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FROM MUSIC THERAPISTS TO PHYSIOS TO MIDWIVES – WHY RESEARCH SHOULD BE EVERYBODY'S BUSINESS







ICA



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IN ASSOCIATION WITH NIHR AND HEE

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HEE/NIHR Integrated Clinical Academic Programme for non-medical healthcare professionals



INTERVIEW

BIRTH OF A NEW BREED

Midwives, nurses and AHPs still make up a tiny fraction of NHS clinical researchers. The NIHR's Dave Jones tells Jennifer Trueland why and how this is changing

When Dave Jones was a newly qualified doctor, patients with bleeding ulcers were a regular occurrence in the health service. In many cases treating them required emergency surgery with an expensive hospital stay.

Then researchers discovered that a bacterium, *helicobacter pylori*, was implicated, and that treating patients with a simple combination of drugs was all that was needed; it transformed care – and had a huge economic benefit.

Treatment costs a few pounds," says Professor Jones, NIHR dean for faculty trainees with the NHS National Institute for Health Research. "This has saved thousands of millions of pounds. Yet, before *H pylori*, if you'd asked how we were going to deal with the numbers of people with bleeding ulcers, the suggestion would have been training more surgeons."

This, in a nutshell, is why research is so important to the health service, says Professor Jones. And it's also why clinicians should be at the heart of it.

"In our lifetime we've seen great discoveries," he says. "But first and foremost, it's about quality, and finding ways to give better healthcare. A culture of questioning is very important for that, and that's what clinical academics do – they ask questions about what they can do better, and because they are working with patients, they can see the gaps that lead to the questions, and they have the curiosity to seek the answers."

The UK has a great tradition of medical academics, he says. Indeed, he's one himself, specialising in liver medicine in a role that has combined teaching, research, and treating patients.

But clinical research should not be the preserve of medics, he says: other disciplines, such as nursing and midwifery, allied health professionals and healthcare scientists should get the chance to bring their questioning minds, and expertise, to



'Training and research go hand in hand. And there are skills that translate very well to clinical practice'

Dave Jones

the research table as the different professions make an ever greater contribution to the delivery of quality care.

Non-medics' programme

That's why the NIHR and Health Education England have set up the Integrated Clinical Academic (ICA) programme for non-medical professions, complementing the NIHR Integrated Academic Training programme for doctors and dentists.

The ICA programme has five elements, plus a mentorship scheme. Internships are designed to give clinicians a taste of what research involves, and include an introduction to all aspects of clinical research from trial design and data management to conducting primary

research. The six month programme includes backfill for the intern's time, and allows the intern to do a research project supervised by a clinical academic supervisor.

The next step up is a Masters in Clinical Research Studentship, which can be taken over one or two years (full or part time). These are fully funded and available at 10 host universities across England.

The Clinical Doctoral Research Fellowship is aimed at graduates with some research experience who want a career that combines clinical practice with research.

The two post-doctoral programmes, Clinical Lectureship and Senior Clinical Lectureship combine clinical and academic activities and the award funds 50 per cent of the award holder's salary.

According to Professor Jones, the NHS benefits from a research-active workforce, across all disciplines. "Training and research go hand in hand," he says. "And there are skills that translate very well to clinical practice."

For example, researchers with experience of getting consent from people taking part in trials develop expertise in ensuring that patients know what's going on with their care. "Researchers understand consent, and this spreads out to the rest of their colleagues too," he says. "Having researchactive individuals has an impact on whole departments and organisations."

Attracting research grants and partnerships with industry can also bring resources and kudos to trusts, he says, adding that the NHS is well placed to be a world-leading research environment.

"We have a unique structure in the NHS because it's a single system. We have the NIHR, which is a national organisation; we have clinical research networks, and we've got lots of great people. In fact, it's so good that some people ask what's the catch," he says. "We can drive innovation and bring economic benefit and improve patient care, and training is also unique

"But the downside is that research still isn't always seen as core business in the health service. I think it is core business because it brings everything together and there's growing evidence that being a research-active organisation is good for patient care. But there are still those who think that spending money on research and development is a luxury."

Growing an expert body of clinical academics, deployed throughout the health service, who will lead and inspire others to follow in their footsteps – and will help drive improvements in patient care – is a hugely important step, he believes.

"Research and development is much more embattled in the current economic climate, so we have to demonstrate that research can make savings, and that being a researchactive organisation does bring benefits, both



to patients, and to the organisation."

Having an open mind and considering where research might lead to a step change is important, but so too is keeping a weather eye on practical application.

"Henry Ford used to say that if you asked people what they wanted [before the motor car was invented] they'd have asked for faster horses. It's important for us to keep it focused on real returns: who benefits, how do they benefit, and when?

"Blue sky thinking might be great, but you really have to think about where it goes," he adds.

He accepts there is a long way to go until non-medical clinical research becomes embedded in organisations. Indeed, he believes his work won't be done until, in his local area of Newcastle, nurses, AHPs and healthcare scientists have joint professorial and clinical appointments with the trust and university, as is the case for physicians like him. But he says that the increasing drive towards multidisciplinary working – and interdisciplinary respect – is helping to change the culture.

"We need to back away from the doctor driven research narrative. I remember when I hurt my knee whilst I was skiing. I saw an orthopaedic surgeon who couldn't do anything for me, then I saw a physiotherapist who sorted me out in 15 minutes.

"We have nurse-led services, and physioled services, and all sorts of AHPs who are the experts in what they do – they must be supported to do research because they are the ones who are seeing the gaps, and who know the questions that must be answered."

In comparison with medicine, there are

"tiny" numbers of AHP, nurse and midwifery academics, he adds. This could partly be a result of history and tradition: because there have traditionally been so few of them, there is much less opportunity for positive role-modelling. "They have been less likely to come across inspirational people in their field," he adds. "We need the inspirational people to draw people in and help them to dream the dream."

Creating a career structure

The ICA programme is part of wider efforts to develop that population of clinical academics who will, over time, help to create a new tradition where clinical research is no longer predominantly a medics-only zone.

"It's partly about attracting people in, through internships, and masters degrees, but it's also about creating that career structure." he says.

structure, ne says.

"I want to see the non-medical [clinical research] pathway coming together faster, because I think it benefits us all. There have been, and there still are, barriers, but I think they are breaking down.

"There are a lot of bright and talented people out there, with the drive to do this. It gives me enormous optimism."

*Useful links: nihr.ac.uk/hee-ica**
bit.ly/hee-nihr-animation*
hee.nhs.uk/work-programmes/clinical-academic-careers/*

The ICA Programme is funded by Health Education England who work in partnership with the National Institute for Health Research, who manage the programme

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CASE STUDIES

PRACTICAL GAINS

A speech therapist, nurse and physiotherapist are all united in their belief that the research they are doing has huge benefits both for them and the NHS



Although he might be very near the start of a clinical academic career, James Faraday's work already has the potential to change practice for the better.

The speech and language therapist, who works at The Newcastle upon Tyne Hospitals Foundation Trust, wants to transform the way that healthcare staff support people with dementia to eat and drink well, improving lives and wellbeing.

He credits his time as an HEE/NIHR intern for giving him the confidence and skills to make it happen.

"For a long time, I had the sense that our work as speech and language therapists needed to be more evidence-based," he says. "I wanted to make some efforts in that direction, but felt neither equipped nor confident to do it.



New voices: speech therapists are among those training in research

"So the advent of the HEE/NIHR Internship came at just the right time for me."

For Mr Faraday, the six month programme meant 35 days out of day-to-day work but it opened up a new world. As well as workshops, sessions with a life coach, and supervision from a lecturer at Newcastle University, it brought him together with peers from all disciplines.

This, for the self-admitted introvert, was a big surprise. "The real revelation was the networking," he says. "I was a bit wary and apprehensive about it, but it wasn't scary at all and was actually really useful. It's not my natural way of working, but it was really just talking to people about their ideas and talking to other people about my ideas. A lot of it was by email, which was helpful, but the face to face contact was really inspiring."

Interns could choose to join a research project that was already taking place, or develop their own ideas. Mr Faraday decided on the latter approach. "My interest is training by speech and language therapists, particularly around dementia care and eating and drinking. It could be about the swallow, or difficulties using cutlery, or recognising food or the importance of eating and drinking, or people might have reduced appetite.

"Speech and language therapists are already integral to this, in providing assessment and management of swallowing difficulties. But I felt we could provide more training to empower nurses and carers, and in an evidence-based way."

As part of his internship, Mr Faraday has written a protocol for a systematic review, investigating and appraising evidence with the aim of improving practice.

And that's only the start. Since completing the programme, he has successfully applied for research funding from his own trust to



continue the work, and is hoping to do a PhD in the future.

"I think the internship has been hugely helpful. It's given me the confidence and the knowledge to take this forward. I'd always want to continue with a clinical element to my work, because helping patients is the whole point of what I'm doing.

"In my view, research and clinical work shouldn't be compartmentalised."

He has been spreading the word about the ICA programme to colleagues at the trust, and has sparked some interest, he says. "I really want to enthuse people and encourage them to do research. I've felt very supported by my managers and my colleagues. I feel very lucky."

NURSE HELPS TO TACKLE CHRONIC PAIN

Thanks to Gillian Chumbley, some research funding, and a trip to Australia, there are patients in the UK who are no longer suffering the pain that was making their lives a misery.

Based at Imperial College Healthcare Trust in London, the nurse consultant has been responsible for a change in practice that led to the trust introducing ketamine to control post-operative pain in some patients.

Having received a travel bursary to Australia to learn about the use of ketamine in acute pain, followed by a four year clinical lectureship from the NIHR to research its use in chronic post-surgical pain, Ms Chumbley became the first nurse in the trust to be chief



'Being clinical, you see gaps in knowledge and you see questions you want to answer'

investigator in a randomised control trial of a medicinal product.

Now she is determined to support other nurses, allied health professionals and healthcare scientists to follow careers in research. "Being clinical, you see gaps in knowledge and you see questions you want to answer. But being funded to do research as well allows you the time to step back and do something about it.

"As a nurse consultant I've been lucky because I can spend 25 per cent of my time on research – although that tends to work out as one day a week. But the NIHR grant really gave me the time to make it happen."

Ms Chumbley's career so far has involved breaking down a number of barriers, and there have been challenges along the way. This includes juggling her research with her continuing clinical role.

But having developed a strong nursing team with a real research ethic helped, as did supportive management and a trust environment that is respectful of and committed to research.

"Obviously you have to have a passion for

what you do, and you have to be persistent to deal with the frustrations along the way," she says. "You also have to accept that something's got to give – you can't do everything perfectly."

The really positive thing is the benefit that patients are already feeling as a result of the ketamine research, she says. Although the study, which concluded in July, shows that ketamine doesn't appear to prevent patients (after thoracotomy) developing chronic pain, it did show that they needed less in the way of opioids after surgery.

What's more, Ms Chumbley has been asked to talk at national pain conferences, so has helped to spread practice beyond her trust's walls.

She has also been able to develop collaborations that have led to further research and has successfully bid for other funding – such as a £100,000 grant for a back pain project – none of which would have been possible without the NIHR grant.

"It can be hard to be the one breaking through, but we're making it easier for the people coming behind. That's good for the NHS and good for everyone."

PHYSIOTHERAPIST – AND CLINICAL RESEARCH PROFESSOR

As a professor in musculoskeletal health in primary care at Keele University, Nadine Foster has led or contributed to more than 100 papers in peer-reviewed publications, supervised masters and PhD students, and is president elect of the Society of Back Pain Research in the UK.

But it's when the physiotherapist talks about the importance of improving the care of patients that her face really lights up.

"My research is all about trying to help patients with aches and pains," she says simply. "There's a large population of people who suffer from this – they consult their GP with back pain, or knee pain, and for a lot of patients, the outcomes aren't good.

"Essentially, we're trying to improve the lot of patients, and to reduce the global burden of disease."

In 2012, she was awarded an HEE/NIHR Research Professorship for five years to support a large programme of translational research focused on improving outcomes for patients in primary care with common aches and pains.

This involves working directly with patients in primary care. "All my work is done in the NHS 'lab," she laughs. "I feel very lucky to be supported by a high quality funder, and have very good research collaborations with medical colleagues. The multidisciplinary aspect is very important."

Certainly her own work is a good example of the benefits that can accrue to the NHS from research.

She has been working with clinical commissioning groups to stratify care to identify patients who can be supported to self-manage – freeing up time and resource for those who need clinical intervention.

Professor Foster says that although she "fell into research", as a young physiotherapist there weren't the same opportunities for a clinical academic career as there would have been for a young doctor in a similar position.

Nevertheless, she pressed ahead, completing a PhD, then moving up the academic ladder to her current position. That's not to say it's always been easy. "At times I felt disadvantaged. I didn't want to move full-time into academic life; I wanted to work with patients. If I had been a medical doctor I wouldn't have had to decide between one or the other; I'd have been able to combine being a clinician with being an academic.

"I think it's really important that we are now seeing career pathways for non-medical clinical academics, and I think that's got to be good for the health service and for patients, as well as the clinical academics themselves."

Having been a pioneer herself, she is optimistic about the future. "There are plenty of great people coming behind us," she says. "We know that what we all want is improved care and better outcomes and what we want is a system that is focused on this. Clinical academics are the sort of people who are curious, who will ask questions, and that leads to cycles of continuous improvement. It's really important that clinical services are research-active, and it needs to be the case throughout the system." ●

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WORKFORCE

'MANAGERS NEED TO RELEASE BRIGHT STAFF'

Developing new combined clinical and research roles will be part of wider organisational and culture change that the NHS must go through in order to push more of its best people into doing research. Jennifer Trueland reports

There's a growing body of evidence that being a research-active NHS organisation is good for patient care.

Clinical research means patients get access to newer treatments, faster; it can generate income, and help to build trust reputation and attract and retain the best staff.

But although there are significant pockets and clusters of great practice, research is still far from embedded across the NHS.

That's a shame, says Tracey Batten, chief executive of Imperial College Healthcare Trust, who believes that some trusts could be missing a trick.

"Imperial was the first academic health science network in the UK; it's really in the DNA of the organisation.

"All our staff know that what we aim for is excellent clinical services, research and education. It's inherent to the delivery of everything we do.

"My view is that it ensures that our patients are getting access to the latest technology and innovations; it means we have clinicians with enquiring minds, delivering excellent and safe care. Yes, it takes investment in the workforce, but it's a workforce that's looking at how we can improve patient care every day."

Of course the money that research can bring in terms of research grants and other sources of income isn't to be taken lightly.

Tim Jones, director of delivery at University Hospitals Birmingham, who has board level responsibility for research and development, reckons that research and development is worth some £30m to the trust.

"We're a large, tertiary teaching hospital and we're very interested in research," he says. "For us, it's pragmatic as well as altruistic. To attract the best clinicians you need a culture of research and innovation. Being known for research means we get higher calibre candidates for jobs. But it's also reputational in a broader sense. If we're associated with interesting research, then it can lead to positive publicity, which is great for us locally and nationally."

He believes that more and more research is being carried out in a multidisciplinary way. He welcomes moves to encourage all health professionals to develop their knowledge, skills and confidence around research. Again, it's a mix of pragmatism and altruism.

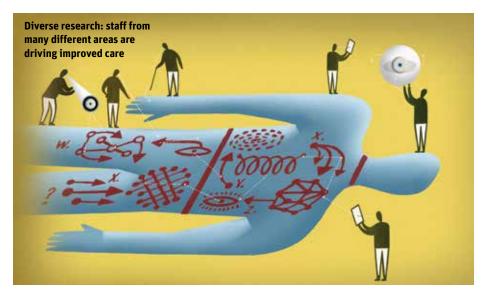
"It's not only about research in itself; there are transferable skills, like learning how to build a business case.

He does believe that wider cultural change around research is needed across the NHS. "We're buddied up with a district general hospital to help people to see the benefits," he says. "In too many places, research is still seen as pulling people away from clinical care. But when you have clinicians involved in research it can make an immediate transformational difference that really brings great value."

It is not only clinicians who need to be engaged in efforts to embed research, he adds. "Managers need to be willing to release staff, and sometimes the problem is that it's your brightest and best who want to do research, so you don't want to release them. But if you're going to keep your brightest and best, you've got to support them to do what they have to do."

Just as research has historically been more common among medics than other clinicians, so too has it often been seen as the preserve of the acute teaching hospital. Sarah Williams for one would like to challenge that view.

Ms Williams is associate director of research and clinical effectiveness at Solent Trust, which is one of the largest providers of community services in the NHS and a research pioneer. She believes it's vital that research takes place in all health and care settings. "Traditionally the big acute teaching hospitals have been very active in research – they've got the medical resources and they



have the infrastructure. We've challenged that down here. We might not have large biomedical research centres, but we can excel in community and mental healthcare research and particularly AHP-led research. We need more evidence around community and out-of-hospital care, as that is the direction of travel, particularly for long term conditions."

With a wide portfolio that stretches from podiatry to dementia and rehabilitation to sexual health, the trust is encouraging all clinicians to get involved in research. Ms Williams believes it brings benefits to the trust. "It's not just about income and getting people access to big trials. It's also about using research to improve the care we're delivering. In some studies it's a long game – we don't see immediate benefit. But in others, you can really see it having an impact."

She cites research that has involved engaging with care homes to improve care for people with dementia. "We're trying to do more with social care, and be more integrated," she says. "The real value of research is when it's not isolated."

Near neighbour University Hospitals Southampton Foundation Trust has a reputation as a research-active trust, and has also been a pioneer in developing interesting career opportunities for nurses and allied health professionals who want to combine research with clinical work.

Combined posts

Judy Gillow, who was until September the director of nursing and organisational development at the trust, has been instrumental in setting up two combined posts at professor level, one (for a clinical nurse chair) has already started and another post is in the pipeline. Both are joint appointments between the NHS and university.

"We've been working with Southampton University to develop a clinical academic research pathway," she explains.

"The impact so far has been phenomenal; it's been a real success and I hope there will be many more."

There are several reasons why the trust focuses on clinical academic careers, she says. "We should be developing leading edge care, and this is a way to attract good practitioners, to broaden practice, to encourage people to ask critical questions and develop their analytical skills. The patients benefit, the trust benefits, and the individuals are happy at work."

This rings true for Wendy Tindale, consultant clinical scientist and scientific director at Sheffield Teaching Hospitals who (among other roles) holds a chair at the University of Sheffield and is clinical director of Devices for Dignity, an NIHR Healthcare Technology Co-operative.

She and her colleague Sue Pownall, head of speech therapy at the trust, say that



encouraging and training AHPs to take up clinical research has valuable knock-on effects for health services as well as the clinicians concerned.

"It builds staff confidence, they feel more able to ask questions and challenge – and that benefits patient care," says Ms Pownall.

Professor Tindale believes that the time is right to develop clinical academic careers across the spectrum of health professionals. "It's important to look at the big picture and the whole of the patient's journey, and see who is in the right place to ask the right questions. But it's also about disseminating the results of research, and I think it's important to involve patients and the public in spreading that message."

'By allowing staff to combine academic research and clinical activities, we have attracted new talent'

Creating new clinical academic posts is not necessarily easy, but it is worth it, says Sir Ron Kerr, former chief executive and now executive vice chairman of Guy's and St Thomas' Foundation Trust, which employs a number of staff on the Integrated Clinical Academic programme.

"While it can be a challenge to create these roles, particularly among nursing, midwifery and allied health professionals, the benefits are clear. By allowing staff to combine

academic research and clinical activities, we have attracted new talent to the trust and also been able to provide exciting and valuable development opportunities for existing staff.

"These staff undoubtedly bring additional skills and knowledge into the organisation and are then able to apply this to their clinical practice. The type of research that is being undertaken will enable us to improve clinical quality, safety or even patient outcomes."

Current ICA roles at Guy's and St Thomas' are wide ranging and include a dietitian looking at the prevention of type 2 diabetes among patients with HIV; a nurse looking at how to improve communication about the BRCA 1 and 2 mutations to patients with breast and ovarian cancer and their potentially at risk relatives; a midwife looking at women's experiences of risk assessment for pre-term birth; and a dietitian looking at the impact of malnutrition among elderly people accessing health and social care services in the community.

"While it may seem challenging to create half time clinical roles, it is not impossible, and the fears that staff would leave the trust once they completed their research, or move full time into academia, have proved unfounded," adds Sir Ron.

Commercial gains – including potential profit from spin-off companies – are obviously an attraction for any trust but, back in Birmingham, Mr Jones believes there's a bigger game afoot.

"Our vision is to develop the best in care. To do that, there must be a focus on quality, patient experience, research and innovation, and a fit for purpose workforce. Research is at the very heart of our values."

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CASE STUDIES

CLINICAL NOTES

A music therapist's investigation into the benefits of her therapy is just one example of the new directions research is taking on the ground



As a music therapist working in the NHS, Catherine Carr had always wanted to study for a doctorate, but the barriers seemed insurmountable.

How could she afford the salary drop if she gave up her job? Could she juggle working and studying at the same time? What would happen to her career if she took time out?

But working with adults with mental health problems, she also had a fierce desire to do more to help her patients and those like them; what's more, she had a good idea about how that might be possible.

"I really felt that intensive music therapy in adult inpatient settings could bring real benefits, but it was difficult to find evidence to back this up," she explains.

"I wanted to know things like whether patients would take it up if it was offered more than once a week, what impact it would have in a hospital environment, whether it would lead to more positive outcomes for people with mental health problems, and for staff. But to find out these things, it was necessary to have a thorough understanding of the intervention."

In other words, the way forward for Ms Carr was research, but she didn't necessarily feel she was equipped to take it forward on her own. "My background was a music degree – our training didn't really cover the basics of research," she explains.

A colleague made her aware of the possibility of applying for NIHR funding; she was successful, and has now completed her PhD.

While this is obviously a tremendous personal achievement, the research is already having an impact on patients and health services. Early results show that inpatients

who take part in music therapy several times a week experience benefits such as being able to express themselves emotionally, connect with other people, and have a better attention span. "What we can say about music therapy is that it gives people a chance to be heard – they don't have to have words," she says.

Staff reported in particular that intensive music therapy had an immediate effect on patients' mood, with angry patients becoming calmer, and sad or low patients becoming livelier. "[Patients] felt safe enough to say they were angry, for example," she adds. "It also improved relationships with others on the ward."

As a result of her findings, her trust has taken the principles of intensive therapy for adult inpatients and is looking at applying it across arts therapies. Ms Carr is also investigating whether it is beneficial for people who aren't inpatients, which could lead to even more change.

Ms Carr is now working with East London Foundation Trust and Queen Mary University of London. Having thoroughly caught the research bug, she has now been awarded an HEE/NIHR Clinical Lecturership that will allow her to continue her joint role as a clinician and researcher.

One of her goals is developing what will effectively be a manual for other music therapists, so that they can put her research findings into practice – benefiting the NHS as a whole, staff, and, of course, patients and service users.

HEALTHCARE SCIENTISTS OPTIMISING DIABETES CARE

Across the NHS, pathology workload is increasing at around 8 to 10 per cent each year, placing a huge burden on lab resources and trust finances.

Yet not every test is necessary, some are



taken at the wrong time so are virtually useless, and there's duplication in the system, wasting patient and staff time as well as public money.

Even in one disease area such as diabetes, getting a better handle on how, where and when tests are ordered has the potential to save the NHS millions. But how do you do it?

That's where Owen Driskell comes in. The clinical biochemist and NIHR Clinical Research Network lead for laboratory medicine, based in the West Midlands, is working to improve test utilisation – with likely positive effects for quality and outcomes as well as the financial bottom line.

His work in diabetes has shown that huge improvements could be made to optimise testing in diabetes, with implications for all disease areas, on the basis of focused and skilled clinical research.

Having become one of the first recipients of a Healthcare Scientist fellowship, 50 per cent of Mr Driskell's time has been protected for research. This has allowed him to take part in the INTERCEPT study, which aims to reduce the burden of unnecessary testing in pathology, using diabetes as a model.

"The aim is to make sure that the right test is performed for the right patient at the right



time to ensure the best outcome for patients while making the best use of NHS resources," he says.

"We know that there's quite a lot of variety between labs, but we wanted to know why."

He and colleagues found out that almost half of HbA1c tests in people with diabetes were taken at times that didn't comply with guidance, some done too soon, and some too late. This is costing the NHS large sums of money, as well as potentially harming patient outcomes.

Work to improve adherence with guidelines and optimise testing, efficiency and patient outcomes is underway.

"The guidelines, at the minute, are based on expert opinion rather than research evidence. In the INTERCEPT study we have also shown what optimal testing would be and that it is associated with better diabetic control and so would lead to fewer adverse patient outcomes, for example strokes, heart attacks (which have far greater economic burden than the cost of the tests to avoid them).

"To me this highlights that laboratory results are not just numbers, they are central to effective healthcare and have an impact way beyond laboratory budgets."

'I've been taught to be a critical reader – I can look at a journal article now and critique it'

Mr Driskell has planned his career with an eye to research possibilities. "One of the reasons that I chose the job in the West Midlands was the opportunity to develop research. With the support of my boss, I was able to pursue an interest in research and then the NIHR opportunity came up. This offered the chance for me to focus on developing as a researcher, but also to do the research in this important area."

He believes that health scientists – and patients – benefit from being engaged in clinical research, but says it is difficult for them to pursue it without support.

"We need to engage young training scientists to recognise that research is part of what the NHS does," he says. "And we also need the NHS to be responsive and encourage staff to take up these opportunities and support them to do it."

Listen and learn: evidence suggests that music therapy can help lift patients' moods

SPREADING THE MESSAGE ABOUT THE VALUE OF RESEARCH

Anthony Gilbert really loved his job as a physiotherapist at the Royal National Orthopaedic Hospital, working with complex patients in a highly specialist setting.

But a desire to further improve the already excellent care that was offered at the trust led him to apply to do a masters degree in research at Southampton University.

Having completed the course, under the HEE/NIHR Integrated Clinical Academic (ICA) programme, he is now back at the trust with new roles, as therapies research coordinator and clinical academic physiotherapist.

Mr Gilbert feels that he has benefited personally from the masters programme – but believes his trust is the better for it too.

"I've been taught to be a critical reader – I can look at a journal article now and critique it. I'm also happy to challenge colleagues' thinking – I think I'm quite unpopular now," he laughs.

"But I actually think that research is becoming more popular in the therapies directorate. People are aware of what I've done, and others are interested in doing a masters, or getting involved in research."

He also believes that doing the masters has helped his standing in the department. "People see me as more of a leader and I can support and mentor other people to do research. People can see what I've done, and I think they're interested in taking something similar forward themselves."

His research ambitions have by no means stopped with the masters degree. "I really want to do a PhD but I also want to stay in the NHS and stay in this hospital. There are challenging and complex patients here, and I love it."

He believes, however, that people who have done the masters need to be supported to continue research when they go back to their NHS posts.

"For me, I've come into a newly developed post and it has a real research focus. But some of my cohort on the masters have gone back to their purely clinical posts and they don't really feel they have the space to continue with research. It's great that we're training people, but I think there's a real need to prioritise the career pathway."

Getting support from his manager to do the masters and also to recognise the value of research has been crucial. "Without that support from my manager, I wouldn't have been able to do it," he says. "But I think that having a focus on research really helps the NHS. For me, it's really exciting and there's a real buzz in our department. It's really making a difference."

ICA

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INTERVIEW

'HAVING ROLE MODELS IS KEY'

Clinical research should be a 'real positive' that helps the career progression of all clinicians, not just medics, says HEE's Nicki Latham

Nicki Latham would love to see a day when clinical research is so embedded in the NHS that it becomes an unquestioned part of it. She would like it to be seen as just something that's done, because that is what the NHS does.

But the chief operating officer at Health Education England knows that there is still a way to go – and believes that a research-ready workforce is key to making it happen.

That is the reasoning behind the relatively recent drive to promote clinical academic careers across a wide variety of health professions, not just doctors.

For Ms Latham's organisation, there are policy imperatives that must be met. For example, under the terms of the Health and Social Care Act, HEE has a statutory responsibility to promote research.

The organisation has also been mandated to develop a more flexible workforce that embraces research and innovation and can adapt to the changing demands of public health, healthcare and care services.

But, according to Ms Latham, it goes deeper than these organisational responsibilities: it is about ensuring that research is at the heart of workforce development. "From our perspective, it's clear that research-active trusts provide better care for patients and it's equally clear that you shouldn't separate theory and practice," she says. "We need our healthcare professionals to be evidence-based in their practice, so the question is how should we go about making that happen."

One of the big issues, of course, is that clinical research has for many years largely been the domain of medics, particularly in terms of combined clinical and academic posts.

So how is HEE working to change that culture, and meet its other objective of

supporting clinical academic careers and increasing numbers of staff across all clinical and public health professions with a proper understanding of research and its role in improving health outcomes?

Developing a clinical academic career framework and pathway has been a good start. "At HEE we contribute to the policy and provide the framework," says Ms Latham. "Our teams started to work in a multiprofessional way to build that.

"What we really want to do is ensure that all health professionals have the opportunity to develop skills and confidence in research – and to ensure that we have the next leaders for the current and future workforce, and to provide the next leaders for research."

Although the focus of the new framework – the HEE/NIHR Integrated Clinical Academic programme – is non-medical health professionals, the medical model is an inspiration, says Ms Latham.

"From our perspective, we've seen from medicine how clinical academics have had a real impact, contributing new medical knowledge and ways of delivering care. It's our responsibility to provide the opportunity for other clinicians to forge that link between research and practice and make a real difference to patient care."

She sees it as a crucial part of workforce planning, particularly as the public sector continues to grapple with well rehearsed challenges such as an ageing population, new and expensive technologies and a move to greater health and social care integration. "We need a workforce that is flexible and responsive to what the system needs," she says simply.

The HEE/NIHR Integrated Clinical Academic programme is a vital vehicle for delivering this, she says. But it is not a silver bullet, and won't in itself lead to the step





'We have to get to the point where research is something that's seen as what we do in everyday practice'

Nicki Latham



change that is needed for clinical research to become embedded across the health and care system. "Having role models is key," she says. "In medicine it's accepted that doing clinical research is a real positive in terms of career progression. But when it comes to nonmedics, there's still quite a lot of work to do."

Part of that is very definitely cultural. "In a way, it's a change management programme," she says. "We have to get to the point where research is something that's seen as what we do in everyday practice. That's about engagement and educating and empowering staff and managers."

With its national role, HEE is "pivotal" both in creating the framework and in encouraging organisations to take it forward, she says.

"We live in difficult and challenging times, and so it's important that research is an important constant, rather than a 'nice to have'," she adds.

It is early days for the Integrated Clinical Academic programme, but feedback so far has been overwhelmingly positive, says Ms Latham. "The internships are becoming really quite popular," she says, adding that she has personally been impressed by the research that is already coming through as a result of the programme; she stresses that the grants are highly contested.

In a sense, however, HEE and NIHR are planting the seeds that will take time to reach their full potential. "We're creating a pipeline of clinical researchers, and they are spreading what they have learned throughout their organisations and beyond.

"Of course it's very important that research findings are put into practice when people are back in their trusts, and we need to look at evaluation to see the long term impact."

Clinicians, she adds, are ideally placed while working on the ward (or any other healthcare setting) to recognise where there is a research need. "It needs to go from ward to research and back to the ward again," she says.

"But doing research helps people to develop clinically as well as academically. They know the problems and the issues that their patients and service users are experiencing, and they know the questions to ask to make it better for them. That's the important thing, and our job is to help create the policy conditions to make that happen."

CASE STUDY: USING CATHETERS BETTER TO FIGHT INFECTION

Even the most dedicated infection prevention nurse would be the first to admit that catheters are not perhaps the most glamorous part of healthcare. But catheter-associated urinary tract infections (CAUTI) can have a big impact on individuals and, indeed, on NHS resources.

That's why Jacqui Prieto's research and clinical work is focused on reducing rates of infection – and on reducing inappropriate use of catheters.

Currently associate professor and HEE/ NIHR senior clinical lecturer at the University of Southampton and a nurse specialist in infection prevention at University Hospital Southampton Foundation Trust, she leads a combined programme of research and quality improvement to understand how catheters are used in hospitals.

Key research questions include what influences their use, what drives unnecessary use and, importantly, what can be done to reduce use in order to prevent CAUTI as much as possible, potentially saving staff time, bed days and, of course, patient distress.

"We're looking at optimising catheter care, including prompt removal, and questioning whether they are always necessary," she says. "Of course some patients will need catheters, but there is scope to avoid their use in a lot of cases."

The ongoing programme of research has shown very impressive outcomes so far, including a reduction in catheterisation rate, a decrease in inappropriate catheterisation from 9 per cent in 2011 to 5 per cent in 2015, and standardised documentation for recording catheter insertion and care, and defined indications for catheterisation.

In addition, an initiative to use portable bladder scanners to assess patients for urinary retention in a non-invasive way (and avoiding, where possible, the use of indwelling catheters) has saved the trust an estimated £19,548 per month by avoiding CAUTI.

Another important part of her role is encouraging culture change, and persuading nurses that, not only can they consider alternatives to catheterisation, they should stand their ground with other health professionals, knowing that their practice is backed by the best evidence.

A joint clinical and academic appointment at professor level is unusual in nursing, so Ms Prieto is something of a pioneer. But she is determined to encourage others to follow in that path.

She believes that there is still a way to go until such appointments become the norm, but has appreciated the opportunities that working in a research-active trust have offered. "The nursing executive team has been highly supportive of this programme, which is very important," she says.

"Typically people have had to make a choice between a clinical or academic career," she says. "But I've always valued my clinical work, and for me, being able to combine the two is a dream job."









The ICA Programme is funded by Health Education England who work in partnership with the National Institute for Health Research, who manage the programme

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