

Welcome to Roche

"The NHS is facing huge challenges. By partnering with Roche Diagnostics, you can unlock the benefits of our global scale to deliver local impact for you, your organisation and the people you care for."

Geoff Twist, Managing Director, Roche Diagnostics UK and Ireland



Even if you have heard of Roche - we never assume - you may not know that we are one of the world's leading providers of diagnostic testing. Or that Roche Diagnostics has operated in the UK since 1908 and has been a committed partner to the NHS since its creation in 1948.

In 2022, more than 752 million of our tests were used in the UK to accurately and effectively detect diseases, conditions and infections, helping clinicians make informed decisions about the best course of treatment and care.

But we do much more to improve healthcare and outcomes for the people of the UK. Today, Roche experts are working with operational teams, healthcare professionals and scientists across the NHS to design and implement tailored and pragmatic solutions which improve efficiency, cost effectiveness and outcomes. We are also working with policymakers, regulators, patient advocacy groups and researchers to shape healthcare in ways that will future-proof services.

The scale, rigour and reliability of our tests, tools and technologies are built within our global operation. The bespoke, end-to-end support and expertise we provide across the NHS is informed by our detailed understanding of what is needed at a local level.



In this brochure, you can read the stories and personal insights that demonstrate how working with partners, we're transforming Alzheimer's testing, improving infectious disease and cardiac patient pathways, and redesigning care for pregnant women with pre-eclampsia.

Our Managed Service works in partnership with you to develop bespoke programs and pragmatic solutions that support your people; helping you to achieve your targets and deliver the highest standards of treatment and care for your patients. With a Roche Managed Service you can:

- > Improve patient flow through your hospital or primary care services;
- Keep people out of hospital who don't need to be there;
- Reduce the need for more costly tests and interventions; and
- Streamline patient pathways leading to better outcomes for them
 and efficiency savings for you.







Using our global scale and in-depth local knowledge, Roche Healthcare Consultants are working across the NHS to help drive and manage change.



Operational Effectiveness Consultants

Experts in optimising space, technologies and processes within laboratories to increase efficiency to help meet growing patient demand.

Healthcare Transformation Partners (HTPs)

Drive clinical change projects across and between different healthcare settings. Through redesigning patient journeys, leading digital transformation projects and implementing value-based healthcare, HTPs work with commissioners and providers to deliver patient-centred services.

Strategic Consultants

Support you in future-proofing your organisation, developing insights from clinical studies and other sources to help you look beyond today's challenges to plan, prepare for and even mitigate the challenges we know are coming.



Through our portfolio of diagnostic products and solutions and the expertise of our Consultants, we can bring our global scale to deliver local impact for your patients, clinicians and healthcare systems.

Improving the diagnosis and treatment of heart failure

Heart failure is a leading cause of unplanned hospital visits and the primary diagnosis in 100,000 UK admissions each year.² Early diagnosis is critical, but the main symptoms are indicative of several other conditions making it hard to identify.

We are working with a range of healthcare providers to support them in unlocking the potential for NICE-approved N-terminal pro-hormone B-type natriuretic peptide (NT-proBNP) testing to improve⁶ heart failure diagnosis, treatment and outcomes.



Diagnosing heart failure at St George's Hospital

The new pathway specifies that patients aged 75 and over, presenting with breathing problems (dyspnoea), are given an NT-proBNP test as part of the standard blood order test set. Patients who need it can access a test within 24 hours, whereas previously, they may have waited several days.

Clinicians using the pathway at St George's Hospital diagnose heart failure earlier and using the NT-proBNP test in this way can reduce hospitalisations.⁷

"Patients are at the centre of everything we do.

If we have a simple way of identifying patients who should get access to specialist care/specialist therapies, then we should be using it. I am absolutely delighted we are at St George's, without any hesitation."

Matthew Sunter, Lead HF Nurse at St George's

Using diagnostics to improving the treatment of heart failure

The STRONG-HF paper published in the Lancet in 2022 is changing how heart failure patients are treated. In 2023, The European Society of Cardiology recommended a new approach that enables clinicians to rapidly accelerate (the previously very gradual) increase of medication dosage in heart failure patients. This has been shown to reduce post-discharge deaths and readmissions.

An experienced global community of over 300 Roche consultants are using LEAN methodologies, change management strategies and advanced data analysis tools to implement STRONG-HF- and learning from each other and sharing best practices as they do.

In the UK, our Consultants work within local systems to redesign pathways, update post-operative patient management processes and pharmaceutical practices, and refresh patient communications to maximise benefits.

Early diagnosis of heart failure in primary care

Roche Diagnostics partnered with Clarivate Analytics and EMIS to prompt GPs to request an NT-proBNP test for patients presenting with the key symptoms of heart failure, in line with NICE guidelines.⁴

From September 2023, GPs from over 4,000 practices in the UK have been automatically receiving pop-up notifications when a patient presents with symptoms and risk factors associated with heart failure.

All EMIS users receive these alerts unless they actively opt out. EMIS typically only supports 'opt-in' campaigns but we worked with them to make an exception due to the urgent need to improve early heart failure diagnosis.

The initial intervention ran for twelve months. Roche is currently working with Clarivate Analytics and EMIS to assess the impact of the intervention and present the findings.



Transforming the pre-eclampsia pathway

Roche Healthcare Consultants worked with clinicians at the **Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust** and experts at **Yorkshire and Humber Academic Health Science Network** to transform their pre-eclampsia pathway.

Today, 5,000 women who give birth at the Trust each year benefit from faster diagnosis, earlier treatment and better outcomes for themselves and their babies.

Global scale

The previous pre-eclampsia pathway caused stress among pregnant women and their families and frustrated staff, who felt processes weren't consistent or scalable.

Roche Healthcare Consultants led a three-day workshop to explore how to re-engineer the pathway to put the person at the centre. They used Continuous Improvement methodology to drive change and supported the Trust to introduce a ratio test (Elecsys° sFlt-1/PIGF) to increase pre-eclampsia diagnosis.

Local impact

The new pathway is having real benefits for the women using their maternity services, with the potential to:



Cut turnaround time by 43%¹⁰



Save 900 hours of staff time per annum¹¹



See 70 more women treated correctly first time¹¹

The success of the pathway and the partnership approach gave Doncaster Royal Infirmary confidence to expand the service across Yorkshire.

"The expertise of Roche Healthcare Consulting in Continuous Improvement and facilitation enabled an enjoyable and interesting three-day workshop. We left feeling excited to make positive changes to our pathway, with a clear plan of what we needed to do and the significant benefits we could realise for our patients. We are still working together now to improve not only the pre-eclampsia pathway but all services provided to maternity."

Dr Shirley Spoors - Consultant Biochemist and Clinical Lead



Rapid flu testing in the community

Between December 2022 and March 2023, nine GP practices across Yorkshire and the North West implemented a community flu test-and-treat pilot, with the support of Roche, using rapid point-of-care testing (POCT) to help diagnose and treat high-risk patients as early as possible.

The pilot, which included partners from the NHS, academia and the private sector, aimed to assess if POCT and digital reporting could reduce pressure on the local healthcare system.



Global scale

After a detailed consultation with RHCs, individualised pathways were designed for 16 community locations where testing could be performed, including GP surgeries, care homes and respiratory hubs.

The pilot used the Roche **cobas**° liat analyzer to process tests at the point of care. Results were available to the clinician in just 20 minutes.

Local impact

During the trial, 43,000 clinically at-risk patients were encouraged to take a flu test at one of the pilot sites if they developed symptoms. Data from the pilot was collected by Healthcall, an NHS-owned company and independently analysed by Unity Insights. Based on national averages for flu surveillance, they established the estimated impact of the programme:

It is estimated that:



17 hospitalisations were avoided, saving £37,0008



1 ICU admission was avoided, saving £1,000°



4 deaths were avoided⁹

Phase two of the pilot is running in winter 2024 using the Roche rapid lateral flow test to diagnose, triage and treat symptomatic patients with flu A/B and/or Covid.

"We've been supported throughout the whole project."

Healthcare professional (anonymous)

Accelerating the diagnosis of Alzheimer's disease

We have supported **Tallaght University Hospital (TUH) in Dublin** to introduce in-house testing for Alzheimer's disease using our diagnostic tools to accelerate diagnosis and enable early interventions.

Roche Diagnostics supported TUH in fully verifying three new assays in the clinical service repertoire. The three assays – CSF Elecsys $^{\circ}$ Phospho-Tau (181P), Total -Tau and β -Amyloid (1-42) – have all been successfully integrated into the clinical pathway for diagnosing Alzheimer's disease.

With the help of RHCs, TUH collaborated with the Royal Victoria Hospital, Belfast, to share samples and clinical expertise, enabling them to introduce the new diagnosis pathway successfully.

As well as speeding up the diagnosis of Alzheimer's disease for patients in Dublin, medical scientists from TUH and Royal Victoria Hospital have learned valuable skills from their involvement in this ground-breaking project.

"Introducing Alzheimer's disease biomarkers gave scientists in TUH an opportunity to develop their expertise."

Eoin Begley - Chief Medical Scientist, Clinical Chemistry TUH









Partner with us to access the power of diagnostics for your organisation, your people and your patients

We know the NHS is facing some huge challenges right now. We want to help.

The examples and testimonials in this brochure illustrate how our partnership approach goes beyond the standard supplier/customer relationship. We can work with you – and your teams – to use the power of existing diagnostics and the latest innovations, to help address, mitigate and overcome some of these challenges.

The Roche Managed Service combines our diagnostic products and platforms, healthcare consultancy and laboratory solutions into a single package. It's a flexible and cost-effective solution which can help you to drive efficiency, get the latest innovations to your patients and deliver consistently high-quality healthcare services.

For more information, please speak to your Roche representative or email burgesshill.marketing@roche.com





References

- 1. Business Intelligence Team at Roche Diagnostics.
- 2. British Heart Foundation (2020). Available at: https://www.bhf.org.uk/-/media/files/health-intelligence/heart-failure-a-blueprint-for-change.pdf?rev=f89dedb7c933452e8086cc063ff98c26&hash=CF140A8A7C54679044042151B809E97C (Accessed: 21 February 2024).
- 3. Mebazaa A;Davison B;Chioncel O;Cohen-Solal A;Diaz R;Filippatos G;Metra M;Ponikowski P;Sliwa K;Voors AA;Edwards C;Novosadova M;Takagi K;Damasceno A;Saidu H;Gayat E;Pang PS;Celutkiene J;Cotter G; (2022) Safety, tolerability and efficacy of up-titration of guideline-directed medical therapies for acute heart failure (STRONG-HF): a multinational, open-label, randomised, trial, Lancet (London, England). U.S. National Library of Medicine. Available at: https://pubmed.ncbi.nlm.nih.gov/36356631/#:~:text=label%2C%2Orandomised%2C%2Otrial-,Safety%2C%2Otolerability%2Oand%2Oefficacy%2Oof%2Oup%2Dtitration%2Oof%2Oguideline%2D,(10367)%3A1938%2D1952. (Accessed: 21 February 2024).
- 4. European Society of Cardiology. (2023). 2023 Focused Update of the 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. European Society of Cardiology. Available at: https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Focused-Update-on-Heart-Failure-Guidelines [Accessed 23 April 2024].
- 5. NICE (2024) Available at: https://cks.nice.org.uk/topics/heart-failure-chronic/diagnosis/how-to-assess/ (Accessed: 21 February 2024).
- 6. Roalfe et al. (2022) Long term trends in natriuretic peptide testing for heart failure in UK primary care: a cohort study. European Heart Journal, Volume 43, Issue 9.
- 6. Adamo M, et al. (2023) NT-proBNP and high intensity care for acute heart failure: the STRONG-HF trial. Eur Heart J. 2023 Aug 14;44(31):2947-2962. doi: 10.1093/eurheartj/ehad335. PMID: 37217188.
- 7. Health Technology Wales (HTW) guidance 026 Natriuretic peptides to rule-in and rule-out a diagnosis of acute heart failure in adults in the emergency department setting (2021) https://healthtechnology.wales/reports-guidance/natriuretic-peptides-to-rule-in-and-rule-out-a-diagnosis-of-acute-heart-failure/# (Accessed January 2024).
- 8. Optimism bias correction applied. Flu hospitalisation cost from: NHS Improvement and NHS England. (2021). 2020/21 National Tariff Payment System: National prices and prices for blended payments.
- 9. Optimism bias correction applied. ICU admission cost from: NHS England. (2021). National Schedule of NHS Costs 2019/20.
- 10. National Institute for Health and Care Excellence. 2016. PIGF-based testing to help diagnose suspected pre-eclampsia (Triage PIGF test, Elecsys immunoassay sFIt-1/PIGF ratio, DELFIA Xpress PIGF 1-2-3 test, and BRAHMS sFIt-1 Kryptor/BRAHMS PIGF plus Kryptor PE ratio). [Online]. [Accessed 5 May 2022]. Available from: https://www.nice.org.uk/guidance/dg23.
- 11. Brunt, T. 2021. PIGF-based testing at Doncaster & Bassetlaw Teaching Hospitals for the assessment of pre-eclampsia. [Webinar]. [Online]. Roche Diagnostics Ltd, 08 October 2021.

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Roche Diagnostics Limited

Charles Avenue, Burgess Hill, West Sussex, RH15 9RY

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