone in their organisation (without having to expose their personal phone number). Hundreds of thousands of messages have already been exchanged securely on the app. Soon they will be able to access policies, quick links and health and wellbeing support too.

Live in 14 hospitals (and soon to be more), as well as a Deanery (they are supporting Junior Doctors), the impact has been incredibly positive with thousands of active users, 60 per cent of them reading Trust news every week - an uptick from readership on traditional mediums.

Using the Ryalto app has shown greater efficiency with time saved by users, increased communication in all directions, higher readership of organisational content, and impressive cost savings - to the tune of £408k over six months for a medium-sized Trust they work with, via reduced agency commission.

They're working harder than ever to ensure Trusts and staff have the tools and support they need to improve engagement and communication, reduce time being spent on various pieces of tech, and ultimately improve patient care and safety.

CONTACT INFORMATION

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Racing against time

Mobile Stroke Units are the way forward for treating more patients within the Golden Hour, says healthcare consultant Professor Rory Shaw.

Whenever the Mobile Stroke Unit of Southend Hospital is out and about in the East of England, members of the public demonstrate their support for this pioneering ambulance. It's the first of its kind in the UK and is proving to be hugely successful in its current trial, thanks to the tireless work of interventional Neuroradiologist Professor Iris Grunwald and her team who have fought hard to make it a reality.

Invented by Professor Klaus Fassbender of the University of Saarland in Germany, this state of the art ambulance takes treatment to the patient, rather than waiting for them to arrive at hospital. He came up with the idea when a breakthrough clot-busting drug was released in 1995 and he was unable to administer it to patients because they arrived too late. It wasn't until 2008 that the first unit took to the roads, and since then these customised ambulances have revolutionised stroke treatment.

Thanks to Professor Grunwald's strong links with her former University, a unit was made available to Southend Hospital from April 2018. Run in conjunction with East of England Ambulance Service and equipped with state of the art technology, the ambulance is a miracle of design. It has the world's smallest CT scanner and on board technology to examine images and relay them to the hospital while en route. It also has blood-testing equipment, weighing equipment and specially positioned cameras to allow the remote clinicians to see the patient and advise on treatment accordingly.

RACE AGAINST TIME

Early treatment of a stroke improves the outcome for a patient. When a patient is suspected to have had a stroke, a CT scan is vital to determine whether there is a blood clot or a bleed in the brain. Once the diagnosis is confirmed the patient is triaged, just as they would be in a hospital but with onboard triaging the patient is sent directly to the right ward and hospital, saving valuable time.

"Before you can give treatment you have to decide which type of stroke the patient has - a haemorrhagic stroke which is a contraindication in 15-30 per cent or whether they have an ischaemic stroke where you have a blockage of the vessel," says Professor Fassbender. "If you give the clot-busting drug in a bleed it would increase the bleeding. The only way to tell is to look with the scanner. It is different to a heart attack, the brain is much more sensitive. With the ambulance, not only do we have a range of diagnostic tools, but we can do the treatment."

Clinically it is impossible to differentiate between causes of stroke. "If you give the drug and the brain is already dead you actually cause harm," says Professor Grunwald. "In a stroke victim 2m brain cells die per minute, so time is critical. To give the clot busting drug we need to know how much the patient weighs, and we can measure this exactly when they are on the table. Often we don't know if a patient is on blood-thinning drugs and we can identify this too."

In the unit the team are also able to do a contrast angiogram to see whether the vessel is occluded. NICE guidelines state that thrombectomy can be up to 24 hours. "Sometimes you do not know when a patient was found and whether it was a 'wake up' stroke, so we can do a CT perfusion (imaging) can also be done to see how much of the brain is still alive."

The onboard Artificial Intelligence software, Co-invented by Professor Grunwald who is also Director for Neuroscience at Anglia Ruskin University, automatically analyses the scan and identifies how much brain is damaged using the standardised ASPECTS score. The ASPETS score is recommended in 19 guidelines for treatment of patients with thrombectomy.

FREEING UP RESOURCES

Professor Grunwald specialises in thrombectomy or clot removal via a catheter inserted into an artery to remove the clot, restoring blood flow and minimising brain tissue damage. When used in conjunction with other medical treatments such as the clot-busting drugs and specialist rehabilitation it can significantly reduce the severity of disability caused by a stroke. Southend Hospital is one of just a few hospitals that offers this procedure and Professor Grunwald is a world-renowned specialist in her field.

In November Professor Grunwald and her team performed the second fastest thrombolysis in the world in just 16 minutes, thanks to the Mobile Stroke Unit.

Although she is still gathering data, the unit has been able to treat one third of stroke patients at home, freeing up both ambulance resource and hospital beds. Often the unit can bypass A&E and take the patient directly to the stroke ward. Within 26 days with 58 patients the unit has saved between 114 and 250 bed days, and saved the hospital more than £17,000 per patient treated with thrombectomy.

She is hoping to run more evaluations with different centres and in the meantime is raising money to build a UK ambulance. The total cost is around £750,000 but she is hoping the costs will reduce in future as there is more competition in the scanner market.

There are currently Mobile Stroke Units in Norway, Melbourne, Qatar and the US including healthcare group Cleveland Clinics, all in consultation with Professors Fassbender and Grunwald.

"I think the future of the unit will be paramedic run," Professor Grunwald says. "At Anglia Ruskin University we are looking at setting up a special diploma for paramedics to be trained for a stroke unit so many more patients can receive treatment. The concept of the Mobile Stroke Unit has saved thousands of lives across the world."

The importance of investing in mouth care

Hospital Times speaks to Mili Doshi from Surrey and Sussex Healthcare NHS Trust about the positive impact that Mouth Care Matters is having on patient health outcomes

In many hospitals across the country, there are patients who are experiencing prolonged admissions as a consequence of poor mouth care. Severe toothache, mouth ulcers, dry mouth and oral infections are common in hospital patients and impact upon well-being and dignity, as well as the ability to eat and to communicate.

Thousands of dentures are lost in hospital every year, causing much distress to patients and adding to the financial burden of the NHS. Oral bacteria flourish in the absence of regular mouth care and is a known cause of hospital-acquired pneumonia, the second most common hospital-acquired infection.

Due to cognitive physical impairments, many patients in hospital are unable to clean their mouths or dentures and require support from healthcare professionals. This is particularly important as people are growing older and keeping their teeth for longer. Patients may be very frail or resistant to personal care so cleaning mouths can be challenging. Nursing staff and allied health care professionals often do not have training so they may lack the knowledge and skills required to provide effective mouth care.

MOUTH CARE MATTERS

Mouth Care Matters (MCM) is a Health Education England initiative to improve the oral health of patients in hospital through education and training. The programme was developed at East Surrey Hospital, has been rolled out across all 13 trusts in Kent, Surrey and Sussex and has since been adopted in a further 30 hospitals across England.

Michael Wilson CBE, Chief Executive of Surrey and Sussex Healthcare NHS Trust, praised the patient-focused programme as being "designed by clinicians for clinicians." Making reference to the programme's focus on improving outcomes, he said: "Every Chief Executive should get behind the programme because it provides a better experience for patients."


Mili Doshi, Consultant Special Care Dentist, Surrey and Sussex Healthcare NHS Trust

There is an awareness of the importance of mouth care among front-line staff but many lack the necessary skills to deliver appropriate support. Initial findings from MCM reveal that less than 40 per cent of nursing staff have had oral care training, most hospital wards do not stock appropriate mouth care products and, furthermore, oral care was only recorded in less than 5 per cent of nursing notes.

Many patients have very dry mouths that are dirty and covered in secretions and debris, leading to pain, infection and ulceration. It is often the most vulnerable groups such as those have not been orally fed or who are at the end of life who have the poorest oral care. The MCM investigation into accidental loss of dentures shows, when the data is extrapolated, that approximately 9,500 dentures are lost in NHS hospitals in England every year, costing the NHS in the region of £1m annually. Much of this is preventable.

WHAT HAS BEEN DONE?

The MCM team has recruited mouth care leads in 13 trusts to make key changes including; implementing a mouth care policy, introducing an oral health recording tool, providing ward based and classroom training sessions and ensuring wards stock appropriate products for mouth care. They discovered it was important to engage with and gain support from all hospital staff and make it a team effort.

"We have found over the last few years that there is increasing momentum from healthcare professionals in hospitals all over the country to improve the standard of mouth care," says Mili. "Changes in practice through education and training are significant in improving oral health for vulnerable groups."

"As part of the programme, we raised awareness among hostess staff about being vigilant for dentures left on meal trays, provided hands-on bedside training for nursing teams and educated doctors on how to manage common oral conditions," Mili continues. "Like other hospital campaigns including 'Hello my Name is' and 'End PJ Paralysis,' MCM is about changing hospital culture to improve the patient experience."

> "There is increasing momentum from healthcare professionals in hospitals all over the country to improve the standard of mouth care"
>
> **Mili Doshi**
> **Surrey and Sussex Healthcare NHS Trust**

IMPROVING PATIENT HEALTH OUTCOMES

Outcomes have been positive with improvements in mouth care recording and patient care benefiting both patients and staff working in Trusts. Following the scheme, one nursing assistant commented: "I have been a nursing assistant for over 10 years and have never had any mouth care training. I have learned so much like how to remove dried debris and how to suction the mouth. I never knew it could help prevent pneumonia."

Further to this, the daughter of a patient who benefited from the scheme said: "When my father was dying, his mouth became dry and really smelly, he was always really proud that he had all his own teeth. The nurse who cared for him had recently had training and showed the other nurses and ourselves how to help keep his mouth clean. We feel it made a big difference to how comfortable he was during his final days."

In addition to improving patient care, there are financial benefits. A health economics report into MCM at East Surrey Hospital found that, for every £1 invested, there was a saving of £2.66 in terms of fewer bed days, reduced number of prescriptions and GP visits. Social improvement has also been found with staff making positive changes to their oral hygiene habit and those of their families.

Mouth Care Matters will run until Autumn 2019 and will be also be extending training for children – 'Mini Mouth Care Matters'

Frances Austin, Upright MRI patient

How claustrophobia can affect MRI patients and the NHS

Nearly a third of Britons suffer from claustrophobia at some point in their lives, according to new research*. The top three nightmare scenarios are a tiny room with no windows (54 per cent), crowded places (51 per cent) and a 'tunnel' MRI scanner (45 per cent).

Over half (57 per cent) of those scanned in a conventional MRI tube said they felt very nervous. A further 10 per cent required sedation and another 13 per cent asked for the process to be stopped altogether.

25 per cent said they would prefer to leave a medical condition untreated, if they were very frightened of the test to diagnose it.

THE SOLUTION

Upright MRI scanners are entirely open at the front and allow patients to be scanned in the position they experience pain under natural weight-bearing conditions: standing, sitting, twisting, crouching, flexing their neck and so on.

The scanner is much quieter than the average MRI conventional tube and even allows patients to watch TV or DVDs on a large screen while it progresses.

Located in London and West Didsbury, Manchester these MRI scans are available to all NHS patients,

health-insured and self-pay patients with a referral from a healthcare professional, to whom the MRI report is sent afterwards.

FRANCES AUSTIN – CASE HISTORY

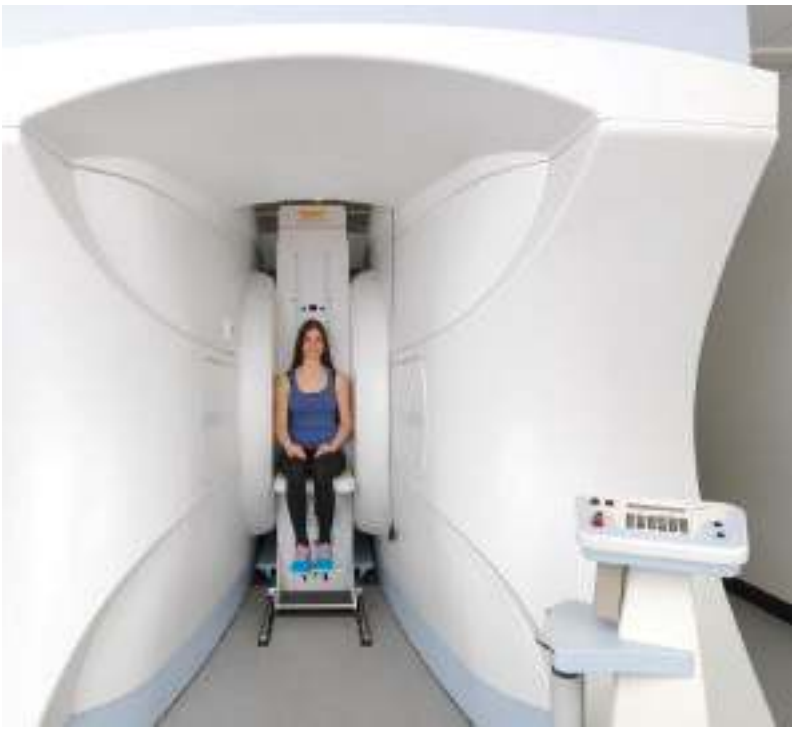
Frances Austin suffers from claustrophobia. When she first noticed that she had a feeling of fullness, tinnitus and earache in her right ear, she was worried.

Her GP referred her to consultant ENT surgeon, Mr Surya Narayan, whose immediate concern was that she may have an ear tumor, due to her symptoms affecting only one ear.

He booked her in for a conventional tube MRI scan that took place after a wait of six weeks. "We'll have to put something over your face, are you OK with that?' said a nurse. I immediately felt uncomfortable," Frances says. "When I lay on the table, they clipped a cage over my face that trapped me and I panicked… They moved me into the tube and I felt it squashing my shoulders. I went into meltdown and started crying."

So, with her consultant's agreement, she had her scan sitting upright wearing an open head coil at the Medserena Upright MRI scanning centre in West Didsbury, Manchester.

"The radiographer went to extraordinary lengths to make me feel comfortable and also adapted the equipment to suit me, so that I wouldn't feel



trapped. The MRI scanner itself is completely open at the front. I felt that I could get out at any moment. All of that allowed me to sit still without a break for 45 minutes while they performed the scans.", she said.

Afterwards her MRI and scan report was sent to her consultant. "My consultant ENT surgeon looked at my MRI and the report by Medserena's consultant neuroradiologist, Dr Amit Herwadkar and said he could clearly see that there wasn't a tumor in my ear and that was such a relief".

"He explained that my symptoms would ease as my brain would filter out the tinnitus over an eight-week period and that the overall condition was likely to settle down. And that's exactly what has happened", she concluded.

Medserena Upright MRI Centres have created online guides for further information on MRIs for claustrophobic patients, patients with acute and chronic back pain and pelvic floor conditions. Read more here:

www.back-pain-mri.com www.fear-of-mri.com www.pelvic-floor-mri.com

*Medserena Upright MRI Centres surveyed a nationally representative sample of 2,000 UK adults. A second poll was then carried out surveying 2,000 UK adults who suffer from claustrophobia. The research was conducted by OnePoll between 3-22 October 2018.

CONTACT INFORMATION

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Revolutionising cancer diagnosis with a breathalyser

According to government figures, almost half of cancers in England are diagnosed at a late stage, leading to increased cost for the NHS and ultimately patients not receiving the treatment they need.

Trying to address this, Addenbrooke's Hospital in Cambridge, part of Addenbrooke's NHS Trust, is currently testing a breathalyser that could potentially revolutionise cancer diagnosis in the UK.

The two-year trial is recruiting 1,500 participants made up of healthy individuals as well as cancer patients. The 'Breath Biopsy Device' has been developed by UK based company Owlstone Medical and Cancer Research UK.

As part of their normal metabolic processes, human body cells produce a range of volatile organic compounds (VOCs). As cancer can cause recognisable alternations in the pattern of VOCs, the test is designed to detect molecules that have emerged from the lung and into the breath. When using the device, participants will be asked to breathe into the cancer breathalyser for 10 minutes which collects VOCs and sends them to a laboratory in Cambridge for analysis.

Professor Rebecca Fitzgerald, lead trial investigator at the Cancer Research UK Cambridge Centre, said: "We urgently need to develop new tools, like this breath test, which could help to detect and diagnose cancer earlier, giving patients the best chance of surviving their disease. Owlstone Medical's Breath Biopsy® technology is the first to test across multiple cancer types, potentially paving the way for a universal breath test."

Billy Boyle, co-founder and Chief Executive of Owlstone Medical, said: "There is increasing potential for breath-based tests to aid diagnosis, sitting alongside blood and urine tests in an effort to help doctors detect and treat disease. The concept of providing a whole-body snapshot in a completely non-invasive way is very powerful and could reduce harm by sparing patients from more invasive tests that they don't need."

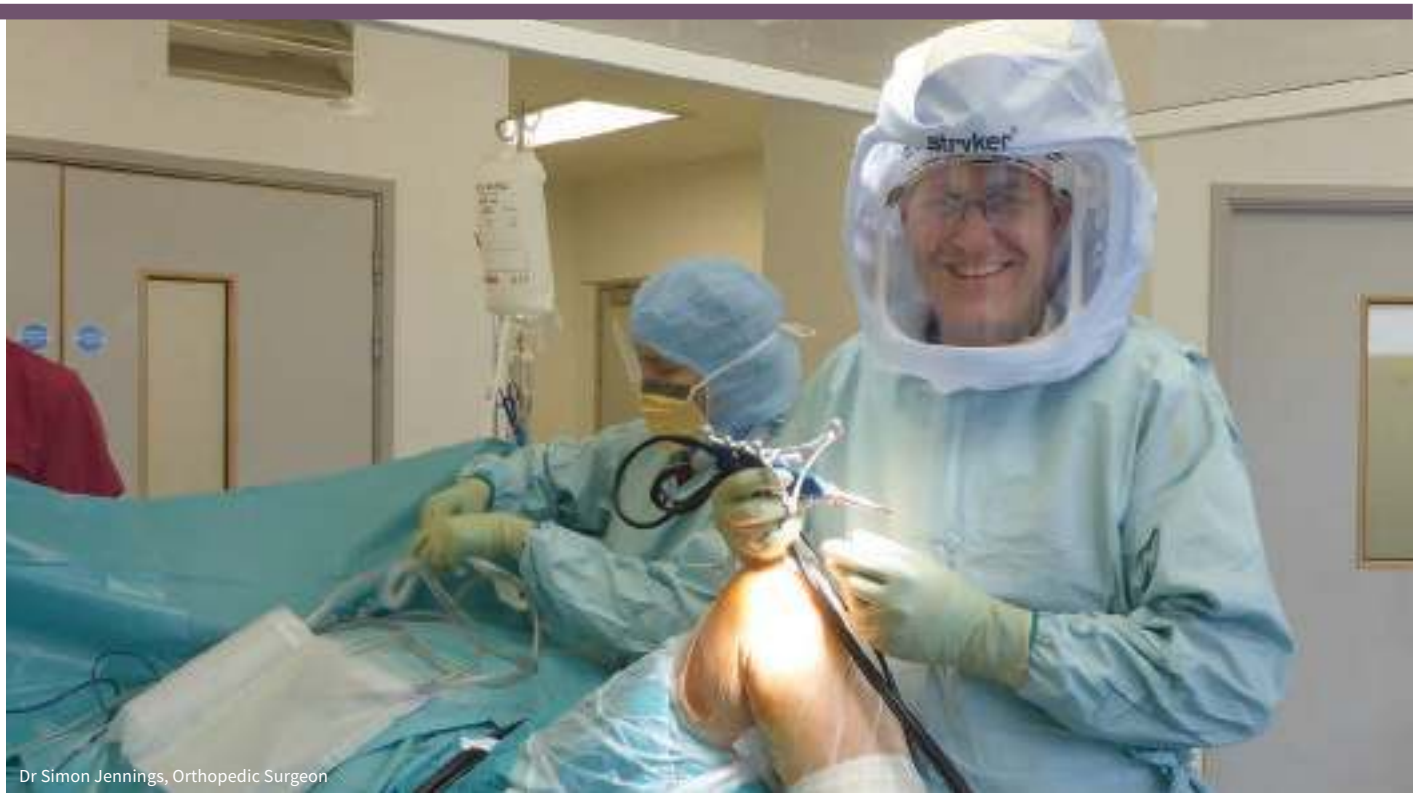
It is estimated that failure to obtain prompt diagnosis is the reason why only 12 per cent oesophageal cancer patients survive as long as 10 years. If this new treatment is found to be successful, it can save thousands of lives and save millions of pounds in healthcare costs.

If the technology proves to accurately identify cancer, the team hopes that breath biopsies could be used in future across GP practices to determine whether to refer patients for further diagnostic tests.

Dr David Crosby, head of early detection research at Cancer Research UK, said: "Technologies such as this breath test have the potential to revolutionise the way we detect and diagnose cancer in the future.

"Early detection research has faced an historic lack of funding and industry interest, and this work is a shining example of Cancer Research UK's commitment to reverse that trend and drive vital progress in shifting cancer diagnosis towards earlier stages."

Recognising the importance of early detection in improving cancer survival, Cancer Research UK has made research into this area one of its top priorities and will invest more than £20m a year in early detection research by 2019.



Dr Simon Jennings, Orthopedic Surgeon

Central Middlesex Hospital to become European leader in robotic surgery

Central Middlesex Hospital (CMH), a part of the London North West University Healthcare NHS Trust (LNWUH), is now the leading exponent of Navio robotic surgery in Europe and will become a training centre for visiting surgeons.

The announcement came after surgeons at the hospital marked the completion of their 100th procedure using robotic surgery technology for knee replacements.

Robotic surgery operates on a computer-guided system which creates a three dimensional model of the knee, granting for more accurate replacements, when compared with the traditional methods.

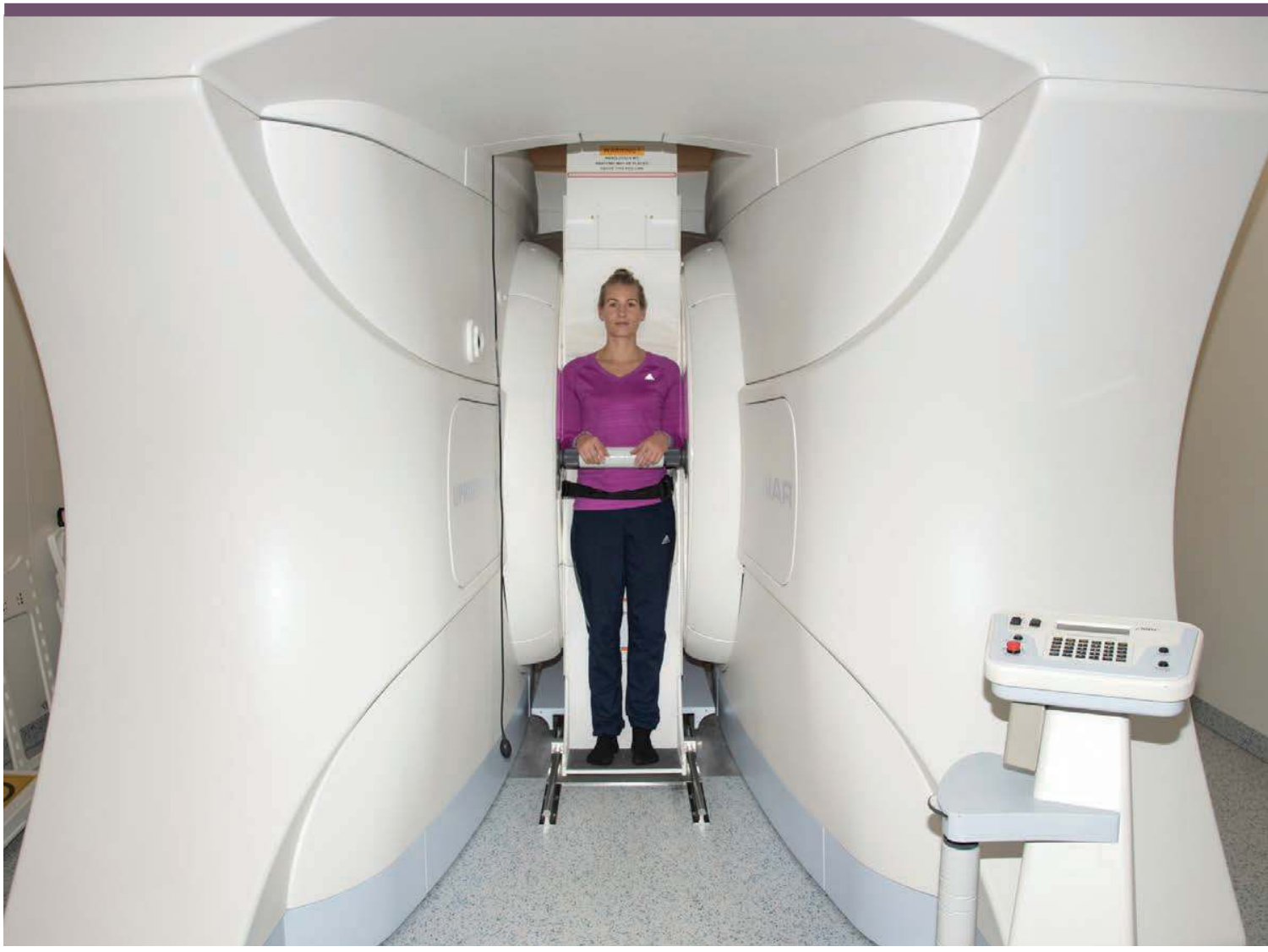
"Logic suggests that if we can fit the replacement more accurately it will feel better and people can get up and about more quickly." Said Simon Jennings, Orthopedic Surgeon for CMH, "the initial results are promising and there is a significant saving for the NHS because people are discharged within a couple of days."

In comparison to its extensive use in America, the UK has taken a more conservative approach to embracing the new technology. Dr Jennings cited one particular US surgeon who was completing this kind of robotic surgery on a daily basis, he now wants to see this level of use in this country also.

The number of knee replacement surgeries is of course expected to rise as the population continues to increase and indeed age and with this so will NHS spending on traditional knee replacements. Currently is estimated that around £585m is spent on knee replacement surgeries every year.

Given this extremely high cost, many see it as essential that more efficient and cost effective alternatives to traditional knee replacement surgeries are explored.


Dr Simon Jennings showcasing the equipment used for robotic surgery procedures



Why patients should not be forced into a claustrophobic MRI tunnel...

Professor Francis Smith pioneered the clinical application of MRI, starting the world's first clinical trial in 1980 and the first diagnostic MRI service at Aberdeen Royal Infirmary in 1981. He is currently Clinical Director at Medserena Upright MRI Centres in London and Manchester, here he discusses the benefits of upright MRI scanners to patients and the NHS.

Our research* shows that one in eight claustrophobic men would rather live with an unknown diagnosis or suffer pain in silence, than submit to a closed MRI scan. Mere sedation is not powerful enough for some, yet there are hospitals that won't offer anaesthesia in such situations. So patients may get sent home with no diagnostic imaging performed at all.

Why, therefore, does the NHS not offer upright, open MRI scans to all its claustrophobic patients? One of the reasons appears to be that many doctors and consultants simply don't know that the option exists.

THE 'NORMAL' MRI EXPERIENCE

Normally patients are required to slide into a tight, cramped, noisy tunnel - the top of which is just centimetres from their face. Understandably, many patients find this experience terrifying, inducing panic attacks and increases in blood pressure.

We estimate that around 500,000 scans of all types may be disrupted every year as a result of claustrophobia. Disrupted meaning re-scheduled, aborted during the process, delayed due to a request for sedation or cancelled altogether. That represents wasted time, slots that could be available to other patients and, of course, it's a huge burden on the budget-strapped NHS.

We are finding that, increasingly, the initiative is being taken by patients themselves having done a quick bit of research on the internet. Patients realise that instead of being crammed into a narrow tunnel they can sit or stand in an entirely open scanner, with the option of watching TV or a DVD while the examination is in progress.

Even the head coils for brain scans are designed to allow a clear view of the surrounding area

outside the system at all times and a friend or relative can stay with them in the room to provide support.

REAL CLINICAL BENEFITS

Major clinical justifications exist for using upright positional MRI rather than the conventional tunnel, especially in the evaluation of spinal pathology. Upright MRI scans are carried out in a natural weight-bearing position. In many cases, this provides a more conclusive diagnosis than supine MRIs.

The intervertebral discs are exposed to a pressure that is 11 times greater when sitting, and 8 times greater when standing, than when recumbent. These load-dependent changes can reveal pathology that is at worst not visible, or at best underestimated, in a tunnel situation.

Medserena's Upright Open MRIs allow almost complete freedom of movement. For instance, in addition to standing or sitting upright, the spinal column can be imaged bending forwards or stretching backwards, rotation and even lateral bending to the point where pain is at its most acute.

We've seen many cases of people who've had scans previously that didn't detect any abnormalities, whereas we've been able to identify the root cause.

Medserena Upright MRI Centres has created online guides for further information on MRIs for claustrophobic patients, patients with acute and chronic back pain and pelvic floor conditions. Read more here:

www.back-pain-mri.com www.fear-of-mri.com www.pelvic-floor-mri.com

*Medserena Upright MRI Centres surveyed a nationally representative sample of 2000 UK adults. A second poll was then carried out surveying 2000 UK adults who suffer from claustrophobia. The research was conducted by OnePoll between 3-22 October 2018.

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Professor Francis Smith

Estates & Facilities

Delivering the NHS estate that patients need

The National Health Service will always be at forefront of national debate.In spite of this, the infrastructure upon which our NHS is literally built has often been neglected in public discussion, an issue that Sir Robert Naylor has spent the last couple of years trying to address.

Sir Robert commands a uniquely influential voice in UK healthcare. Shortly after leaving his position as Chief Executive of University College Hospitals London (UCLH), one of the largest NHS Trust in the UK, in 2016 he was asked by then Secretary of State for Health and Social Care, Rt Hon Jeremy Hunt MP to conduct the most comprehensive strategic overview of the NHS estate since 1962.

With much of the NHS estate predating the creation of the NHS, it is clearly evident why Jeremy Hunt sought to commission a strategic overview of the NHS estate. Given Sir Robert's record of repurposing and utilising hospital estate on large scales, he was the ideal candidate to produce this report.

"Successive reorganisations of the NHS have eroded the importance of estates so the significance of estates roles within NHS Trusts has declined considerably," he comments.

THE NAYLOR REPORT, PUBLISHED MARCH 2017

FINDINGS:

- Without capital investment, the NHS estate will remain unfit for purpose and will continue to deteriorate
- £2bn of assets and land, enough for 26,000 homes could be released in London
- £5bn of investment required to plug the gap of STP backlog maintenance
- £5bn of investment required to achieve the aims of the Five Year Forward View

17 RECOMMENDATIONS INCLUDING:

- The establishment of a powerful new NHS Property Board to provide leadership and delivery support to capital plans
- Encouraging and empowering STPs to develop estates and infrastructure plans
- Collaboration from all national bodies to develop robust capital investment plans
- £10bn of medium term, capital investment to address these plans

DECADES OF EXPERIENCE

It was another Secretary of State for Health, Alan Milburn, who encouraged Sir Robert in 2000 to head up UCLH after 15 years as a Trust Chief Executive in Birmingham. Under Sir Robert's stewardship, Birmingham Heartlands Hospital was transformed from what a Commons Select Committee called a 'prisoner of war hospital' in 1985 to a modern, purpose-built facility. In becoming Chief Executive of UCLH in 2000, Sir Robert took ownership of what was then the largest Public Finance initiative (PFI) ever undertaken in the NHS.

"The most exciting part of my career was the first five years, developing the new hospital and establishing UCLH as a Foundation Trust," says Sir Robert. "Alan Milburn, who was one of the best Secretaries of State I have ever worked with, was very reforming but demanding at the same time."

Within his 16-year tenure at UCLH, Sir Robert oversaw the construction of one of the most impressive academic medical centres in Europe. These days, while there is still ongoing construction, much of the ULCH campus dates to this initial period when Sir Robert was given the autonomy to act in an entrepreneurial manner. "Take as an example, the old Middlesex Hospital," he says. "It was originally on our books for £32m but acting as property developers we actually sold it for £175m, with all the profit invested in the next phase of development."

"You have to decentralise and empower people at a local level, otherwise they lose the incentive to innovate"

Sir Robert Naylor

THE CURRENT SITUATION

Whilst the potential for a Trust to replicate this kind of commercial viability is limited, Sir Robert acknowledges that the erosion of the status of a Foundation Trust and the current period of heightened government centralisation makes it far more difficult.

"The NHS goes through cycles of centralisation and decentralisation," he observes. This effect is driven by money and politics and the freedoms of Foundation Trusts have been eroded to accommodate the less successful hospitals." In his eyes, this situation will inevitably change. "We will soon reach the position where people realise that centralising everything is not effective and we will move to a position of greater local autonomy," he continues, "You have to decentralise and empower people at a local level, otherwise they lose the incentive to innovate."

That hospitals are not currently operating in a commercial environment is a concern Sir Robert has sought to highlight to the government and wider public on many occasions. The absence of a commercial mind-set and estate deterioration is evident, perhaps most notably at Imperial College Healthcare NHS Trust.

"The three major hospitals that make up Imperial duplicate services and have £1.3bn in backlog maintenance," says Sir Robert. "Even in the unlikely

21st Century Design at UCLH

event that money was found to address this they would still operate with a dysfunctional distribution of services."

Similarly, the facilities of smaller Trusts have been allowed to operate within increasingly outdated facilities. "Hospitals in London are getting into more difficult situations now, I visited one recently where patients are housed in temporary buildings built during the Second World War," he discloses.

THE LONDON PROBLEM

Both in terms of primary and acute care services, London poses the single biggest challenge to developing a 21st century NHS estates strategy, so much so that Sir Robert took the initiative to draft a second more detailed report focusing purely on the capital.

In his opinion, one of the reasons for London's problem is political complexity. Most other major cities operate on the basis of much clearer aspirations for their estates, partly due to a smaller group of political interests that govern the city and the surrounding area. "Getting agreement between the vast numbers of different political entities in London is extremely difficult," says Sir Robert.

Sir Robert's London report contains 20 recommended reconfigurations, but he does not see a political context in which it would be possible to publish this in the foreseeable future. The issue has only been side-lined with the distractions of the Government's Brexit negotiations.

"If you don't have a strong government with a majority, controversial decisions with regards to major investment are very difficult as the NHS is inherently political," he says. "I have argued that we need to moderate political interference with the NHS and create a wider consensus about its future, although the likelihood of this happening now is low."

BRINGING GROUPS TOGETHER

Difficulties that manifest when dealing with complex redevelopment projects are best exemplified by Moorfields Hospital London, which is in the process of moving to a St Pancras site. The redevelopment process involves land owned by three different hospital trusts in addition to three separate local authorities. A project of this size and complexity will inevitably involve the Mayor's office, as well as each of the relevant STPs and CCGs who will have their own priorities. Balancing these interests and ensuring that the process is a clinically led is a mountainous task.

Using the influence Sir Robert has built up within the system, he aims to have a positive impact to progress these complex schemes. "Unless different groups involved within a scheme work together, I will advise the Secretary of State not to support their project," he says, insisting this is an important part of his advisory role. "Working together in a coherent way, Moorfields for example, we were able to bring the scheme forward by two years and save money in the process."

Sir Robert Naylor

"We need to moderate political interference with the NHS and create a wider consensus about its future"

Sir Robert Naylor

LOOKING AHEAD

The Chancellor's statement last December that long term capital investment for the NHS will be considered in the next Spending Review is positive news. "I am delighted that consideration will be given to reform the capital regime to remove the existing fragmentation of funding sources and address short-termism of capital decision making," he says. "I have argued for ten-year capital allocations and the commitment to five years is a step in the right direction. Devolving funds to local communities will help them to plan more strategically.

"We are close to reaching breaking point in some hospitals and this isn't good enough for the NHS. The need for more capital investment is patently evident – we spend far less than our European colleagues and the decision to stop PFI will only make it worse. I'm becoming more vocal about the urgency of the situation," he continues. "It's not right to say that everything is fine, because it clearly isn't. We are close to reaching breaking point in some hospitals and this isn't good enough for the NHS, regarded by many as the most important social institution of the last century."

Finally, he recognises that his opinions may cause controversy, accepting that this is an integral part of his advisory role. "I'm happy to take the blame for political controversy but not for keeping quiet when there is such an overwhelming case for improvement. If this causes political debate, but provokes action, then future patient will be the beneficiaries."

Asbestos taken from a hospital

How to save lives and millions in compensation with better asbestos management

Denis Morgan, technical and training manager for Asbestos at SOCOTEC, discusses the importance of asbestos management within the UK's NHS trusts and hospitals to safeguard the health of those using the premises.

In a recent BBC article, it was declared that nine out of 10 NHS trusts have asbestos in their hospitals.

With the backing of Jo Stevens MP, chair of the All Party Parliamentary Group for Occupational Health and Safety, the Government has been urged to conduct an audit to discover the extent of asbestos presence within NHS trusts, and whether a management plan has been established for dealing with it.

If managed carefully, asbestos in a hospital does not pose a risk to patients or staff. However, any disturbance of the material has the potential to endanger lives. In fact, the BBC found "352 claims were made against health trusts between January 2013 and December 2017 by people who had developed asbestos-related diseases in NHS buildings" – resulting in £16.4m of compensation paid out to victims.

Exposure to asbestos fibres can pose severe health risks to those inhaling asbestos fibres, with the most common being mesothelioma, a cancer of the chest lining, and asbestosis, a chronic lung disease.

Many hospital buildings were constructed years before the ban on asbestos containing materials, meaning that the hospitals – like any other building constructed before 2000 – are likely to contain asbestos in a multitude of applications and materials.

The presence of asbestos in hospitals, and other public buildings, is not surprising given their age

and it should not in itself be a significant cause for concern. Greater emphasis should be given to the control measures that are in place at these hospitals and how the materials are being safely managed.

ARE TRUSTS ADHERING TO LEGAL REQUIREMENTS?

It is a legal requirement, under the Control of Asbestos Regulations 2012, that asbestos in healthcare premises (and other non-domestic properties) should be managed. Many NHS trusts and hospitals will already be managing the presence of asbestos in their buildings and will have robust procedures for preventing accidental disturbance of the material. However, the more concerning numbers here would arguably be the 32 hospitals that failed to respond to the information request, raising questions around their records, knowledge and management of asbestos containing materials.

If undisturbed, the asbestos present is not considered a health hazard as the fibres will remain encapsulated. Refurbishment or maintenance works can all pose a risk of disturbing the asbestos, which is why knowing the location of asbestos containing materials is fundamental to long-term safe management.

While funding cuts are stretching NHS resource, asbestos management should remain a fundamental priority for trusts to mitigate the risk of asbestos-related diseases. With trusts paying out more than £16.4million in compensation as a result of asbestos within their buildings, safe management of these materials should be the primary aim, with removal being an option for items in bad condition or liable to damage/ degradation.

Of course, undertaking asbestos removal works within a hospital environment is extremely challenging and costly. With pressure on bed space and funding, hospitals will struggle to justify the proactive removal of asbestos containing materials, which can be safely managed in situ with the correct processes and procedures.

Asbestos being examined

Product Launches

IATA Compliant Transport for Streck Cell-free DNA Blood Collection Tubes

Streck Cell-Free DNA BCT® CE blood collection tubes allow isolation of high-quality cell-free DNA (cfDNA) for use in a wide range of applications such as non-invasive prenatal testing (NIPT) and liquid biopsies. Available exclusively in the UK from Alpha Laboratories, they contain a unique preservative that stabilises nucleated blood cells, prevents the release of genomic DNA (gDNA) and minimises the degradation of circulating tumour cells (CTCs).

Cell-Free DNA BCT tubes improve pre-analytical workflows by simplifying collection, storage, and shipping of whole blood samples for circulating tumour biomarker assays. They avoid the need for immediate plasma preparation and CTC processing at the collection facility whilst ensuring sample integrity is maintained. Enhanced stability and recovery of cell-free plasma DNA minimises variability associated with cell-free DNA sample preparation, ensuring consistent results are achieved. The tubes stabilise CfDNA and gDNA are for up to 14 days at 6°C to 37°C and CTCs are stable for up to 7 days, at room temperature.

Blood samples often need to be transported between clinic and laboratory. They are subject to Category B Biological Substances, UN3373 regulation. For transportation, they must be packaged according to the IATA DGR (air transport) or ADR (transport by road) Packing Instructions 650.

Following pressure differential testing performed per IATA UN3373 standards, Cell-Free DNA BCTs have been certified fully 95kPa IATA compliant. This means they can now be paired with the unique SpeciSafe® packaging solution for convenient transportation.

SpeciSafe is an all-in-one secondary packaging system that combines an ultra-absorbent material bonded to a rigid container with built in tube separation. It is designed to conveniently fulfil the requirements of UN3373 regulations by providing leak-proof protection of sample tubes. Together with a padded envelope or bag as the outer packaging for road transport, or a rigid outer box for air transport, these mailing packs offer a perfect, compliant solution for transportation of Cell-Free DNA BCTs containing blood samples. They are quick and easy to use and come in a range of sizes to ship a single blood tube up to five in one pack.

CONTACT INFORMATION

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Smiths Medical Introduces Pain Management System with Wireless Communication Capability

Smiths Medical, a leading global medical device manufacturer, has released the CADD®-Solis ambulatory infusion pump version 4.1 that sets the foundation for wireless communication globally.

The CADD®-Solis v4.1 pump is UL-marked and has full compliance with the latest product standards, including IEC-60601-1 Edition 3.1. The CADD®-Solis pump maintains the advantages of an ambulatory pump for patient mobility and also provides a single system that effectively delivers IV PCA, epidurals and peripheral nerve blocks from pump to patient.

The CADD®-Solis v4.1 pump enables new features such as:

- Longer drug names to eliminate abbreviating or truncating drug names and concentrations.
- The addition of profiles to categorize drug protocols or represent care areas.
- Wireless two-way communication with the PharmGuard® Server software to help increase efficiencies, reduce costs, and improve patient outcomes.

Customers can continue to use previous versions or choose to upgrade any CADD®-Solis model 2110 pump2 to CADD®-Solis v4.1 software using SureLink® remote support software, while maintaining their existing drug library. Turning off wireless communications or the lack of wireless access does not impact pump delivery or data retention.

Jeff Hohn, General Manager & Vice President, Infusion Systems, at Smiths Medical, says: "The new CADD®-Solis system is a continuation of Smiths Medical's commitment to advancing patient care and helping to improve outcomes through leading-edge technology. Wireless bi-directional communication sets the foundation for integrating pain management data directly into the patient records in the hospital's Electronic Medical Records (EMR), saving clinician time charting and increasing documentation accuracy. For example, providing PCA data into patient monitoring systems could be used to manage the risk of respiratory depression from the over use of opioids."

CONTACT INFORMATION

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Bender UK opens new operating theatre showroom

A new purpose-built operating theatre has been completed to offer a world-class training and demonstration base for new and existing customers to experience Bender UK technology first-hand.

The new state-of-the-art theatre showroom was formally opened by Managing Director Gareth Brunton on Monday 5th November, during a first customer visit by Manchester University Hospitals.

The demonstration room showcases theatre and clinical equipment offered by the company as part of its turnkey healthcare solutions for new build and hospital upgrade programmes. It is connected to a plant room with medical IT power systems or isolated power system (IPS) and uninterruptible power supply (UPS) to replicate power for group 2 medical locations, simulating events such as loss of power and shut-down.

High specification equipment on display in the showroom includes Merivaara surgical lights and HD camera (exclusively distributed by Bender UK), new Bender clinical pendants delivering safe power, medical gases and data, Bender touch screen theatre control panels with 42" PACS screens, vertical and horizonal aluminium bedhead trunking, AV and video routing system from Jones AV and multiple display screens and monitors from Barco.

Mr Brunton explained: "Our investment in this new demonstration area means that for the first time in our history we can now invite our customers to Ulverston to showcase our full turnkey package. The showroom incorporates the latest technology equipment and whilst impressing prospective customers from across the UK and Ireland, we also intend to utilise the facility to train and develop our own staff. Our team here is absolutely delighted with the finished result and we look forward to continuing to deliver a great service across the healthcare sector"

Bender UK is a leader in the provision of turnkey healthcare solutions incorporating medical IT/IPS power systems and uninterruptible power supplies delivering no-fail power to critical 'group 2' areas, and the supply and installation of clinical equipment for operating theatres.

Bender UK has over 500 private and NHS healthcare customers and provides maintenance support 24/7 365 to more than 350 hospitals in the UK and Ireland to ensure equipment is correctly maintained, repaired - ensuring hospitals meet statutory inspection requirements.

CONTACT INFORMATION

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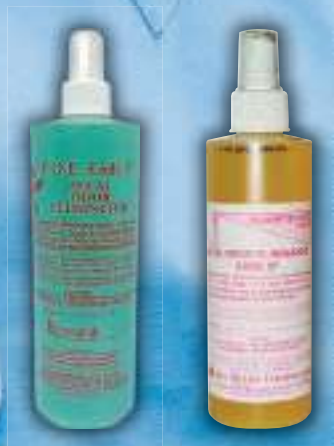

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Dame Sally Davies
Chief Medical Officer for England
Co-convener, UN Inter-Agency Coordination Group (IACG) on AMR

Combating antimicrobial resistance (AMR)

As Chief Medical Officer for England, and as a doctor, I know the very real danger that AMR and drug-resistant infections pose, at home and around the world. That's why, as co-convener of the UN Inter-Agency Coordination Group on AMR, I work closely with other countries and international organisations to ensure we collaborate to combat AMR. A "One Health" approach is vital to ensure AMR is addressed across human and veterinary health, as well as in food and the environment. I will continue to engage with government departments, health agencies, the private sector, academics, professionals and, of course, the public, on the role that we can all play in reducing this deadly threat. **Because all of us need to be resistance fighters.**

Learn more at **AntimicrobialResistanceFighters.org**

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