



Research and Innovation Annual Report 2022/23

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Executive summary

The Strategy, Research and Innovation Directorate has continued to grow its exciting portfolio of activity over the past 12 months, further developing the support we offer to clinical colleagues and their patients. Underpinning all of our work is the drive to provide the best care and outcomes for our patients.

Our work programme is focussed on the delivery of our Research and Innovation strategies, which have set ambitious goals for the last five years. I am pleased to report that we have surpassed all of these goals and are now setting our ambitions for the next five years.

Our research strategy is focussed on increasing access to research for our patients. There is strong evidence¹ that involvement in research improves outcomes for patients, and there is a statutory duty for NHS organisations to promote research². To achieve this we have set out to grow our research in three main ways:

- We have diversified our research base, from almost exclusively National Institute for Health Research (NIHR) funded research in 2018-19, to include significant commercial and academic research activity. These three research strands enrich the participation in research by our staff and provide a wider range of opportunities for our patients to benefit from involvement in research. This approach has also diversified the funding base for our research activity making it more resilient, with 42% of income now coming from sources other than the NIHR.
- We have supported, developed and invested in our staff to lead and support research. This has included
 increasing the number of principal investigators (PI), particularly non-medical PIs including allied health
 professionals (AHPs) and nurses.
- We have strengthened our partnerships with academic institutions through joint appointments of two
 professors (with University of Suffolk and Anglia Ruskin University) and research assistants.

We have seen record numbers of patients (6,316) involved in research last year, many exciting new collaborations and several 'firsts' for research studies nationally and even globally.

Our Innovation strategy aims to support our services to identify and introduce new technology, new skill mix and new approaches to their work in order to achieve our Trust ambition to offer the best care and experience. Key areas of focus include:

- Supporting the introduction of new technology, including apps supporting patients to self-care and digital histopathology to speed up the diagnosis of serious illness.
- Introducing robotic surgery and AI in to clinical care. We are now a leading centre for robotic surgery, becoming a European reference site for abdominopelvic surgery and we have launched The Institute for Excellence in Robotic Surgery (TIERS) with Anglia Ruskin University (ARU). We have supported the introduction of a clutch of AI tools in Stroke Medicine, Cardiology and Radiology.
- Supporting innovators to develop their ideas with patent searches, advice on development, development grants and liaison with potential industry partners.
- Horizon scanning for new opportunities, including genomics.
- Workforce innovation including further development of our world-renowned advanced clinical skills and simulation training, development of our apprenticeship programme (now with more than 330 staff in

¹ Ozdemir, B. A., Karthikesalingam, A., Sinha, S., Poloniecki, J. D., Hinchliffe, R. J., Thompson, M. M., Gower, J. D., Boaz, A., Holt, P. J. E. (2015). Research Activity and the Association with Mortality. PLOS ONE, 10(2), e0118253. https://doi.org/10.1371/journal.pone.0118253

² The Health and Care Act 2022

- apprenticeships), outreach work with schools and students in further education, and our innovative training academies programme.
- Population health management (PHM): we host the regional PHM development team supporting six integrated care systems in the East of England to develop skills and analysis to improve services for patients and reduce health inequalities. The introduction of a new Trainee Health Psychologist is an exciting development this year.

This has been another year of strong development for Research and Innovation, and I am pleased to commend this report to the Board.

Dr Shane Gordon

Director of Strategy, Research and Innovation

July 2023

Research and Development Unit

Research is for everyone: patients, carers, staff and the public

Clinical research is vital for providing the evidence needed to deliver high-quality and cost-effective healthcare services, and to improve outcomes for patients both locally and nationally. It is through research that we are able to develop and test new treatments and approaches to healthcare, and better understand existing conditions.

Research studies are taking place all the time across our Trust. Our teams, researchers, clinicians and all the support units who help us deliver our research portfolio have worked diligently to improve outcomes for patients both locally and nationally. Together with the vision and support of the Trust Board and Colchester and Ipswich Hospitals Charity, this has enabled the



research unit to be ambitious in delivering high-quality research. However, we would not be able to take part in research if it was not for patients, carers, staff and members of the public volunteering to participate. An enormous thank you to you all!

In the last 18 months our research focus through hosting externally sponsored studies, has been to reset and return to pre-pandemic levels, to continue to deliver relevant high-quality research to the population we serve. In addition, we have grown our locally developed research portfolio, with more grant applications, joint appointments and collaborations with our local and national academic partners.

Research performance data is shown from April 2022 to March 2023, plus in parts, data from April 2023 to June 2023.

LOOKING AT OUR RESEARCH NUMBERS

6,316 numbers recruited	251 studies currently active	studies currently in set up	145 principal investigators
new principal investigators	30 specialties active in research	27 units supporting research	9 R&D patient, public groups
123 'own' research applications	16 grants submitted	research nurses/midwives	6 allied health professionals
12 Clinical research practitioners	206 articles and abstracts	76 members of the core R&D team	£3.2m research funding

Offering the best opportunities and increasing equality for research participation

At ESNEFT our strategy is to ensure as many people as possible benefit from involvement in relevant research. Our research portfolio continues to grow to be able to offer our patients the very best treatments, medicines and services available, because we know patients cared for in a research-active environment have better outcomes³.

Research is needed to improve the organisation, quality and accessibility of health and social care services in rural and coastal areas. We are developing new links with local universities to work together to address some of these challenges. Currently at ESNEFT we now offer research opportunities at our Clacton site, to reduce travelling for our patients. and we are leading on our NIHR award *addressing barriers for people with learning disabilities to take part in research*; interim results of this program of work will be due in Autumn 2024.

Below are only a very few examples of the opportunities we are providing through research, as we continue to work with many different organisations national and internationally.

Cancer Teams

We are the top recruiter for the Cancer FOxTROT3 study, run by the cancer team at Ipswich.



Alan Godbold, 62, from Leiston

When Alan was diagnosed with bowel cancer he didn't hesitate when asked if he'd be interested in joining the FOxTROT3 research study looking into treatments for cancer. He said: "I didn't even question saying yes to the research – I said of course I would go for it as I want to help people in the future. I wouldn't be able to have any treatment at all if it wasn't for people who have previously taken part in research, so I wanted to do my bit too."

Research and Development, and Artificial Intelligence (AI) - As well as the traditional research portfolio of studies, our cancer team at Ipswich is one of a few sites in the UK supporting a research study Qure.AI to deploy impactful AI technologies in reading chest x-rays to prove a faster lung cancer screening pathway. This type of research will benefit developers and NHS adopters, in having evidence base research. Having this evidence will assure clinicians and provide them with confidence when using these cutting-edge technologies, to provide care for patients across our Trust.

Commercial companies are lining up to run their studies with our Haematology research team at Colchester's Collingwood Centre. Three new members of team are now in post with a renewed focus on supporting commercial trials. The team is also supporting other complex commercial trials across speciality boundaries.

Our Haematology research team at Colchester were the top recruiter in January 2023 for the **Mithridate** study looking into treatment options for patients with blood cancers.



Pictured: Some of our haematology team

¹Research Activity and the Association with Mortality | PLOS ONE

NHS fast tracks life-extending prostate cancer drug to patients - the impact of our involvement in research is far reaching and was highlighted at the end of 2022, when the NHS became the first in Europe to roll out the drug Darolutamide to patients whose prostate cancer has spread to other parts of the body. Our Oncology research team at Colchester delivered the research trial called **ARASENS** and featured in an NHS England news story. They were also the top recruiter for the study!

Our principal investigator (PI) for the trial Dr Kumar said: "This drug is proven to have real benefits for patients, and I have seen first-hand how it has saved lives, giving our patients in trials who have had limited success with other treatments, complete and long-lasting remission from cancer and hope of a future that is cancer-free. "It is fantastic the treatment will now be made available to eligible patients across the NHS, and we can continue to expand the number and type of treatments we have available to beat cancer."



Pictured: Some of our oncology team at Colchester Hospital who delivered the ARASENS trial

Diabetes Team

Our Diabetes research team at Ipswich is proud to have crossed boundaries and developed working relationships with newer pharmaceutical companies, including the leading British company in cardiovascular medicine. The team has now established further links with similar companies in metabolic medicine. The team also consistently delivered on areas beyond metabolic medicine including heart failure, renal disease, non-alcoholic stetohepatitis (NASH) and cardiovascular prevention.

The team is the top recruiter for the Diabetes Libre performance study in the UK!

Steven Emmerson, 63, from Hadleigh and his research journey on the Libre study

Steven said it "saved his life" when he joined a research study offering the chance to try out a device to monitor his blood sugar. Steven, who lives with type 1 diabetes, had struggled to manage the condition which left him with neuropathy, poor mental health and significant sight loss. As part of the FreeStyle Libre study, he was able to use a device which is stuck to his arm and tracks his glucose levels through his mobile phone. He said: "Libre changed my life. I was able to earn a living again, I was able to start living for perhaps the very first time. I felt I was gaining some control over my condition."



Generic Research Teams

Our Generic teams have had many highlights and continue to expand across both sites. Our Motor Neurone Disease (MND) research portfolio is gathering pace; we are now running three studies in this area.



Carole Singleton, 75, from Felixstowe

Carole was diagnosed with motor neurone disease (MND) during lockdown. Her Mum was also diagnosed with MND 30 years ago, but unlike her Mum, Carole was given the option of taking the only treatment available – a drug called Riluzole which can extend a person's life for a few months. Carole wanted to join the MND-SMART research trial in the hope of finding new medications or combinations of medication that may help those living with MND in the future. She said: "Riluzole wasn't available for my Mum as it was on trial, so I feel fortunate I'm able to take it, as well as be a part of the MND-SMART research study that I hope will help people in the future."

Maternity research continues to go from strength to strength, recruiting over 650 recruits to **OPHELIA** - a study looking at diabetes in pregnancy (gestational diabetes). **iGBS3** is a study looking at Group B Streptococcus (GBS) which is a bacterium that causes serious infections in young infants across the world. We opened this study in March 2023 and we recruited over 300 participants by the end of June 2023!

Harmonie - first commercial interventional paediatric study at Ipswich Hospital.

Our first commercial paediatric study, HARMONIE, has been a big success; the study researched the effectiveness of a vaccine for RSV (respiratory syncytial virus) in babies under one year, with the goal of preventing hospital admissions.



First time PI, Dr Ruth Cowie and Co-PI, Dr Prathiba Pai consultant paediatrician, led the study.

Dr Cowie stated: "Not only did we meet the requirements for the study participants - but the results have just been published this month and they've shown a real difference in cases of RSV in babies; with 83% reduction in hospitalisations, 76% reduction in preventing severe infection and 58% reduction in all causes of hospitalisations.

"This is a great step forward for ESNEFT and paediatric studies. Children historically have had very little research. People are always anxious but if you don't do research, then the treatments don't advance. A lot of treatments we have for children are based on adult models and haven't changed in decades! I was pleased we may be able to advance medicine for children, even in a small way."

We are constantly looking to expand our research portfolio, to enable as many of our patients as possible the opportunity to take part in research. We are taking part in the **ORION-4** study to look into new treatment options to lower cholesterol levels.



Wendy Radford, 62, volunteer for the Salvation Army, is participating in ORION-4 at Colchester.

Wendy Radford didn't know she had high cholesterol when she had a stroke leaving her severely ill ten years ago. Although she can now walk again, the risk of another stroke meant Wendy was happy to sign up to the **ORION-4** research study looking into new treatment options to lower her cholesterol level. The five-year study aims to test if a new "bad" cholesterol lowering medication called Inclisiran safely reduces the risk of heart attacks or strokes in people who have had one of these conditions. She said: "I was more than happy to take part in the study. I had to commit to five years and have regular injections in my stomach and blood tests taken."

Research Support Teams

ESNEFT sponsored research and university collaborations - Our Research and Development Agile Evaluation team, which also supports our research portfolio, continues to grow. We have secured grant funding to run an evaluation of the Clacton Diagnostic Centre (CDC) and results are due in the autumn. We have also appointed a joint research fellow to work with our joint Professor of Health and Wellbeing at the University of Suffolk, Professor Colin Martin, whose expertise is in perinatal research, and with a particular focus on mental health and birth satisfaction. We have also recently appointed a joint Professor of Allied Health with Anglian Ruskin University (ARU) Professor Sally Fowler-Davis.

Excellent robust research cannot happen without our research partners and collaborators. We participated in developing the Suffolk and North East Essex Integrated Care System (SNEE ICS) research strategy for 2022-27. Our ICS vision is 'to build a culture of research across Suffolk and North East Essex Integrated Care System (SNEE ICS) that is responsive to those in most need in the communities that it serves.' We have been actively working on our locally developed research to support this vision with a range of collaborators including:











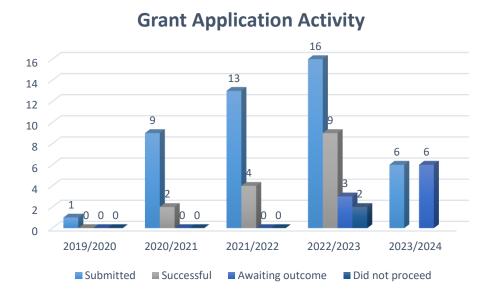




Grant activity and funding for our locally developed research

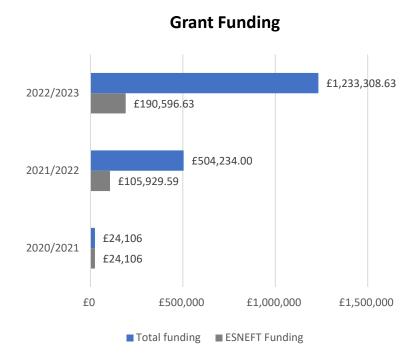
Grant funding is essential to deliver our locally developed research activity, by supporting research participants, our researchers, and research support teams. We develop and submit applications for grants to a range of funders locally and nationally, including research funding bodies (NIHR, UKRI, Wellcome Trust, BMA, UEA Health and Social Care Partners) and charities. We are extremely grateful to the Colchester and Ipswich Hospitals Charity who have supported the additional team, to enable the growth of this new funding stream.

The team continues to increase grant applications and funding.



Our ESNEFT grant funding has increased year on year, with funding awarded from charities and NIHR programmes. We have been part of grant applications or led on grant applications that have received a total of £1.2 million, £191k of which was awarded to ESNEFT. Funding came from the following awarding bodies; Wellcome Trust funding, NIHR (PDG, career fellowships), UEA Health and Social Care Partners (UEAHSCP), charities (BAS Aphasia) and the BMA J Moulton award.

Locally, we have received funding for two UEA Health and Social Care Partners (UEAHSCP) projects, including evaluating the Clacton Diagnostic Centre and a research study looking at views of exercise in pregnancy. We also received grants for two UEAHSCP scholarships. We have submitted five applications for the UEAHSCP 2023/2024 funding call, which are pending. We currently have three AHPs on the Integrated Clinical Academic Health Education England (HEE)/NIHR pathway – the Pre-MSc Internship, PCAF and the PCAF Bridge.



Funding highlight

ESNEFT was awarded £139,668.64 by the NIHR PDG funding stream for a project called 'No research about us, without us' which focuses on the barriers to research for people with learning disabilities. The R&D support team is leading on this study, which involves ten partners. The co-lead for this research is Gary Bourlet from Learning Disability England. Gary is an expert by experience and the other co-lead is Dr Amy Russell, University of Leeds, who has an honorary contract with ESNEFT.

Patient and Public Involvement group

We have set up an ESNEFT <u>Patient and <u>Public</u> <u>IN</u>volvement (PPIN) group where we follow the UK Public Involvement standards and are actively mapping our local region to determine which populations we serve, to ensure our research is inclusive for these communities. We hope our NIHR PDG 'No research about us, without us' will inform both PPI engagement and our research.</u>

We have led focus groups and 1:1s with people in nine patient groups.



Pictured: Research participants at Ipswich Hospital

As part of our PPI focus groups and 1:1s we aim to ensure we have input into our locally developed research at the earliest opportunity, and throughout the research project cycle; from design to study close out and dissemination.

The Synapse Centre for Neurodevelopment

Interest in our Synapse Centre for Neurodevelopment continues to grow. This is our research centre designed to combine expertise from paediatric physicians; allied



health professionals; R&D teams, industry and academic institutions. Education is very much part of the centre's strategy. Four education afternoons have been successfully run, focussing on genomics, preschool neurodevelopment and health comorbidities with neurodevelopmental disorders.



We currently have two projects in focus, the **Synapse Registry** - we have successfully completed all of our patient and public involvement in to the Synapse Registry, and co-produced the registry to ensure it is user friendly. We are currently delivering the **FAMILY** project - Faecal Microbiota Analysis in Neurotypical and Autism Syndrome Disorder - this research study looks at the gut bacteria of children with a neurodisability and a sibling that is neurotypical, to compare if their gut bacteria are different.

Our two AHP clinical academic research practitioners (CARPS) are working

through the centre, while studying for their PHDs. With ARU they are working on two projects: barriers to and improving delivery of speech and language support in preschools and support for preschool children with autism and sensory processing disorders. The centre also supports a team interested in rare disease and genetics and is supervising and supporting a medical intern and two PHD students with the University of Essex.

Research Governance

All research is delivered in accordance with the UK Policy Framework for Health and Social Care Research (2017). This sets out the research governance principals, which protect and promote the interests of patients, service users and the public in health and social care, by describing ethical conduct and proportionate assurance-based management of health and social care research.

We ensure all of our research has undergone robust governance, and Trust assurance is required before any research can start at the organisation. All studies on the NIHR portfolio have been through quality assurance processes to ensure compliance with good practice. Staff undertaking research activity should be trained in International Conference Harmonisation – Good Clinical Practice (ICH-GCP), which is valid for two years, to ensure best practice is maintained.

For more information on current research studies taking place at the Trust, visit Be Part of Research (nihr.ac.uk)

Quality assured — all of our research requires support from our research support teams. This year in line with the ESNEFT philosophy that *Time Matters* we have implemented a new quality management system across all teams to improve Trust wide processes. To enable ESNEFT to sponsor drug and device clinical trials, the teams are undergoing drug and device research sponsorship training. This will enable the unit to strengthen our position to offer the best research, care and experience to the population we serve.

Our support team assurance activity, as approved through our Research Assessment Team Group 01 April 2022- 30 June 2023





Pictured: Some of our research support team

An exceptional Trust research team represents exceptional research

Developing and celebrating our research teams

Our Trust-wide research and development team continues to grow with 76 members over eight teams across ESNEFT. We are funded through the annual allocations from National Institute for Health and Care Research (NIHR) Clinical Research Network (CRN) East of England (EoE), together with commercial income and academic and charity grant income. We currently have two joint professors and one joint research assistant with local universities as well as two clinical academic research practitioners working within our Synapse centre. Our clinical academic research leads are about to complete their three-year appointment having secured funding for predoctoral and PHD awards. We are supporting two of our team to complete a clinical trials MSc.







Pictured: Some of the cancer and diabetes research teams 'flying the flag' for research at the Suffolk Show and World Diabetes Day

Clinical research practitioner (CRP) - One of the roles within our team is that of a clinical research practitioner (CRP). Our CRPs have varying backgrounds bringing with them an enormous wide range of skills. Since April 2020, accredited registration for CRPs has been approved by the Professional Standards Authority as part of the Academy for Healthcare Science (AHCS) Accredited Register. We have two team members on the CRP registry. The CRP role is an exciting one and it varies from day-to-day. A CRP will support the team involved within a clinical trial including taking bloods, spinning bloods, data input and in some cases cannulation and ECGs. Screening for trials and preparing shipment and storage of samples, is also part of the role. The CRPs and their skills are extremely valued.

Bally Purewal is the lead CRP at ESNEFT. Bally explains the scheme.

The CRP directory is for those members of the research team who are not registered to a healthcare profession but working in a research delivery role. The directory serves as a 'pre-registration' space for those CRPs who are intending to apply to join the AHCS Accredited Register. ESNEFT has 12 members of the team on the CRP directory. In January 2023 the experienced practitioner gateway was launched for experienced practitioners without a degree level qualification. ESNEFT is currently guiding their first member of the research team through this process.



Our research and development team has been busy sharing best practice across the region and beyond with presentations and several posters accepted at conferences, including first prize for our Long COVID study. Our Trust cancer research team was the joint winner for *team of the year* at the East of England Cancer Research Conference 2022.





Pictured: Stephanie Bell (left) and Celine Driscoll celebrating with their awards at the NIHR CRN East of England awards ceremony

Leading our research studies

We could not deliver our studies without the dedication and hard work from our principal investigators (PIs). We have 145 PIs that have gone over and above to lead our research portfolio. We are encouraged that 17% of our PIs who took on the role were nurses, midwives, AHPs and practitioners. We are delighted that three of our consultant PIs, Mr Radwan, Dr Venkitaraman and Dr Mukesh have been invited to take on the role of lead chief investigator (CI) within the UK for interventional research trials.

The Green shoots scheme - offered by CRN EoE, this scheme aims to grow the region's research capability and recruitment activity, providing 24 months funding for clinicians in the form of PA or sessional time to develop capability and expertise to deliver the NIHR Portfolio. ESNEFT has been awarded eight so far, in Stroke, Surgery, Trauma and Orthopaedic, Ophthalmology, Rheumatology, Gynaecology, Diabetes and Paediatrics.

NIHR Associate PI - The Associate PI Scheme is a six-month in-work training opportunity, providing practical experience for healthcare professionals starting their research career. We have supported 13 so far across our sites.



Pictured: Dr Zeenat Banu, Diabetes team, our latest NIHR CRN green shoot researcher

Supporting our Allied Health Professionals

Recognising a gap for clinical academics within our allied health professional (AHP) workforce has led to the Trust supporting research academic posts, to enable collaboration and designing of academic research. This has raised the reputation and profile of the Trust. It has generated new income sources, produced publications and supported recruitment of staff. We have seen an increase in AHPs becoming PIs for our studies with eight taking on the role this year. In addition, the allocated time and resources has enabled us to establish our Synapse Centre, which continues to grow with widespread recognition regionally and nationally.

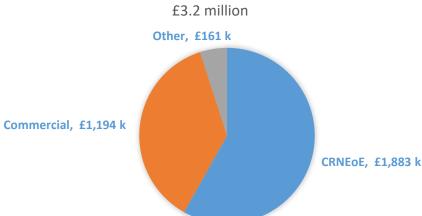
Support from other departments - Research would not happen at ESNEFT without the continuing support of the other departments within the Trust. Financial support is provided by the CRN EoE and commercial funding, which

is disbursed at source to any department supporting activity over and above standard treatment. The Research and Development unit also financially supports posts in finance, communications, imaging and pharmacy.

Research Finance

Finance remains strong within our research and development unit at ESNEFT. We continue to income generate to self-fund the research team and other members and departments of the Trust to support and expand opportunities for research activity across the sites.

Research funding 2022/2023



Governance of research finance is assured by the Research Funding Group (RFG)

Its membership includes finance, PIs and senior leaders from R&D. Funding from commercial activity is reinvested into the R&D unit to pay for the R&D teams across sites. Surplus funds generated per department are used in year to enhance the research portfolio within those departments. This includes research-planned activity (PA) for researchers, costs for research presentations and conferences, research MScs and clinical trials courses, research team members, research fridges, fellowships and research equipment.



Pictured: Dr Ramachandran Venkitaraman our PI at Ipswich Hospital with a member of the radiotherapy team who support our research

A total of £394k was drawn down to divisions in-year. Each department has a named lead PI responsible for collating ideas and gaining approval for the spend within the department. The withdrawal is then submitted to the RFG. Once the group has supported the withdrawal, the funding is transferred to the department who follow Trust guidance for spending.

Examples of how the funding is spent

Three new specialist monitors funded in year for use in Radiotherapy at Ipswich Hospital. These monitors offer higher-quality images for the radiotherapy team when reviewing scans and planning patient treatment for research studies, which need to be sent to national research teams for peer review.

Patients and our research participants can now benefit from top-of-the-range new scalp-cooling machines funded in year for use at Colchester Hospital. Scalp cooling works by wearing a cold cap to reduce blood flow to the scalp, which shrinks fast growing hair follicles. This then helps reduce or stop the impact chemotherapy has on a patient's hair.

Research Publications

Our employees have demonstrated the vibrancy and innovative practice of a research-active organisation in the last 12 months by producing conference abstracts and publications in high-quality academic journals. Two hundred and six articles and abstracts were produced (Appendix 1). **These examples demonstrate that a**



Pictured: Dr Muthu Kumar our PI at Colchester Hospital with members of The Collingwood Centre

commitment to clinical research leads to better treatments for patients.

Increasing opportunities and delivering our new research strategy

We will continue to support and encourage involvement in those research-naïve areas and look forward to opening studies in our new orthopaedic centre called the Dame Clare Marx Building, which is currently being constructed at Colchester Hospital. Other areas opening studies include Infection Control, Cardiology, Frailty, Gastroenterology and Surgery.

We are currently working with Clacton Hospital to make research more accessible to our coastal patients and will be commencing recruitment to two studies there shortly.

We look forward to growing our network, collaborations and partners to support our own locally developed research and evaluation projects. We are excited with the confirmation that space has been made available to accommodate our **first physical research centre**, which will incorporate our Synapse centre. This will enable us to meet the needs of new research studies to expand our research portfolio. We will consult with patients, carers and researchers in designing this centre so it becomes a **research centre of excellence**.

Research is for everyone: patients, carers, staff and the public

Research and Development Strategy: 2022-2027



We have achieved our 2019 targets

- ✓ Optimise current practices
- ✓ Increased the number of patients recruited to trials
- ✓ Developed new funding streams
- ✓ Recruited more than 5,000 participants in CRN EoE funded trials (our target was 5,000)

We want to continue to achieve these targets and expand the areas and number of studies we run through research.

We work on clinical trials funded in three ways: by CRN East of England, commercially-funded trials, as well as our own studies and those through university partnerships.

Our aim in our five-year strategy is to:

- · develop more of our own research studies
- increase the number of people taking part in externallyhosted studies

Both these ambitions will help develop our income streams so we're not just reliant on CRN East of England (CRNEOE).

Key priorities for 2022-2027

- 1 Establishment of ESNEFT as a centre of excellence for academic AHPs, clinical research practitioners (CRPs), nurse and midwife development and continued development of hosted research and collaboration with university partners
- 2 Strengthen and develop governance and careers for our staff
- 3 Establishment of ESNEFT as a centre of excellence for public and patient involvement in research
- 4 Establishment of a dedicated Research Centre
- 5 Financial security

Between 2022 and 2027 we want to:

- ✓ Develop new academic research roles
- Strengthen careers for underrepresented specialisms
- ✓ Build academic partnerships
- ✓ Work with our Integrated Care Board
- ✓ Develop research ideas
- Continue to pursue new areas for research, including obstetrics
- ✓ Develop new funding streams
- ✓ Recruit 10,000 participants by 2026/27
- ✓ Build and develop our research team
- Share and publicise our work and celebrate our successes

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Innovation

Introduction

Our Innovation Strategy supports our Trust ambition to *offer the best care and experience,* our strategic objectives, and the *Time Matters* philosophy. It is helping to nurture and grow the culture of innovation within the Trust.

Our aims are to adapt quickly to new opportunities, to deliver the best care and transform services for patients. These opportunities are wide ranging, such as medical (e.g. diagnostic and therapeutic interventions), process changes, changing the way we encourage people into the NHS and in turn help them develop their careers, and digital/ICT solutions. This will help our health and care system to attract and retain high-quality employees.

Innovation is at the heart of our strategic objectives: to keep people in control of their health, lead the integration of care, develop our centres of excellence, support and develop our staff, and drive technology-enabled care. This includes collaboration with industry and our ICS partners to address wider opportunities and challenges. Innovation projects exploit breakthroughs in science and technology, such as artificial intelligence (AI) and robotics. They address quality, logistical and productivity issues facing our patients and the local system. They help to improve health outcomes for patients and lay the foundations for high-tech care for future generations.



Pictured: Innovation Team, left to right, Peter Cook, Margarite Garrett, Subash Vasudevan, Shane Jarvis and Elizabeth Gray.

How we work

Our Innovation team follows these principles to deliver our Innovation Strategy:

- We act as an enabling function supporting teams across the Trust
- We will prioritise key projects that offer the greatest opportunity for improvement
- Where faced with competing priorities and insufficient resource, we take into account the impact of the
 project on patients and the Trust, and the keenness of the team or department to progress the project
 when prioritising
- We support individual innovators

- We support the vetting of external approaches to the Trust where organisations are proposing technological solutions, projects and/or collaborations
- We play a key role for the Trust in horizon scanning for new solutions.

Our innovation work over the last year can be categorised under the following main strands:

- Supporting the introduction of new technologies/services and an evaluation of their effectiveness
- The introduction of robotic surgery and AI
 - Development of The Institute for Excellence in Robotic Surgery (TIERS)
 - Introduction of multiple clinical AI tools
- Our new ideas programme
 - Supporting staff to come forward with ideas and help them develop their innovations
 - Supporting intellectual property commercialisation from within the Trust
- · Horizon scanning for new opportunities
- Workforce development

Measuring success

We measure our success by:

- The number of novel ideas developed within the Trust and the ICS;
- The number of business cases approved and the return on investment secured through them. This includes improved health outcomes, productivity, workforce development and/or financial gains;
- The amount of external funding brought into the Trust and the ICS to support innovation.

Our existing strategy runs until 2023/24 and by the end of 2022/23 we finished in a strong position to achieve our success measures by year end 2023/24, as illustrated in the table below:

Success measure	2019/20	2020/21	2021/22	2022/23	2023/24	Overall Achieved / target
No. of new ideas from staff received, explored / supported	17	8	8	19	2	54/50
No. of external grants secured	0	2	6	5 (+1 a/w outcome)	0 (+2 a/w-being developed)	13
External grant funding secured	0	£5,300,000	£2,083,501	£674,649k	0	£8,058,150 /£1m
No. of business cases developed (SOC,OBC, FBC)	19	3	23	4	1 (1 IN DEVELOPMENT)	50/50
No. of unique business cases approved	17	1	22	3	1	44/50
Business case ROI	Anticipated £1m	£5.4m	Anticipated £7,875,000	£2.8m	£130,000	*£17,205,000 /£5m *Anticipated

Through the delivery of our Innovation strategy, we have been able to increase our impact throughout the Trust, seeing significant progress in a number of areas which are outlined below.

Supporting the introduction of new technologies/services and an evaluation of their effectiveness SMARTcare tracking and tracing (Scan4Safety)

SMARTcare is the Programme overseeing the implementation of digital track and trace technologies into the Trust, in line with Scan4Safety principles, to improve efficiency and reduce spend through better stock management, improve safety by digitally linking implants and instruments to patients, and introduce recognised standards (GS1) for unique digital identifiers.

The Inventory Management System provides a digital stock management system for consumables, which provides automated stock-holding details, alerts for stock which is about to expire, and automatically re-orders items when they are used. It also has the functionality for point-of-care association to patients, digitally tracking implants, alerting if stock is expired at the point of use or incorrect item for the procedure, and improving the product recall process. It enables clinical time to be released and improves safety for patients. This is being deployed in theatres and is 52% completed in Ipswich and 65% completed in Colchester, although areas with the highest level of spend and most use of implants have been targeted first.

The Sterile Services and Endoscopy Reprocessing Instrument Tracking Systems used on both sites have been replaced with one system. This has now been deployed into theatres and procedure rooms to create a digital-closed loop for tracking the location of sterile instruments and endoscopy equipment, and their use at the point of care. Clinical time is saved by being able to look up the location of the items required, which will reduce cancelled operations due to lack of instruments and reduce the number of items opened in error which then have to be re-sterilised. Sterile Instruments can also be digitally tracked to their use on specific patients, providing digital tracking and thereby enabling increased safety. This is being deployed in theatres and procedure rooms and is 92% complete in Ipswich and 75% complete in Colchester, by location. However, the areas with the highest volume have been targeted first.

Both projects will complete by March 2024.

Digital histopathology

Our collaboration with Norfolk and Norwich University Hospitals NHS Foundation Trust (NNUH) and West Suffolk NHS Foundation Trust (WSFT), to introduce digital histopathology across our respective Trusts has continued during 2022/23. Sectra were the successful provider identified through a competitive tender process, an internal project manager was appointed to oversee the project and work closely with colleagues at NNUH and WSFT. All of the necessary technology has now been secured with some internal IT testing and workflow planning taking place. Technical 'go live' is expected to be the Autumn of 2023 following some further work on the connectivity to ensure the system can work to its full potential, allowing cross-site sharing of cases and remote working. Once the system is live the pathologists will need to validate themselves on the system, dual reporting cases ensuring they are competent on the digital system.

Soon after, we will begin to see benefits for our patients and for the Trust including:

- Faster reporting times and reducing the need to outsource samples, improving our turnaround times for diagnosis, and enabling productivity to increase.
- Faster second opinions by enabling digital images to be viewed instantly by colleagues at NNUH and WSFT.
- Improved quality of diagnoses through more accurate accounting and measurements of samples.

- Improved quality of meetings due to images being more readily available for multidisciplinary teams (MDTs) in a timely fashion.
- Enabling the introduction of artificial intelligence (AI) technologies once they are fully developed which are thought to provide efficiency gains of between 20 and 40%.
- Improved staff retention and staff recruitment.
- Reduction in outsourcing and recruitment of locums.

Huma – supporting patients receiving robotic orthopaedic surgery

The Innovation Team has supported the Orthopaedic robotic surgeons, working with Huma and Smith+Nephew, to implement the use of a specialist phone application for use by patients and multidisciplinary clinical teams. This is a digital joint reconstruction pathway, which helps knee surgery patients get ready for surgery and provides support post-operatively. There is educational content, virtual rehabilitation guidance, and options for inputting pain and function scores, and linking to smartphones or smart watches to record physical activity. Overall, it helps guide them through their care journey, and automates recording of Patient Recorded Outcomes Measures (PROMS).

The introduction of robotic surgery and AI

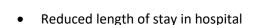
Robotic surgery and the development of The Institute for Excellence in Robotic Surgery (TIERS)

Our strategic commitment to developing robotic surgery has made big strides over the last two years with the introduction of four robots for abdominopelvic surgery and two for knee replacement procedures. This supports our ambition to continue to be at the forefront of minimally invasive surgery, deliver state-of-the-art surgical techniques to the population we serve, and support education and research in robotic surgery.

We now have a growing reputation as a centre of excellence in robotic surgery and are a visiting site for abdominopelvic surgeons from across Europe to see the technique and its implementation. Our first robotic system was installed in 2020, with a further two systems procured in 2021/2022 to focus on Urology, Colorectal and Gynae-Oncology. We invested in a fourth robotic system at the end of 2022/2023 that will enable us to move almost all our gynae endometriosis and colorectal major procedures to be robotic. We will be among the first in the country to do so, keeping ESNEFT at the forefront of innovation.

Benefits to our patients from the move to robotic surgery are proving to

Pictured: Subash Vasudevan, General Surgeon with the DaVinci robot



- Reduced conversion to open surgery
- Reduced complications and returns to theatre
- Reduced blood loss

include:

- Reduced post-operative pain
- Faster resumption of daily life



Investment in robotic surgery has also supported the recruitment and retention of surgical colleagues, with expert surgical consultants joining ESNEFT on a substantive basis (reducing the use of locum surgeons) and sought-after robotic surgery fellowships in place. Longer term, robotic surgery is also expected to enable an extended surgical career from reduced repetitive stress injuries for surgeons.

In addition to service delivery, a wider programme to support research and training in robotic surgery is underway.

Relationships with The Griffin Institute and Anglia Ruskin

University (ARU) have led to investments in training in robotic surgery for ST4+ doctors as well as the collaborative creation of an MSc in robotic surgery, which will commence in September 2024. Research projects are under development for both knee



Pictured: surgeons rom Varberg Hospital in Sweden, visting ESNEFT to learn from our experience in implementing robotic surgery.

replacement and abdominopelvic procedures, through The Institute of Excellence in Robotic Surgery (TIERS), a partnership between our Trust, ARU and industry. In addition, the robotics programme is being used as part of our wider schools-outreach activity to inspire the next generation towards health careers.

Case study

Matt Farrell, health and safety inspector from Colchester

Matt struggled to walk because of crippling arthritis in his right knee, but he says having robotic surgery to replace his knee joint has "given him his life back". The 55-year-old said: "The recovery has been brilliant – I actually favour my right knee now. I was living on so much medication to cope – I'm now on very little and being able to walk around pain free is fantastic."



Artificial intelligence (AI) in clinical settings

- **E-stroke:** Through funding from NHSX, we have implemented a pilot with Brainomix to introduce E-stroke software to improve stroke care. The pilot started in Summer 2022 and will have a full evaluation conducted by Oxford Allied Health Science Network. The E-stroke technology uses AI to analyse images of the brain and blood vessels, and automatically flags blockages to clinicians to help guide treatment decisions, potentially helping patients receive life-saving treatment more quickly. The technology also allows scans to be securely and quickly shared 24/7 with colleagues at specialist centres to gain a second opinion to support fast diagnosis and treatment.
- **Heartflow:** Introduced through the national Medtech Funding Mandate Programme, Heartflow provides a non-invasive cardiac test which gives a detailed view of a patient's coronary arteries. It enables physicians to create more effective treatment plans for patients with coronary artery disease by creating a digital 3D model of the arteries via a non-invasive CT angiogram. Computer algorithms are used to solve millions of complex equations, which assess the impact that a blockage has on blood flow. The first year of the pilot has finished, with an internal evaluation currently underway. Funding for ESNEFT to continue using

Heartflow has been confirmed for 2023/24 as part of the continued support from the Medtech Funding Mandate.

- C2-Ai: C2-Ai uses AI to support elective patient waiting list management, enabling the prioritisation of patients and aiding capacity-planning processes to help reduce risk. ESNEFT has the opportunity to have independent evaluation support from the Eastern Academic Health Science Network during the pilot process to fully understand what impacts the technology can make. To date, three consultants from general surgery have fully engaged with the technology, and a further two soon to commence using C2-Ai. Similar studies in other NHS trusts have shown C2-Ai to have had significant impacts on the waiting lists, categorisation of patient risk and identification of pre- and post-surgery interventions.
- Qure.AI: Funded through the SBRI Healthcare Cancer Programme, this AI tool supports the interpretation of chest x-rays and is believed to be able to detect multiple abnormal findings in less than one minute. Scans can be separated between abnormal and normal scans interpreting abnormalities in the lungs quickly, in turn aiding diagnosis and leading to better outcomes. The funding will allow for the evaluation of the technology 'in the field', with ESNEFT being one of several trusts taking part. The research project will begin in early 2024.

In addition to the established projects, we have been investigating AI developments across a range of specialities to deliver patient benefits and align to the Trust strategy. These include initial discussions with NeuHealth, a company with a virtual outpatient's clinic for patients' with Parkinson's. The intended use of the platform is to help clinicians evaluate and remote monitor the progression of Parkinson's disease; improve medication and non-medication management and identify risk of future clinical outcomes in advance of their occurrence among other things.

Working with ESNEFT renal and research teams, we are in discussion with Scaled Insights, an AI company, using AI to understand a patient's personality to predict their behaviour and compliance to home dialysis treatment. A patient will be asked to say a number of lines and answer questions, the AI system will use language construct to understand a patient's subconscious to predict their behaviour. Both of these projects are subject to external funding grants, the outcomes of which will be in the Autumn 2023.

Supporting innovators - our new ideas programme

The Innovation Team has continued to support staff across ESNEFT in exploring their ideas for new ways of doing things, or for innovative new products or processes that would help either patient outcomes and/or the care they receive, and the work of the Trust. Across the year, many have been supported with advice and guidance on market analysis, product development, intellectual property rights, design and funding opportunities.

The development of an idea to the fruition of a working product or technology can take many years, assuming it is a viable idea. One such idea that has taken several years to develop from its original prototype designs, but which has now been introduced into the Trust is the 'Bedhead Tidy'. Two ESNEFT employees developed and designed the simple but excellent innovation, which the Innovation Team has supported in securing the funding to pay for design right protection and the manufacturing of 1,000 units. Over 930 Bedhead Tidies have now been installed in wards across ESNEFT. This innovation creates a tidier storage of oxygen tubing at the head of a patient's bed and improves the ease of access to this equipment, particularly in an emergency.



Pictured: ward sister Jane Kemp based on Easthorpe Ward, and inventor and medical gases engineer Steve Connew

Innovation vouchers

Thanks to the Colchester and Ipswich Hospital Charity, the Innovation Team has access to £50k in the form of ten innovation vouchers. The funds from these vouchers allows innovators the chance to access money to support them with the development of the initial proof of concept works, which makes it easier to secure funding and support for later stages of the innovation development pathway. One of these vouchers was used for the Bedhead Tidy innovation, which was then further supported by the Colchester and Ipswich Hospital Charity through additional funding for the manufacturing of these units.

Staff at ESNEFT can still benefit from the innovation vouchers, as there are still funds available for another six vouchers.

Horizon Scanning for new opportunities

Genomics

Understanding the opportunities genomics can offer the Trust has been and will continue to form a large piece of work for the Innovation Team. Initial work has included engagement with the Eastern Genomics team and identification of ESNEFT staff already engaged within this area. Full staff engagement will commence with a questionnaire, enabling the team to complete divisional and Trust wide S.W.O.T analysis and the formation of a working group. This will form the basis of a Trust Board workshop in the Autumn of 2023 and wider discussions regarding the opportunities for ESNEFT to become involved in.

Workforce development

Advanced clinical skills and simulation training

2022/2023 saw further investment across both sites to increase access to the latest in simulation technology, enabling quality training for our clinical staff and ensuring a higher quality of care being delivered to patients. The new purchases better reflect the diverse nature of our workforce and patients.

East Anglian Simulation Training Centre, Ipswich Hospital

This year we have added additional in-situ simulation training in the emergency department, theatres, and the Rushmere Day Unit alongside teaching within the centre. This has enhanced interdisciplinary learning within clinical teams' areas of work.

We have introduced new courses, an example of which is a new regional Airway Crisis Course. Delegates included anaesthetic staff and operating department practitioners (ODPs), and the emphasis of the course is to ensure delegates can manage difficult airways that often occur under stressful circumstances.





Pictures: Airway Crisis Course

We adapted the manikins especially for the course in order to simulate difficult airways due to vomiting and debris. This added realistic challenges for the delegates to assist them to deal with these incidents within their clinical practice.

ICENI Centre, Colchester Hospital

This year we have expanded the breadth of the ICENI Centre's curriculum and relevance to a wider group of clinical professions. There were 6,026 learners who undertook training at the ICENI Centre in 2022/2023 - far more than in previous years.

Examples of the expanded curriculum that is helping our clinical workforce to enhance their patient care include:

- Ophthalmology The inaugural East Anglian Glaucoma Microsurgery Symposium was held in 2022, which included full hands-on surgical simulation training in the ICENI Centre wet lab as well as a series of lectures from key speakers across the UK. In collaboration with the Royal College of Ophthalmology a range of courses and masterclasses are now being delivered through the ICENI Centre supported by the latest in high-tech simulation equipment.
- Gynaecology In addition to its existing curriculum offer, gynaecology colleagues ran the first ever course Picture: Gynaecology course in collaboration with Cooper Surgical using high fidelity tissue model simulation. Helping to recreate surgery for gynaecological procedures such as hysterectomies.



 Neurology and ENT – 2022 saw the first 'Complex Surgical Approaches to the Skull Base', held at Ipswich Hospital using cadaveric heads and training delegates from across the UK as well as ESNEFT. Led by neurological and ENT surgeons, the feedback from learners was so good that the course will be repeated in 2023.



Picture: The dental skills room in readiness for the Complex Surgical Approaches to the Skull Base course

Apprenticeships

2022-23 has been a very successful year for apprenticeships at ESNEFT. The Trust has taken a significant step change to use apprenticeships as a vehicle to train and upskill our staff, and to optimise the utilisation of the Trust's Apprenticeship Levy.

In April 2022, the Trust became an Employer Provider of Apprenticeship Training, allowing ESNEFT to deliver Apprenticeship training to its own staff, initially in a limited number of Apprenticeship Standards where it makes sense for ESNEFT to be the provider. This move is part of a broader range of initiatives ESNEFT has taken to provide a Trust-wide strategic approach for the delivery of apprenticeships. These initiatives will deliver the following benefits:

- Increase the number of apprenticeships within ESNEFT to around 500 per year
- Use apprenticeships to improve career development pathways
- Increase our offering to entry-level staff to undertake an apprenticeship and improve the retention and recruitment of entry level staff groups
- Increase the breadth of apprenticeship opportunities available to staff regardless of job type, banding or location
- Use apprenticeships as a vehicle through which the Trust can enhance its leadership and management capabilities
- Make full use of the Trust's annual Apprenticeship Levy and recover as much of the Apprenticeship Levy already paid into the ESNEFT Digital Apprenticeship Account as possible
- Satisfy our public sector apprenticeship target of a minimum of 2.3% of our workforce undertaking apprenticeships each year.



Pictured: Jade Fox, who is undertaking a Radiography Apprenticeship

Significant progress has been made:

- 2022-23 ESNEFT saw its highest ever number of apprentices on programme, with over 314 staff
 undertaking an apprenticeship at the end of 2022/2023, an increase of 46 from the previous year. One
 hundred and ninety-three of these have been new apprenticeship starts in the year, 75 with our new
 internal training arm
- An increase in Apprenticeship Levy spend, including an increase in the sharing of our levy with other healthcare organisations within the ICB, with £1,095,343 being utilised to train our apprentices in 2022/2023. This represents an increase of levy spend of over £190k from the previous financial year
- Growth in the volume of Apprenticeship Standards available to our staff, with 61 being utilised across the
 organisation. This illustrates an increase in the breadth of roles across ESNEFT which are being supported
 by apprenticeships. In particular, the year has seen the creation of new developmental opportunities for
 many of our allied healthcare professionals and support staff. These include new apprenticeships being
 offered to the following roles:
 - Speech and language therapist
 - Dietician
 - Diagnostic radiographer
 - Therapeutic radiographer
 - Physiotherapist
 - Assistant practitioner specific AHP pathway
- Relaunch of the nursing associate in September 2022 providing greater opportunities for progression for internal staff

The retention of rate of apprentices for our internal delivery arm, as an Employer Provider of Apprenticeship Training, is over 94%. The predicted success rate for the next academic year (2023/24) is currently at 82%, which would put ESNEFT significantly above the current Department for Education (DfE) benchmark of 60%. Feedback from apprentices and their managers have been excellent to date:



"I have learnt something every day and feel I have been given all the support I have needed so far."

"Tutors are very supportive and give good feedback to ensure improvement is being made."

"Very pleased with the support given to our apprentice."

Pictured: Ginny Spencer, who is doing an Assistant Practitioner
Apprenticeship

Case study

Hannah Martin, therapy practitioner, Ipswich Hospital

Hannah has worked for the NHS for 23 years, working her way up from a band 2 theatre assistant role to her current band 4 role. She didn't have any formal qualifications to mark her years of experience and the knowledge she had gained so used the opportunity to sign up for an apprenticeship and is now embarking on a Level 3 Senior Healthcare Support Worker Apprenticeship.



Case study

Juliet Francis, ward sister, Ipswich Hospital

Juliet herself was an apprentice, having risen through the ranks with onthe-job training and an apprenticeship to gain her knowledge, skills and qualifications. She's now encouraging members of her team to become apprentices themselves and a keen supporter of the scheme. She said: "I've found apprentices want to learn, they ask lots of questions and that encourages their communication skills and confidence. When you feel



confident you also feel more prepared to challenge the way something is being done. Having confident and capable staff helps to free up other members of the team to do their jobs – so everyone benefits."

Outreach - Talent for Care

Our community outreach work through the Talent for Care team has an ambitious work-plan for the 2022/2023 academic year, doing more than ever before to widen participation and highlight the opportunities that health and care careers offer.

Work with Schools

Aside from attending more generic careers events in the community, the team has a dedicated programme of ESNEFT events with schools and colleges that will engage with over 1000 students during the academic year. Highlights include the following:

 Our first ever ESNEFT Careers Fair, held at the Colchester Stadium. There were 21 stations all representing a different career within the NHS, with each using



Attendees of the ESNEFT Careers Fair

an exciting interactive element to fully engage the students. We had a footfall of over 500 students across

- North Essex and East Suffolk in attendance throughout the day, 180 of which were students from seven schools that serve disadvantaged communities.
- There were two Medical Careers Days held to inspire and educate the next generation of doctors. A total of 95 students took part in a range of practical skills stations, basic life support, suturing, cannulation and GP history taking. They heard first-hand from senior medics, including our Director of Medical Education,
 - Deputy Chief Medical Officer and even from a local MP/doctor. All students were provided with work experience information and application forms, so we hope to accommodate placements for these students in the very near future.
- We have numerous exciting ESNEFT outreach events in the pipeline: AHP masterclasses, an ODP day, Therapeutic Radiography day, Careers Expo with Colchester Institute, NHS and Wider Healthcare Insight Days, 'Restart a Heart' and NHS careers information days for our local careers advisors/teachers as well as repeating the successful events we have already hosted to date.



Students at the ESNEFT Careers Fair experiencing VR headset used to train doctors.

- In collaboration with Anglia Ruskin University (ARU) we
 will be launching in September 2023, 'NextMedic', a programme for students who meet the 'Widening
 Access to Medicine Scheme' criteria and have aspirations to become a doctor. The programme will be
 open to students in Year 9 and span over five years. On successful completion of the programme students
 will have the opportunity to apply to medical schools and where applicable will be made a lower
 conditional offer.
- The team is also in discussions with ARU over the possible involvement in the launch of Medical Doctor
 Degree apprenticeships in 2024 which, when up and running, will provide a natural follow on from
 'NextMedic' and help widen participation in the programme.

Work Experience

Since relaunching our work experience programme in August 2022, 297 work experience opportunities for school/6th form students have been provided within the Trust, with a further 198 applications being processed for the summer term. The aim is to accommodate 500 work experience students during the 2022/2023 academic year, far exceeding the previous number of 265 in 2019, making this already the most we have ever had at ESNEFT.

Further Education

We now have a Memoranda of Understanding with both further education colleges in our catchment area - Colchester Institute and Suffolk New College. This has allowed us to work collaboratively on numerous projects to support their students and develop a pipeline of potential ESNEFT employees for the future. Sixty-two placements have been accommodated in clinical settings for BTEC Health & Care students and our first cohort of Pathology placements for their Laboratory Sciences T-Level students will commence in spring 2023. These placements are additional to the courses and provide students with invaluable insight into both the NHS and ESNEFT, influencing their future career choices.

Internships

In 2022, we launched our first ever internship programme for students with special educational needs at Ipswich Hospital, in partnership with Suffolk New College. The aims of the programme are to provide work placements on rotation across an academic year in which interns gain vital employment skills, and to enable them to apply for jobs following the internship and completing college. It has been a successful first year with two of the interns already securing paid employment with OCS Group, our facilities service partner at Ipswich Hospital. We are in discussion with Market Field Special

Educational Needs College with the aim of replicating the programme in Colchester in 2023/2024.

Training Academies

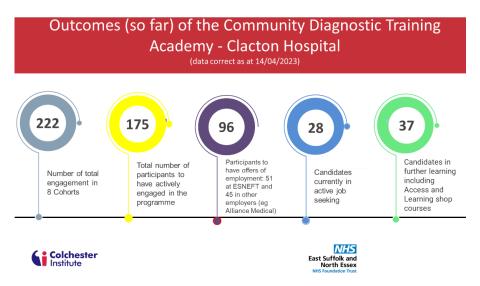
We launched an innovative training academy model in late 2021/2022 to recruit entry-level diagnostic and administrative staff from the local population in Tendring for the Clacton Community Diagnostic Centre. This was a partnership with Colchester Institute, funded by a successful bid to the Community Renewal fund. The success of this pilot has led to the securing of further funding to extend the model to other workforce requirements and



Pictured: participants of the Clacton Community Diagnostic
Training Academy

led to the creation of a number of other training academies across the ESNEFT and ICB's footprint.

 Clacton – The Community Diagnostic Training Academy supported 222 participants, with positive outcomes (employment or further learning) for 133 of these, of which 96 have secured jobs. It continues to support seven overseas-qualified health professionals with English language classes, in order to assist them with securing NMC or GMC registration.



Picture: Outcomes from the community diagnostic training academy

- Ipswich The Ipswich Community Training Academy, in partnership with Suffolk New College, is predicted to be our most popular training academy yet, with over 70 participants registering their interest in the first intake in March 2023
- Armed Forces The Armed Forces Training Academy, commencing in February 2023, offers a route into non-clinical NHS employment for those who are a part of the wider Armed Forces community, with the training academy forming part of ESNEFT's commitment to the Armed Forces Covenant
- General Practice Plans have been developed for a pilot programme is to be launched in north Essex later
 in 2023, preparing candidates for entry level roles in General Practice. This academy will be delivered in
 partnership with the Suffolk and North East Essex (SNEE) Training Hub.

Case study

Kemi Mafo, pharmacy quality control officer, Ipswich Hospital

Kemi moved from marketing to pharmacy thanks to the training academy. She jumped at the opportunity for a new career opportunity, and worked her way up the ladder to become a pharmacy quality control officer — all within six months of joining the scheme. She said: "I'm a happier person now and fulfilled because I'm able to actively contribute to a collective aim at work. I would say to anyone who has a passion to work and help people improve or maintain their health to try and get into the academy as you get supported all the way."



Population health management

Since 2021, the Director of Strategy, Research and Innovation in ESNEFT has hosted a regional population health management (PHM) team. This team, consisting of a consultant in Public Health and a PHM data analyst, is funded by Health Education England East of England (now part of NHS England).

PHM is an approach using linked data to understand and predict the current and future health and care needs of the population. This is used to support planning and delivery of proactive and preventive care to improve the health of the population.

PHM regional support

The aim of the team is to help organisations in the East of England with the delivery of population health management and associated enablers to improve local population health and wellbeing and address health and healthcare inequalities. We work across six Integrated Care Systems (ICSs) in the region and have carried out several activities to support the aim during the past year:

- We continued to develop as a technical hub for PHM for ICSs and their organisations to access and provide leadership through partnerships across regional organisations and teams including:
 - translating national strategy
 - holding a cross-ICS workshop to share experiences
 - collaboratively reviewing PHM capabilities in each ICS to identify areas of good practice and development, and requirements for regional support.
- We carried out population health intelligence skills mapping with ICSs and held a cross-ICS workshop with regional intelligence colleagues to review the findings and identify analytical workforce development themes and challenges to follow up.
- We continued to develop the regional PHM network to support bringing together the workforce involved with PHM across settings and ICSs, and their development of skills needed for PHM (e.g. through sharing resources, developing resources where none were available such as on the use of Theographs⁴ a visual representation of healthcare activity over a period of time and providing good practice examples) through building on an online information library and delivering six webinars over the past year.
- We are a member of Suffolk and North East Essex ICS diabetes committee and provide technical input into identifying priorities through presenting and interpreting diabetes population health and health inequalities data. We are building on this by working with ESNEFT colleagues on a project reviewing taking a PHM approach to inform targeting of clinical approaches to reduce the frequency of complications resulting from diabetes.
- We are a member of ESNEFT's Health Inequalities Board and provided technical input into developing the strategy on the background and relevant policy guidance.

Trainee Health Psychologist

We have also successfully secured two-year funding to recruit a trainee health psychologist in workforce redesign, who is working as part of the PHM team in ESNEFT, on behalf of the region. This is a trailblazing new national programme, providing a funded training opportunity for health psychology for each region in England. The programme will involve local projects looking at where behaviour change is vital to introduce new ways of working and how to support the workforce, for example looking at embedding addressing health inequalities in

⁴ How to use Theographs to better understand individual stories and improve patient care - Imperial College Health Partners

day-to-day work. It will also involve developing and conducting research projects and delivering training to the workforce.