Innovation Impact Report

2024 - 2025

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Foreword

This has been a pivotal year for Health Innovation Manchester – a year marked by progress, partnership, and purpose. As we move closer to realising our vision of becoming world-leading in improving the lives of local people, transforming care, and boosting the economy through innovation, we find ourselves at a critical moment in our journey.

Our progress comes against the backdrop of immense pressure on health and care systems, both globally and here in Greater Manchester (GM). Challenges such as poor population health and deep-rooted inequalities continue to fuel increasing demand for services. These are not easy problems to solve - but they are precisely the problems that innovation can help address.

Innovation is not just an ambition; it is a necessity. Our ability to harness technology, data, and digital solutions is central to improving outcomes, driving efficiency, and building a healthcare system that is fit for the future. At Health Innovation Manchester, we are uniquely placed to lead this transformation here in GM, and as part of the wider Health Innovation Network across England.

We have now launched an ambitious mission to harness global innovation to tackle cardiovascular-renal-metabolic (CVRM) disease across GM which is a high risk, significant disease burden, causing considerable economic impact. This includes a portfolio to take a more preventative and proactive approach to managing the impact of obesity and obesity related complications. We are forming strategic alliances between healthcare and industry to address these issues together, with a particular focus on reaching into underserved communities to address inequalities.

The successful multi-agency health innovation accelerator programme has been a beacon of this approach, leveraging circa £30m of public and private funding over three years to accelerate risk stratification and diagnostics for communities at high risk of developing cardiovascular,

respiratory and kidney disease, as well as unlocking the potential of genomics through the DEVOTE programme to enable precision medicine.

This year we have continued to have a strong focus on maturing the underpinning digital and data assets required at a system level to accelerate innovation, working in close collaboration with NHS Greater Manchester and academic partners. This has included the continued growth of the GM Care Record for all 2.8m GM citizens and establishing the GM Secure Data Environment. This work is supported by national permissions and local governance, including data controllers and citizens to ensure we maintain their trust and interests in our activities. We will seek to build further on this into next year, with the launch of a new 'Greater Data' service that will foster greater industry and academic collaborations to advance research, population health and unlock economic potential.

In addition to this, we have also signed our first formal international partnership with a leading government state in India - home to one of the world's foremost life sciences hubs in Telangana. Working together, we hope to lay the groundwork for the next generation of cutting-edge treatments, diagnostics, medtech, and digital health solutions. This agreement will facilitate the exchange of knowledge and research capabilities and open up new opportunities that have the potential to transform lives.

Our commitment to excellence has been further reinforced by the strengthening of our leadership team. We are delighted to welcome Professor Mark Britnell as Chair of our Board. Mark's global healthcare experience, gained across 81 countries, brings unrivalled strategic insight and leadership. We are equally proud to be joined by four esteemed Greater Manchester leaders - Councillor Bev Craig, Anthony Hassall, Professor Duncan Ivision, and Professor Ashley Blom - whose collective expertise and local commitment will further anchor our work in the communities we serve.

In another exciting development, we have appointed Professor Dame Nancy Rothwell as our Global Ambassador. Nancy brings a remarkable legacy of leadership, research, and scientific excellence. Her distinguished career - including her most recent role as President and Vice-Chancellor of The University of Manchester and her positions with AstraZeneca, the Council for Science and Technology, and the Russell Group - places her in a unique position to elevate our work on both national and international stages. Her guidance will be invaluable as we continue to forge meaningful partnerships across the world to address global, and Greater Manchester's, health challenges.

This year has truly set the stage for what's to come. With new partnerships, global collaborations, and senior leadership at the helm, Health Innovation Manchester is poised to accelerate its mission and deliver even greater impact.

Together, we will continue to drive forward innovation that matters - innovation that transforms care, improves lives, and creates a healthier, more equitable future for all.
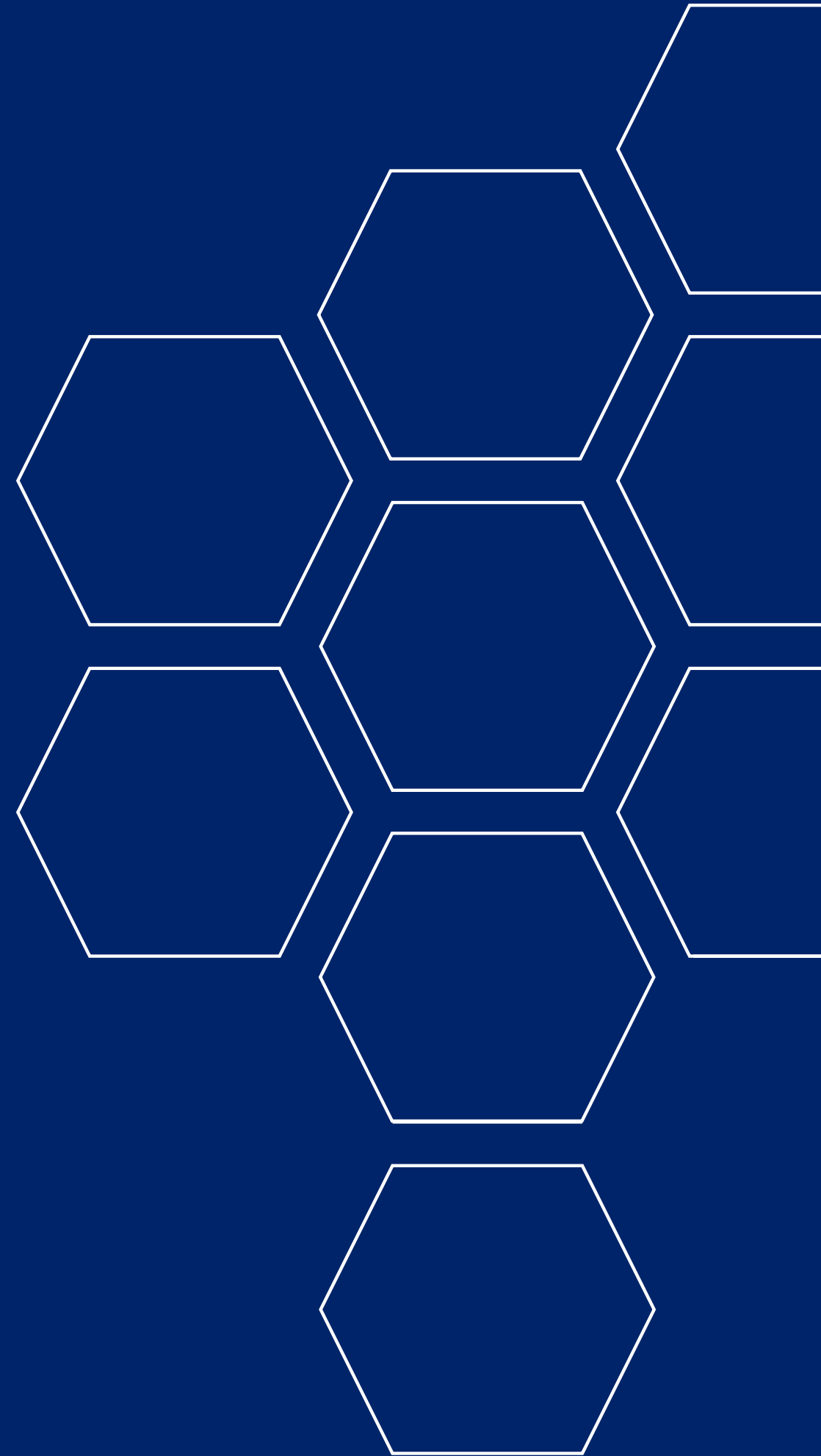
With thanks

Professor Ben Bridgewater
Chief Executive Officer

About Health Innovation Manchester

Health Innovation Manchester (HInM) is a place-based innovation organisation, with a vision to be world leading in improving the lives of local people, transforming care and boosting the economy through innovation.

HInM has facilitated rapid access to cutting-edge health innovations, ensuring that the people of GM are at the forefront of benefitting from pharmaceutical, digital and other technology products. HInM's proven method underpins the ability to target those most in need and measure precise population health outcomes.

HInM has fostered a collaborative ecosystem of academic, healthcare, and industry leaders to drive innovation that addresses real-world healthcare challenges - positioning the city region as the place for inward investment with demonstrable impacts, built on its rich data assets that enable patient interventions to be targeted in the right areas and at the right time.

Our strength lies in the sustained commitment of Greater Manchester's (GM) civic, academic, industry and health and care partners since our formation in 2017 - who are all represented on our Board.

We have four key elements to success:
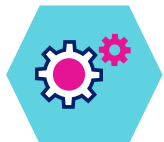
1. Integrated governance

Whilst we are an NHS hosted organisation, we report to an independent Board comprising the highest-level city region leadership from the NHS, GM universities, the GM Combined Authority, local authorities and influential non-executive directors from global life sciences and medtech industries.

2. Integrated capabilities

HInM comprises the GM Health Innovation Network (formally AHSN), the Manchester Academic Health Science Centre, the National Institute for Health and Care Research (NIHR) Applied Research Collaboration Greater Manchester (ARC-GM) and the NHS GM ICB Digital Transformation Office. Whilst recognising their distinct accountabilities, we integrate the components to deliver our mission through blended activities and driving collaboration across GM partners.

3. Industry partnerships

Greater Manchester's past, present and future success is based on strong partnerships with industry. We recognise that major innovation supply chain opportunities for health and life sciences are coming from the pharma, biotech and digital industries.

We are focussed on building partnerships with industry to accelerate their product lifecycle processes to provide value for industry, as well as accelerating benefits for local people, and the health economy. HInM has brought in circa £20m per annum investment to the GM system in recent years.

4. Unrelenting focus on method

We recognise that the reliable delivery of innovation at pace and scale has been a challenge for healthcare systems across the world.

To progress our approach, we have placed data and digital approaches at the heart of everything we do and developed an enhanced innovation method overseen by robust assurance and the measurement of impact. This is at the centre of our operating model and will optimise our return on investment, support system sustainability and economic growth, and deliver better outcomes and experiences for patients.

Our strategy will deliver impact from innovation across GM that:

1. Improves lives and outcomes by addressing the priority drivers of population health.
2. Supports a safe and sustainable health and care system through deployment of innovation at scale.
3. Boosts jobs and economic growth through industry collaboration and partnerships.

These impacts will be delivered though our four strategic objectives to:

1. Address high priority drivers of population health by deploying proven innovations at scale, with a major focus on primary and secondary prevention.
2. Establish GM as a global learning market for accelerated access to novel innovations at scale.
3. Optimise digital and data products and services to understand the population, define their needs and develop new models and pathways.
4. Work with partners to enhance the GM system's capacity and capability to deliver health innovation and demonstrate impact.

More information is available in our 2024-2027 strategy

OUR PEOPLE

We recognise that our people play a pivotal role in delivering our vision and we've actively created a working environment that harnesses and rewards the dedication and expertise of our staff.

This year we have launched our Organisational Development and Transformation (ODT) plan that that ensures our people, processes, culture, tools, and technology are aligned to successfully deliver our HInM strategy and vision. Our transformation will empower teams to thrive in an increasingly complex environment while delivering high impact innovations for our communities. Our culture remains the foundation for engagement, motivation, and resilience.

Our ODT Plan has been guided by the design principles of our target operating model. These principles have been distilled and adapted to ensure they are meaningful for the organisational development we want to achieve. They set out our aspirations our target operating model:

- A flexible operating model that blends professional expertise with health and care insights.
- A reputation as a trusted ecosystem commercial partner accelerating transformative innovation.
- Organisational design that matches resources to evolving priorities, ensuring operational quality and efficiency.
- A culture that balances delivery expectations with forward-looking transformation.
- A motivated and diverse workforce committed to excellence and continuous learning.
- A focus on the development of innovative solutions that prioritise people's needs, enhance healthcare experiences, and ensure equitable, personalised care with ongoing community engagement.

The ODT Plan is supported by investment in our people and a newly formed People Council that will help to foster the principles of co-design with our employees. The People Council will help to ensure that every staff member has a platform to share ideas, collaborate on solutions that make HInM a better place for everyone. We believe in fostering a positive work environment where everyone feels valued and heard.

> "
> Our people are the heart of our transformation. When we invest in growth, collaboration, and shared purpose, we don't just change the organisation — we empower each other to shape its future
> "
>
> **Claire Macconnell,** Director of Operations

Demonstrating our impact

Health Innovation Manchester delivers a broad portfolio of innovation activities across multiple care settings, population health and disease areas – from early-stage discovery to solution development and deployment of innovation at scale.

It takes time for the full benefits of innovation to be delivered, but we are seeing promising outputs, outcomes and impacts from our work. This report highlights impacts from priority programmes of work and other notable projects.
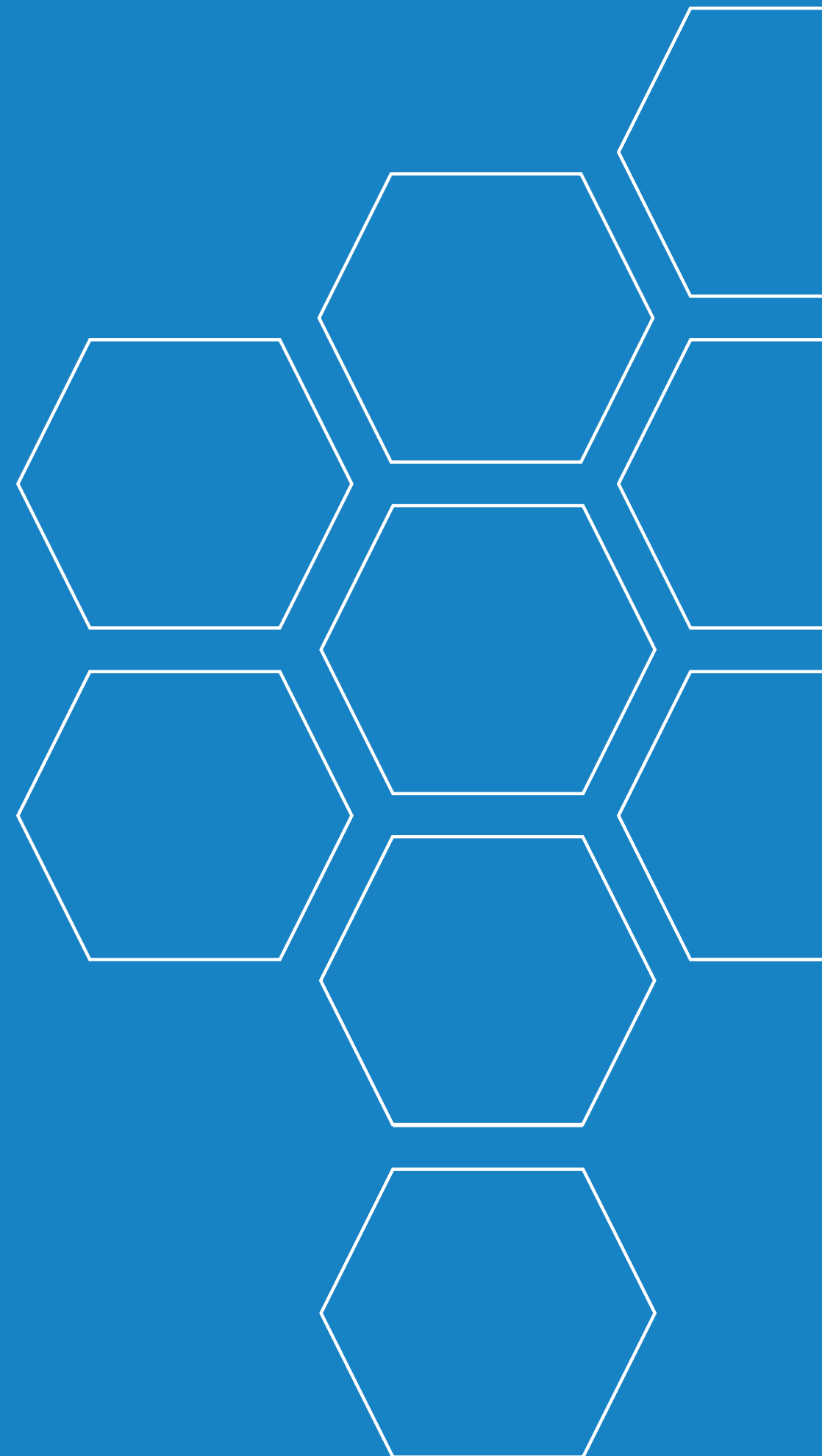
IMPACT 1: IMPROVE LIVES AND OUTCOMES FOR THE PEOPLE OF GREATER MANCHESTER (GM) BY ADDRESSING THE PRIORITY DRIVERS OF POPULATION HEALTH

Launching a Cardiovascular-Renal-Metabolic (CVRM) Mission: Programmes in development by HInM will address disease that

- Costs the GM system an estimated **£2.5bn** a year **£13,700** per patient.
- Claims nearly **5,500** lives annually in GM - an estimated loss of over **63,000** years of life.

Obesity pathway transformation: programme to address obesity in GM to address:

- **600,000** adults with obesity in Greater Manchester.
- Cost of obesity in Greater Manchester **£3.2bn** (inc. £1.2bn in lost productivity)
- Estimated **£440m** economic benefit from reduced obesity prevalence.

Early Detection of Heart Failure project:

- Of the **403** patients who have been enrolled and tested, **55.1%** were male **22.1%** were from ethnic minorities and **53.3%** were from the three most deprived areas within Greater Manchester.

Almost **90%** of all patients were found to have high blood pressure, whilst almost **45%** of those enrolled admitted to being an ex-smoker.

Heart Failure Care Plans:

- Over **3,400** heart failure care plans have been created in the GM Care Record during a pilot evaluation in Tameside and Heywood, Middleton and Rochdale, delivering better-coordinated care and improved outcomes for patients.

IMPACT 2: SUPPORT A SAFE AND SUSTAINABLE GM HEALTH AND CARE SYSTEM THROUGH THE DEPLOYMENT OF INNOVATION AT SCALE

GM Care Record:

- GM Care Record is estimated to provide over **£15m** per annum in productivity benefits due to clinical time saved.
- In April 2025, over **24,000** healthcare professionals accessed over **380,000** patient records.
- Digital dementia wellbeing care plan pilot launched in Tameside and Bury with **1,020** plans currently live.

- My GM Care app launched to **13,000** residents in Tameside.
- **190** community pharmacies onboard with access to the GM Care Record
- **86%** of data feeds across primary care, social care, acute, mental health and community providers are live into the GMCR.
- Over **11,000** EPaCCS end-of-life care plans published to date, with over **5,000** plans active at the end of March 2025.

PALOH:

- Nearly **3,000** tests have been completed in GM, equating to **14** babies saved from hearing loss and around a **£850k** cost avoidance to the healthcare system.

IMPACT 3: BOOST JOBS AND ECONOMIC GROWTH FOR THE GM CITY-REGION THROUGH INDUSTRY COLLABORATION AND PARTNERSHIPS

Industry Investment:

- HInM has brought in circa **£20m** to the GM system in recent years

Health Innovation Accelerator:

- **£18m** secured in industry co-investment and Innovate UK funding over three years

- **29** high value jobs created, and **50+** jobs sustained

- Over **400** patients engaged via community events

- Over **1200** patients engaged via treatment or research activities

- Deployment of new engagement techniques and identification or creation of at least **three** new products or services
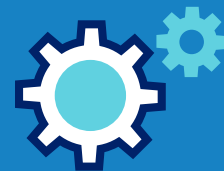
- NICE Approval of a new MedTech product

Health innovation network impact*:

A proportion of the overall funding leveraged was the result of the extension of Health Innovation Accelerator programme (£2.8m) - resulting in co-investment funding of **£17m**

- DEVOTE Programme: **£12.5m**
- Advance Diagnostics Accelerator (ADA) **£4.5m**

Other activity includes supporting Cancer Research UK's Clinical Training Programme, Local GM system activities and SBRI funded programmes.

These investments are a blend of Government, private and public sector funding focussed on developing healthcare innovations and transformation.

Jobs safeguarded **586**

Jobs created **326**
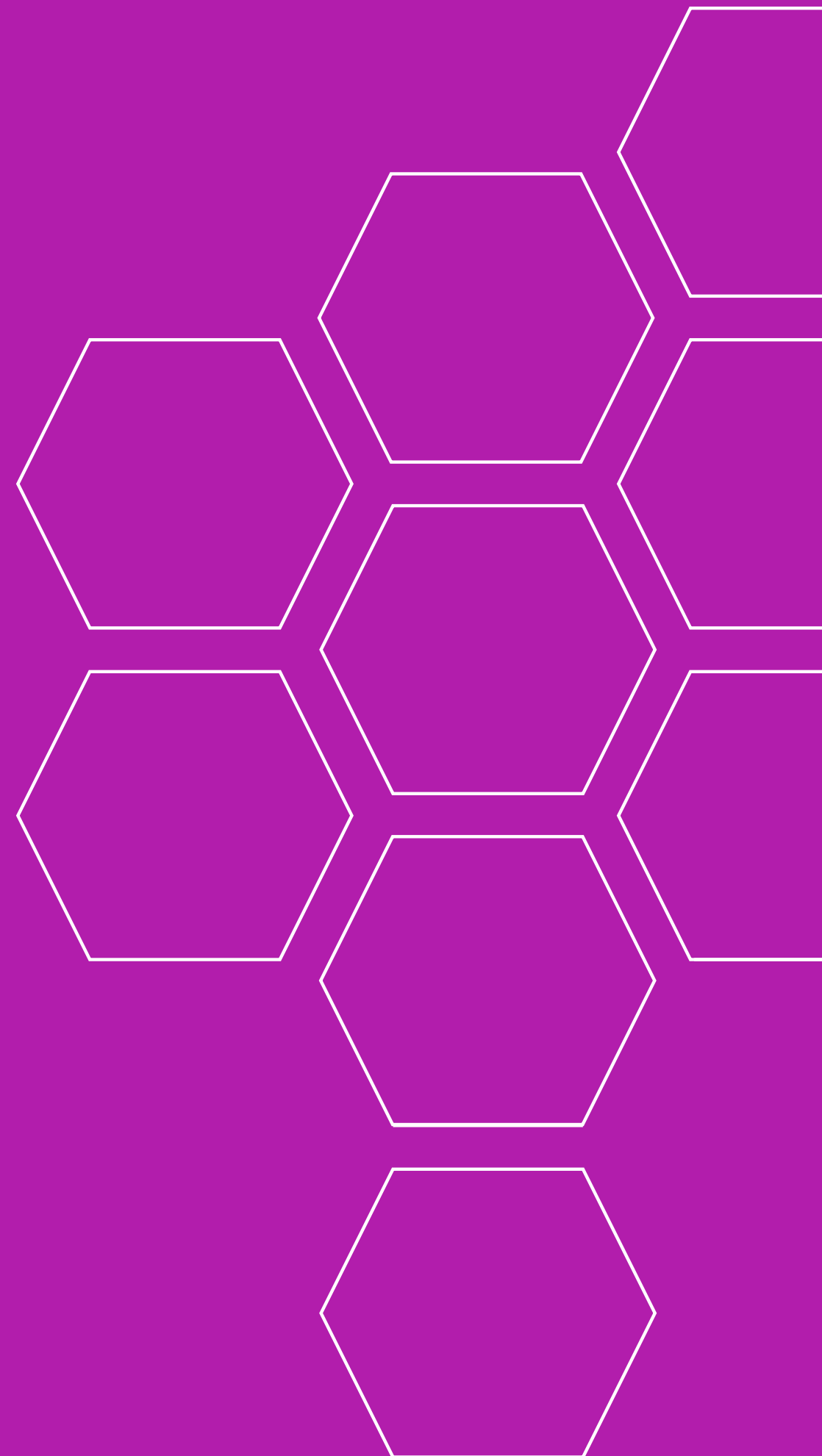
Additional investment: **£501,019,252**

Progress across Health Innovation Manchester programmes:

4.1 IMPACT 1

Improve lives and outcomes for the people of Greater Manchester (GM) by addressing the priority drivers of population health

4.1 A) LAUNCHING A CARDIOVASCULAR-RENAL-METABOLIC (CVRM) MISSION TO HARNESS THE POTENTIAL OF GLOBAL INNOVATION

Cardiovascular disease (CVD) is the leading cause of death globally, imposing a substantial burden on individuals, society, and healthcare systems.

CVD intensifies the pressure on the health and social care system, increases the reliance on informal caregivers, and impacts the economy through higher levels of sickness absence and reduced workforce participation. Recognising its impact, the NHS Long Term Plan designated CVD as a clinical priority, emphasising it as the largest area where lives can be saved in the next decade.

To help us quantify the scale of the issue in GM we commissioned a health economic analysis of the cost and impact of CVD. The report, undertaken by Frontier Economics, provides a comprehensive analysis of the financial and human impact of CVD, considering not only the burden on the NHS and social care but also the broader societal impact. This includes reduced quality of life, the strain on informal caregivers, and economic losses from higher sickness rates and decreased employment. The report shone a light on the size of the problem of CVD in GM and highlighted the urgent need for action.

> "
> Economic analysis of cardiovascular disease (CVD) is vital to help inform healthcare planning and resource allocation. Our report shows that CVD generates significant costs to individuals, the NHS and the local economy of Greater Manchester. We also explore the potential benefit from successful preventive or treatment interventions. We hope this analysis will guide innovation in patient pathways for CVD, improving health outcomes while reducing economic burdens. "
>
> **Nick Woolley, Frontier Economics**

Costs the GM system an estimated **£2.5bn** a year. **£13,700** per patient
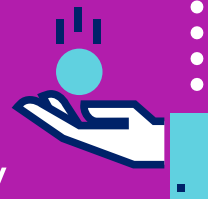
Claims nearly **5,500** lives annually in the area – an estimated loss of over **63,000** years of life.

Impacts older populations – prevalence rates **0.3%** among individuals aged 18–19, rising to **22.8%** among individuals aged 70 and increasing with age

Cardiovascular disease is now recognised as the single most significant area where lives can be saved over the next decade. To address this significant issue, Health Innovation Manchester (HInM) has now launched a three-year programme of activity that will form the CVRM Mission.

Working in collaboration with local health and social care partners, as well as industry and academia, the mission will create a more efficient and effective system focussed on preventing disease occurring and reducing the prevalence and deterioration of the CVRM systems. The CVRM Mission also supports the innovation work we deliver locally as part of the wider Health Innovation Network.

A key component of this strategy is the ability to analyse population health data to identify people at risk so the right interventions and treatments can be introduced at an earlier stage.

Partnerships are also being developed with industry to support the introduction and optimisation of innovations and novel therapies that could provide quicker access to treatments for local patients.

In summary, the CVRM Mission will encompass four main areas of work:

1. Addressing inequalities in underserved communities by finding people at risk of CVRM diseases and providing equitable access to care and treatment.
2. Understanding how advances in population health management approaches can support the health system to more accurately target interventions and shift towards prevention, as well as quantifying the cost and benefits of approaches.
3. Recognising the burden of obesity in GM, and the potential offered from industry innovation, we will develop new models of care and pathways to support increased equity of access to care and treatment.
4. Forming strategic partnerships with industry to accelerate the deployment of proven therapies and treatment, underpinned by a blueprint approach in partnership with the local health and care system.

These four areas will be measured against the following outcomes and impacts

- A reduction in CVRM related events.
- Increased access to care and treatment.
- Increased system efficiency and effectiveness.
- Faster access to novel therapies and industry led innovations.
- Productivity benefits to GM economy.

During the past year, significant progress has been made to build firm foundations to support the desired outcomes. The key projects highlighted help to demonstrate the CVRM Mission ambitions.
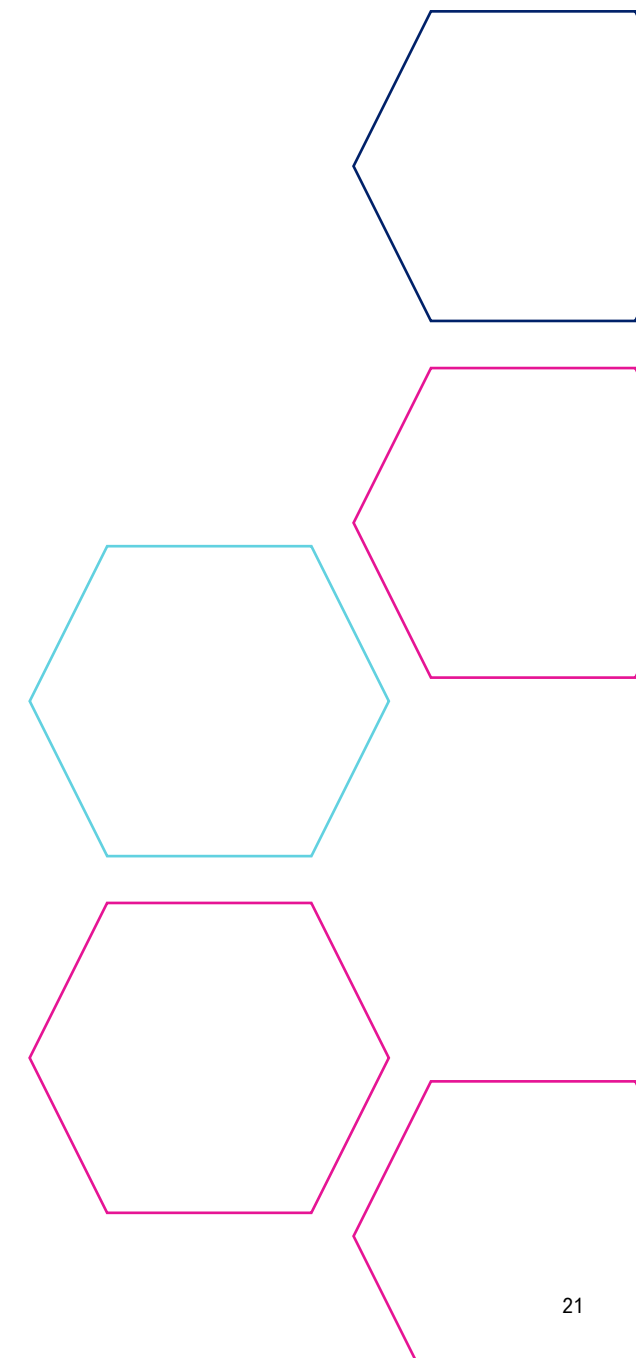
LIPIDS OPTIMISATION POINT OF CARE TESTING (POCT)

The Lipids Optimisation Point of Care Testing (POCT) project is currently delivering a POCT for cholesterol within social community settings, allowing people to regularly attend and communicate results through an integrated digital platform directly to primary care colleagues for action.

A key aim of the project has been to identify and reduce health inequalities in the outcomes of those Greater Manchester people who are at high cardiovascular risk through innovative approaches using data, diagnostics, and patient engagement.

The project has targeted localities at high risk of CVD and used creative approaches to co-design work with community and voluntary sector groups such as Manchester Winning Hearts & Minds & Public Health team, **BHA For Equality** and CAHN – **Caribbean & African Health Network CIC**, helping to build trust, raise awareness and promoting engagement and co-ownership.

To date, over 350 tests have been delivered in the community, with further checks still to be delivered with the assistance of our community and voluntary sector partners. Through this work, we aim to understand and evaluate community enablers and address barriers to understand how we can continue to use diagnostics to ensure high risk community patients are referred earlier and managed in the care pathway to reduce the risk of cardiovascular disease.

This project is delivered as part of a series of projects that looks to address GM's major morbidities for the Advanced Diagnostics Accelerator (ADA), part of the Health Innovation Accelerator. The Health Innovation Accelerator has been established to rapidly improve the diagnosis and treatment of disease.

> " I think this is perfect for a lot of people... it's really important that we have these opportunities, literally when we are at our churches or at our community centres, then we do engage because I know for a fact that some of the screenings that have been done have saved lives. I wish they were around years ago. So, I just urge people to go, it's not painful, it doesn't take long, the staff are nice, they keep you relaxed and calm - I think it's really worthwhile. "
>
> **Valerie Leveridge, Greater Manchester resident who received a POCT in a community setting with CAHN.**

ADVANCED DIAGNOSTICS ACCELERATOR – HEART FAILURE RISK DETECTION

We have already undertaken a substantial amount of work under the 'Health Innovation Accelerator' programme that brings together academic and industry excellence from advanced diagnostics, digital and data.

There are several projects that aim to detect risk factors early and build up knowledge and insight to support the CVRM Mission these include:

- Chronic Kidney Disease Discovery
- Chest Pain Point of Care Testing
- Community Diagnostics – Lipids Optimisation
- Rapid Diagnostic Testing of Stroke
- Early Detection of Heart Failure

Communities across the UK are seeing cases of Heart Failure (HF) rise significantly, with GM at higher risk than other UK areas. The disease is an escalating health problem across the country which is estimated to affect approximately 1-2% of the adult population.

The Early Detection of Heart Failure project, delivered in partnership with Manchester University NHS Foundation Trust and the University of Manchester, was established to gain a greater understanding of the condition and to detect patients at increased risk of HF across the region. The research involves taking measurements of heart structure and function made from cardiac MRI scanning, reviewing blood levels of a marker of fluid retention and medical history factors. This provides an indication of whether a person is developing HF or could become unwell from it.

The project, led by Dr Nicholas Black, Cardiology Clinical Research Fellow at Manchester University NHS Foundation Trust (MFT), has recruited a diverse cohort of patients from across GM who will be monitored for the next five-years. To date, over 400 patients have been enrolled onto the research study through community engagement work and through more traditional methods such as a General Practitioner (GP) referral.

Eric Lowndes, a 71-year-old from Irlam, is involved in the research. To qualify to take part a patient must be over the age of 50, with health issues such as high blood pressure or high cholesterol and must reside in Greater Manchester.

> " Taking part in this piece of research was straight forward, it was easy to do, and it didn't take long. I went into the hospital with my wife for an appointment – the whole thing took an hour and five minutes, and then we spent about ten minutes talking to Dr Black who explained exactly how my heart was operating. I asked him if this was the normal process and he said that it absolutely was. So, if anyone does want to take part in this research, that's what you can expect; allow for a couple of hours for the whole thing and then you're home and dry. "
>
> **Eric Lowndes, Patient from Manchester.**

Of the **403** patients who have been enrolled, **55.1%** were male, **22.1%** were from were from ethnic minorities and **53.3%** were from the three most deprived areas within Greater Manchester.

Almost **90%** of all patients were found to have high blood pressure, whilst almost **45%** of those enrolled admitted to being an ex-smoker.

DIGITAL HEART FAILURE CARE PLAN IMPLEMENTATION

The Digital Heart Failure Care Plan has now been integrated into the GM Care Record, which can be viewed by patients through the My GM Care app, providing healthcare organisations and patients with a standardised care plan to manage heart failure. There are currently over 3,400 active plans created as part of a 'proof of value' evaluation.

This significant step forward enables everyone involved in a person's care to see their plan and will lead to better coordination, improved outcomes, and a more streamlined experience for both patients and care providers.

Over **3,400** **care plans** have been created in the GM Care Record during a pilot evaluation in **Tameside** and **Heywood, Middleton** and **Rochdale.** designed to deliver better-coordinated care and improved outcomes for patients.

OPTIMISING DIABETES CARE (ODIN) IN GREATER MANCHESTER

By working in partnership with Boehringer Ingelheim (BIL) and GM system partners, an advanced interactive dashboard has been created to address healthcare challenges and enhance patient care. Built using real-world data, this cutting-edge tool provides a comprehensive understanding of the cardiorenal metabolic care pathway across the city-region.

The dashboard integrates with the GM Secure Data Environment (SDE), a secure 'box' within the existing GM ICS Advanced Data Science Platform (ADSP) that has the highest standards of safety and security measures in place. Within the SDE it can access de-identified data on patients with diabetes and associated conditions, such as obesity and CVD. It then uses machine learning and data science to analyse the information to identify variations in care and patient outcomes.

By pinpointing gaps in care, the dashboard will empower healthcare providers to take the right steps to ensure healthcare is delivered in an equitable and efficient way.

The data analytics dashboard also enables approved users to understand opportunities of change in healthcare, to test new service models and pathways, different targeted interventions and the impact of additional funding.

These features allow users to evaluate the potential impact of proposed changes, ensuring strategic decisions are informed and effective. The goal is to reduce inefficiencies, improve access to care, and enhance patient experiences and health outcomes.

The dashboard has been reviewed by a number of a clinical experts in our system, as we now work towards the next exciting stage.

The development of the dashboard demonstrates the value of working in partnership with industry, the transfer of knowledge from BIL has already helped to enhance the data science skills and expertise within the GM system. This will increase the capability of local teams to deliver other innovations that can addresses population health and care issues.

> This interactive dashboard highlights the potential of data-driven insights to transform healthcare. By identifying care variations and simulating opportunities of proposed changes, it provides a powerful platform to guide future planning and improve health outcomes for patients across Greater Manchester.

Dr. Aseem Mishra, Clinical Lead CVD Prevention & Manchester Locality Portfolio, NHS GM

OBESITY PATHWAY TRANSFORMATION

People living with obesity have an increased risk of developing other health conditions, such as CVD. To address this problem, we have partnered with Eli Lilly and Company to understand the cost and impact of obesity in GM and are now working in collaboration with NHS Greater Manchester and primary care providers to reimagine how GM can provide a more integrated and holistic service to eligible cohorts.

During 2023 and 2024, we worked with Frontier Economics, they identified that there are around 600,000 adults who live with obesity in GM, which costs the city-region economy £3.2bn annually, including healthcare costs, costs to the individual and carers, and productivity loss – which accounts for £1.2bn every year. We also found that there is currently unequal access to weight management services and treatment across GM, and demand for support outstrips current capacity, often leading to long waiting times and suboptimal outcomes.

The pace of global innovation in obesity medicines and the digital and medtech sectors provides a real opportunity to harness the potential of innovation to improve services, outcomes and experiences. This year we launched the next phase of our obesity programme to codesign a new model of care and pathways for adults with obesity, using a more tech- enabled, primary care-led model of care that increases equity of access to all therapies and wrap-around support.

Key to this project is our design thinking approach to problem-solving that puts patients, staff and real-world experiences at the heart of innovation. Its use of collaboration and iterative testing develops solutions that improve care experience, delivery and efficiency. This has involved a series of working sessions in collaboration with NHS GM and primary care providers, culminating in tow workshops, where over 50 stakeholders were invited to feedback on developing models of care. The information gathered will inform the project outputs and further engagement work is planned.

600,000 **adults** with obesity in Greater Manchester

Cost of obesity in Greater Manchester **£3.2bn** (inc. £1.2bn in lost productivity)

Estimated **£440m** economic benefit from reduced obesity prevalence

HEALTHCARE INEQUALITIES PROGRAMME (InHip)

The Innovation for Healthcare Inequalities Programme (InHip) aims to address local healthcare inequalities experienced by deprived and underserved populations.

HInM, alongside expertise from secondary care partners and community organisations, worked with local communities to identify and minimise healthcare inequalities and improve access and uptake of the latest NICE approved health technologies and medicines.

These technologies and medicines are focused on five clinical areas of priority within the national Core20PLUS5 approach to reducing healthcare inequalities, which includes maternity, mental health, respiratory, cancer diagnosis and cardiovascular disease (for adults) and asthma, diabetes, epilepsy, oral health and mental health (for children and young people (CYP).

Working with key stakeholders, HInM identified that there was a high prevalence of paediatric asthma, asthma related hospital admissions and high levels of smoking in households. As a result, paediatric asthma was identified as a key healthcare inequality challenge and a pilot project was established at the Royal Oldham Hospital to identify cases of paediatric asthma and increase access to interventions for children admitted on to wards.

The pathway involved identifying asthmatic CYP admitted to hospital and offering a NICE approved innovation of a Fractional Exhaled Nitric Oxide (FeNO) test on the ward and repeated tests at four and twelve weeks.

FeNO devices are a novel medical technology used to monitor lung health by measuring nitric oxide in the breath of patients. Nitric oxide is a biomarker for asthma. FeNO testing measures the level of inflammation in the lungs and can be used to diagnose and monitor asthma in CYP. If asthma is uncontrolled, patients can be assessed (when appropriate) to see if they are eligible for biologic therapy medication. This specialist medicine is used to help the body gain long-term control of everyday asthma symptoms, reducing the overall risk of an asthma attack.

In addition, both the CYP and their household members who identified as smokers, were provided with stop smoking advice and referred for onward support via the Smoke Free digital app or the local stop smoking service.

The work delivered in Oldham led to all CYP identified with diagnosed or suspected asthma being offered a FeNO test, with 42 individual CYP then being followed up in the community where they provided a successful FeNO test result. Two individuals were assessed for biologic therapy with one successfully referred onto the biologic pathway. The support to stop smoking was accepted by 95 percent of the Individuals and because of the help provided, three homes committed to being smoke-free and this number is continuing to increase.

Work was also undertaken with groups of representatives from the local community to gain insight into their current understanding of asthma triggers and management, the impact of parental smoking on CYP asthma and barriers to stopping smoking. Connecting with a range of trusted community groups led to honest conversations around cultural influences and how messaging can be made as inclusive as possible. The findings informed the development of educational resources for families in collaboration with the community groups.

This approach will continue as normal practice in Oldham and is now being rolled out in Tameside. The pilot demonstrated the strength of working in partnership with key stakeholders across the system, including the community, to address local healthcare needs.
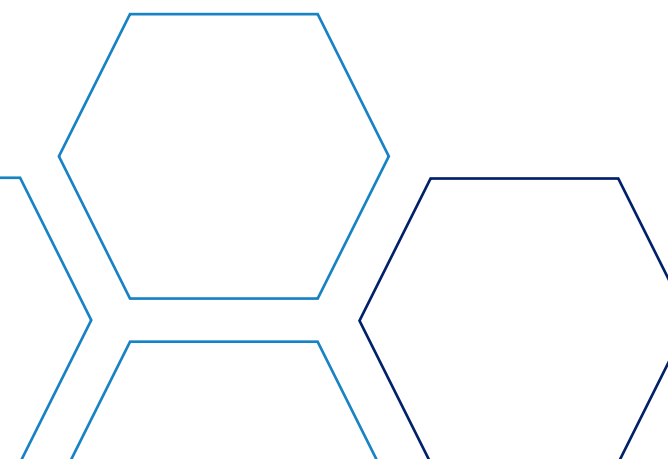
4.2 IMPACT 2

Support a safe and sustainable GM health and care system through the deployment of innovation at scale

The Greater Manchester Care Record (GM Care Record) is a vital digital resource for people living in GM and is helping to improve the delivery of health and care services and save lives.

It brings together patient information from NHS and care services across all 10 Greater Manchester boroughs into one joined up record, so that patient information can be accessed by frontline health and care workers, wherever patients receive their care.

It provides frontline staff with access to vital patient information from other care settings.

Our future focus will be to maximise return on investment, increase usage and access; optimise data feeds and to implement new models of care. The key projects we have delivered this year include:

- Community Pharmacy access to the GM Care Record.
- Clinical Engagement (growing awareness and adoption of the GM Care Record).
- Data Feed Optimisation.
- Scale up Electronic Palliative Care Coordinating System (EpaCCs) End-of-Life Care Plan on the GM Care Record.
- Heart Failure Care Plan (pilot).
- Dementia Wellbeing Care Plan (pilot).
- My GM Care patient app (pilot).

> " In terms of quality outcomes, the GMCR helped save cost, reduce duplications and strengthen communication amongst system colleagues "
>
> **Project Manager, Bury Integrated Care Partnership**

> " GMCR EPaCCS enables seamless communication between everyone involved in end-of-life care. With information in one place, teams can respect patients' wishes "
>
> **GP, Springfield Medical Centre, Eccles**

The GM Care Record is becoming established as the one single source of truth for direct care. Digital care plans and My GM Care app are valuable new capabilities that are designed to increase the value of the shared care record for users and patients.

Tying in with the ambitions of the GM Health and Care Digital Transformation Strategy, this project supports the delivery of integrated, coordinated and safe care, enabling staff and services to operate effectively and productively, empowering people to manage their health and care needs.

GM Care Record is estimated to provide over
£15m per annum in productivity benefits due to clinical time saved.

In May 2025, over **24,000** healthcare professionals accessed over **380,000** patient records.

Digital dementia wellbeing care plan pilot launched in Tameside and Bury with **1,020** plans currently live.

Digital heart failure care plan pilot launched in Tameside & Heywood, Middleton & Rochdale with **3,500** plans currently live.

My GM Care app launched to **13,000** residents in Tameside.

190 community pharmacies onboard with access to the GM Care Record

86% of data feeds across primary care, social care, acute, mental health and community providers are live into the GMCR.

EPaCCS End of Life Care Plans live in **8/10** GM localities.

Over **11,000** EPaCCS care plans published to date, with over **5,000** plans active at the end of March 2025.

2 award wins:
HSJ Patient Safety 'Improving Medicines Safety' and HTN 'Best use of Digital for Integrated Care Systems'.

COMMUNITY PHARMACY ACCESS TO THE GM CARE RECORD

Well Pharmacy signed up for access to the GM Care Record in November 2024, a significant step forward in improving patient care and safety across the region. Over 60 community pharmacies can now make better-informed decisions regarding prescribed medications or referrals and quickly identify potential drug interactions and contraindications, resulting in safer prescribing and dispensing processes.

Pharmacists can view essential patient information, including medication history, blood pressure records, lifestyle notes, and immunisation details—ideal for supporting flu and COVID-19 immunisation services. This access to vital patient information aims to reduce pressure on both pharmacists and GP practices, as there's no need to call or email colleagues in primary care, or any health services across GM.

Well Pharmacy is one of the first major chains to gain access to shared care records in England, and the partnership represents Well Pharmacy's commitment to leveraging digital technology for better health outcomes and greater patient satisfaction.

> "Well Pharmacy's role in the community is continually evolving with our pharmacies now offering more and new services such as Pharmacy First, the Contraceptive Service and Hypertension Case Finding Service. We are thrilled to be the first chain of community pharmacies in Greater Manchester to request access. Signing our pharmacies up to the GM Care Record allows our pharmacists access to real time, comprehensive patient data across the region, allowing us to make more informed and effective decisions. The seamless sharing of information also enhances collaboration with other healthcare professionals, ensuring that our patients receive the best possible care across all settings."

George Sandhu, Deputy Superintendent Pharmacist, Well Pharmacy

> "We're delighted that Well Pharmacy has decided to give their 60+ pharmacies access to the GM Care Record. The ease of access to the GM Care Record via the Electronic Patient Record system means their pharmacists will be able to see health and social care information without signing in to another system which is what pharmacists need to make important decisions quickly."

Luvjit Kandula, Director of Pharmacy Transformation at Greater Manchester LPC

4.2 B) SECURE DATA ENVIRONMENT DEVELOPMENT

We have made significant progress this year on the establishment of the GM secure data environment, which has the technical capability and permissions to unlock health data to advance research, population health and innovation – subject to necessary approvals.

Secure Data Environments (SDEs) are highly secure computing environments that can provide safe and secure access to health data for use in research. Utilising data from the GM Care Record, linked with other key datasets, Health Innovation Manchester is developing the GM SDE in partnership with NHS Greater Manchester.

The GM SDE will provide the infrastructure and analytical tools for artificial intelligence (AI) development, clinical trials, real world studies, translational research, epidemiological studies and health systems research in GM for the benefit of our citizens. GM has secured £2.5m from NHS England to develop the SDE from 2023-2025 as part of a collaborative across the North-West.

We have tested the capability of the SDE through a series of academic and innovation projects so we can develop the functionality and service offer, while continuing to support vital research and innovation work that makes a difference to local people. This has included:

- Establishing the clinical utility of pre-emptive pharmacogenetic testing across GM using linked data.
- Understanding and addressing socio-economic inequality within the quality and safety of care and outcomes for people living with dementia.
- Long-term opioid utilisation patterns and associated adverse consequences in patients with chronic non-cancer pain in GM.
- Investigating the relationship between HRT prescribing and health care utilisation including referrals to secondary care.
- ADAPT: Managing local follow-up for long term cancer survivors.
- Optimising lung cancer screening for individuals from underserved communities within GM.

- Exploring the early impacts of virtual wards in Greater Manchester, a comparative analysis.
- Health outcomes and their determinants in patients with systemic lupus erythematosus (SLE) across GM.
- Diabetes in Greater Manchester (ODIN-GM).
- Detecting EARLY Heart Failure in GM.
- Redesigning Liver Care pathways to target underserved high disease burden communities.

Building trust with our communities and data controllers on using data for research and innovation

Through collaborative efforts between HInM and NHS GM, we were able to secure national Confidentiality Advisory Group (CAG) approval to be able to use de-identified data to aid research, planning and innovation – being one of the first ICS's to achieve this.

We continue to place significant importance on building and maintaining trust with our citizens and data controllers and have established effective governance arrangements to bring representatives close to decision making on how data should be used for these purposes.

SECURE DATA ENVIRONMENT: CITIZEN ADVISORY PANEL

The Citizen Advisory Panel (CAP) brings together public and patient representatives from across GM plays a crucial role in the governance and decision-making processes related to data access and usage within the SDE. Representatives from CAP also attend GM's Data Access Committee (DAC).

The panel comprises 10-12 public members, meets monthly to discuss applications for data access to the SDE and make recommendations to the GM Data Access Committee. 13 applications have been reviewed to data.

The CAP also engages in wider deliberation topics around the use of patient data such as attitudes towards working with industry in healthcare, communicating and engaging with the wider public around data and cyber security. These discussions are co-created by the project team and CAP members, ensuring a comprehensive and inclusive approach to agenda setting. For instance, in response to a cyber security incident in the wider NHS, the CAP invited a top cyber security expert from NHS GM to present and to answer any questions the panel had related to data security.

The CAP's involvement is vital for maintaining public trust and ensuring that data governance related to the SDE is transparent, inclusive, and aligned with community's needs here in Greater Manchester.

> "
> The citizens advisory panel is a mixture of ordinary people. Some people are very clever, they've been computer scientists, or have done other jobs like worked in schools. Some people have been ill all their life like me.
>
> We've got a nice mix of people from all backgrounds, young and old people, and I think we represent Greater Manchester well. I think our different lived experiences helps to put the use data into context for the people who are actually using it, because they see us as real people, not just as data.
>
> When everything works together, the people, the panel, the health care professionals, the researchers, it's amazing - just fantastic. To see it work and then you see the end results of it, you think "I've taken part in that, my voice has been heard" and it just gives you such a sense of achievement because you've been part of it right from the start.
> "
>
> **Russ, patient and member of the Citizen's Advisory Panel**

Greater Manchester is home to several world-class universities and research institutions with a strong history of life sciences and healthcare research. The diversity and size of the GM population and maturity of the health and care system, means we can conduct research at scale, across different populations, and utilise these biomedical and health science discoveries to solve local, national and global problems

The excellent collaboration between GM universities, research trusts, and bodies, combined with strengths in health innovation and life sciences, means we can share talent, knowledge and facilities, to translate discoveries to improve the health of the population.

GM universities account for more than **100,000** students, of which around **28,000** are in biology, medicine, health (BMH) and care disciplines.

From a research perspective, from 2015-2023 GM has generated over in **£1bn** research grants in BMH.

HInM delivers a research and academic portfolio via partnerships with Higher Education Institutes (HEIs) which include The University of Manchester, The University of Greater Manchester (previously named The University of Bolton), The University of Salford & Manchester Metropolitan University. Manchester Academic Health Science Centre (MAHSC) and the NIHR Applied Research Collaboration Greater Manchester (ARC-GM) are also hosted within HInM.

Academic partnerships

Relationships with academic partners across GM allows us to maximise research and academic capacity and capability. These collaborations harness opportunities, attract major research and innovation funding, and ensure there is a constant pipeline of translational research and education initiatives to feed into our innovation programmes.

HInM has continued to develop its academic partnership activities, understanding our shared areas of interests and strengths from which to identify priority areas.

Some highlights from the last year include:

Continued access to GM data for research:

Several academic studies (including ADAPT Long Term Cancer Survivors, Pre-emptive Pharmacogenetic Testing and Virtual Wards) were selected as part the pipeline for gaining access to the GM Secure Data Environment in its alpha service.

Expanding health innovation and life sciences:

HInM partnered with GM colleges to support the Greater Manchester Further Education Innovation Programme . Funded by Innovate UK, the programme aims to increase the role of Further Education colleges by expanding its innovation support and improving productivity for local businesses. Steph Bateman, Specialist Nurse Innovation, joined the programme on secondment as Innovator in Residence – Health Innovation and Life Sciences, working to identify emerging technologies and trends and share 'Innovation Insights' across Health Innovation and Life Sciences.

The role of research leadership: guiding innovation and inspiring discovery:

Working with influential research leaders across GM's universities, we highlighted the vital role of academic leadership in research and innovation and how this bridges the gap between academia and practical healthcare needs - shaping a future of innovation and improved outcomes.

Setting a vision, collaborating and nurturing mature relationships were all featured as key to meeting the challenges facing both the health and care system, and the Higher Education sector. The insightful interviews with **Prof Penny Cook**, **Prof Deborah James**, **Dr Chathurika Kannangara** and **Prof Andy Trafford**, highlighted how GM universities are promoting a strong vision of fostering research and innovation and collaborative partnerships; one where students, staff and wider society stand to benefit.

Hearing loss prevention project – from discovery to deployment:

Gentamicin is a commonly used antibiotic given to newborn babies who are at risk of sepsis. 1 in 500 people have a genetic change that means they will suffer hearing loss after treatment with gentamicin. A pioneering, rapid bedside genetic test can establish if a newborn baby is vulnerable to deafness if treated with gentamicin.

Developed by Manchester researchers and industry partner, **Genedrive,** the test was piloted at MFT and was conditionally recommended by the National Institute for Health and Care Excellence (NICE) in 2023 for use within the NHS.

HInM played a crucial role in integrating this innovative test into neonatal care at scale, providing funding to ensure it was implemented across all eight neonatal units in Greater Manchester.

To date, nearly **3,000** tests have been completed in GM equating to **14** babies saved from hearing loss and around a **£850k** cost avoidance to the healthcare system. The success of this rollout has paved the way for a national expansion.

Following a successful **£1.5** million bid to the National Institute for Health and Care Research (NIHR) and the Office for Life Sciences, the **'PALOH-UK'** study commenced in November 2024.

The Pharmacogenetics to Avoid Loss of Hearing (PALOH) project aligns with the UK government's broader commitment to advancing genomic medicine. Insights gained from this initiative have also informed the Development and Validation of Technology for Time Critical Genomic Testing (DEVOTE) programme. Supported by The University of Manchester, HInM and industry partners, DEVOTE aims to develop and implement rapid genetic testing solutions in other critical healthcare settings. The increasing integration of genomics and informatics has also attracted leading biotech firms, such as Qiagen (APIS Assay Technologies), to establish research hubs in Manchester, reinforcing the city's position as a global leader in genomics.

If adopted nationally, the genetic test could save the hearing of hundreds of babies each year and would reduce associated costs. Health Innovation Manchester continues to work with local, regional and national stakeholders regarding the long-term sustainability of testing.

Manchester Academic Health Science Centre

In April 2020, **Manchester Academic Health Science Centre (MAHSC),** part of Health Innovation Manchester, was officially designated by National Institute for Health and Care Research (NIHR) and NHS England. MAHSC brings together expertise from universities and health and care organisations to drive excellence in research, education and patient care.

MAHSC works closely with these and other GM partners, such as local authorities and industry, to improve health and care services by translating early scientific research and discoveries into benefits for patients and communities. MAHSC amplifies the discovery and development of GM research to provide a rich pipeline of evidence-based innovations that can be deployed at pace and scale.

In this final year of NHSE/NIHR designation, MAHSC has provided over £400,000 of pump-prime funding towards this goal of accelerating research and building capacity and capability.

Funded initiatives include:

- Seven cancer projects, that focus on primary care research and aim to contribute to the advancement and implementation of cancer diagnostics, therapeutics and supportive care.
- An inflammation and repair project that is using peptide location fingerprinting to evaluate changes occurring in the protein structure of knee synovial fluid in cartilage defects compared to advanced osteoarthritis.
- Match-funding a PhD that commenced in October 2024 for three years. The successful PhD project was led by Professor Tristan McKay entitled "Integrating AI to quantify pathogenic alterations to the blood-brain-barrier in a human in vitro model"
- Five clinical fellowships awarded to colleagues by the neuroscience domain, providing funding for between 12-18 months to carry out dedicated research with protected time to do so.
- The women and children domain funded the "Jumpstart your pathway to clinical research" event, which provided insights for clinical staff including nursing, midwifery, and allied health professionals on how to engage with research and how to start a career in research.
- Supporting our mental health domain to hold workshops with system stakeholders, focused on: reimagining models of care at scale, secondary prevention opportunities under 'Live Well', and enhancing productivity related to neurodiversity.

MAHSC will continue beyond the current formal designation. We have engaged system partners to establish the key workstreams and supporting structures required for the 2025-2028 period.

MAHSC honorary clinical chairs:

The MAHSC honorary clinical chairs are awarded on an annual basis by The University of Manchester's Faculty of Biology, Medicine and Health Promotions Committee. They are awarded to individuals from across Greater Manchester who have made a major contribution to their clinical specialty, including excellence in research and education. **Visit the MAHSC homepage** to view the full list of MAHSC honorary clinical chairs.

Each honorary clinical chair is invited to give an **inaugural lecture** that celebrate the diverse professional and personal journeys, as well as clinical, research and teaching achievements.

NIHR Applied Research Collaboration Greater Manchester (ARC-GM):

The National Institute for Health and Care Research (NIHR) Applied Research Collaboration Greater Manchester (ARC-GM) supports applied health and care research that responds to, and meets, the needs of local populations and local health and care systems. The NIHR ARC-GM is hosted by Manchester University NHS Foundation Trust, as part of Health Innovation Manchester, in collaboration with the University of Manchester and the other Greater Manchester Universities.

NIHR ARC-GM is one of 15 ARCs across England, part of an initial £135 million investment over five years by the NIHR to improve the health and care of patients and the public. In Summer 2023 NIHR confirmed the initial five-year investment was to be extended by 18 months until 31 March 2026.

NIHR ARC-GM work with health and social care partners, the voluntary, community, faith and social enterprise (VCSFE) sector, industry and other NIHR infrastructure to translate priorities into answerable research questions, ensuring that their jointly co-produced research is relevant, useful and applicable to local service needs and affects policy and practice within Greater Manchester and beyond.

THE INTEGRATED CARE SYSTEM (ICS) RESEARCH ENGAGEMENT NETWORK (REN) DEVELOPMENT PROGRAMME

The focus of the Greater Manchester (GM) REN has been to create a culture shift that prioritises effective and inclusive Research Engagement in a coordinated way built on mutually beneficial partnerships between the ICS the VCFSE sector, research organisations and the communities of Greater Manchester.

The team have done this by:

- Embedding the Respectful Research Charter into ways of working and training researchers to create and sustain meaningful collaborative partnerships with communities, with the VCFSE sector.
- Galvanising system leaders in Greater Manchester to challenge current ways of working with a shared commitment to taking action to reduce systemic barriers to research participation, along with creating partnerships with ICS programmes working to tackle inequalities, so that REN is better integrated into ICS ways of working.
- Providing community leaders with the opportunity to showcase the impact of their work, enabling meaningful connections with researchers built on mutual respect.

For more information >

4.2 D) PATIENT SAFETY COLLABORATIVE

England's 15 Patient Safety Collaboratives (PSCs) play an essential role in identifying and spreading safer care initiatives.

HInM hosts the Greater Manchester and Eastern Cheshire PSC (GMECPSC) to deliver the National Patient Safety Improvement Programmes (NatPatSIP).

The aim of the programme is to support a culture of safety, continuous learning and sustainable improvement across the healthcare system to reduce harm through patient safety incidents.

HInM's support offer to the GM system has been based around the skillset of our multidisciplinary PSC team - bringing together expertise in system convening, quality improvement, safety science, programme management, insight and intelligence and communications to produce a range of resources and events aimed at supporting the healthcare workforce advancing patient safety.

The four areas of focus for 2024-25 were:

Managing Deterioration & Martha's Rule
System Safety and PSIRF
Medicines Safety
Maternity and Neonatal

Managing Deterioration and Martha's Rule

Martha's Rule is a crucial patient safety initiative that gives patients and their families a way to urgently request a second review if they notice a decline in their own or their loved one's condition that they feel isn't being properly addressed. This initiative, led by NHS England (NHSE), is currently being rolled out across **143 acute inpatient hospital sites** with its importance lying in ensuring timely responses to critical health concerns expressed by patients or their loved ones.

HInM was commissioned by NHSE, via the PSC, to support six hospital teams in GM in the implementation of Martha's Rule. This support was provided through a Breakthrough Series (BTS) format, which focuses on collaborative learning and quality improvement. The team at HInM has been working closely with these sites, coaching and assisting them in embedding Martha's Rule within their hospital trusts.

The work of the 6 GM pilot sites so far has contributed to a national picture of increasing sensitivity to deterioration where Martha's Rule has been implemented.

HInM has confirmed it will continue to support pilot sites during Phase 2 of the national pilot, and will onboard the remaining GM sites into the programme.

> " As we move forward nationally with the implementation of Martha's Rule across the NHS in 2025-26, we are not just working to improve patient safety; we are striving to ensure the best possible outcomes for everyone involved—staff, patients, and their families. I am proud to be part of this important initiative and really looking forward to continuing to support the health and care system that I'm so passionate about "
>
> **Wendy Stobbs, Senior Improvement Manager - Martha's Rule, NHS England.**

System Safety and PSIRF

The Patient Safety Incident Response Framework (PSIRF) is a key deliverable in the NHS Patient Safety Strategy. PSIRF supports the overarching aim of helping the NHS to improve its understanding of safety by drawing insight from patient safety incidents and transform the way we review and improve patient safety.

The key objective for the PSC team in 2024-25 has been the use of quality improvement approaches and methodology to support PSIRF implementation across GM. We have delivered a Community of Practice for Patient Safety Specialists supporting the embedding of PSIRF approaches such as After Action Reviews (AARs) and Swarm huddles and addressing various aspects of sustainable implementation of PSIRF as a systematic way of working.

The PSC team has also supported the GM ICB as a thinking partner through regular meetings with the Patient Safety leads and has supported collaboration at a regional level by jointly hosting a major Patient Safety summit for patient safety leads, marking a significant journey over the past 3 years towards a new systemwide approach to patient safety learning and improvement.

In 2024/5 PSC delivered:

4 community of practice events for Patient Safety Specialists from across GM

Online event in November attracted over **100** patient safety leaders from across the North West

In person NW PSIRF celebration event attended by over **100** people celebrating the journey to embed PSIRF into care across our systems.

> " It was reassuring to see that everyone is about the same stage as we are and that we aren't alone in the struggle. It is also really good to know that what we are doing is on track. It was also great to hear what the future plans are so we can align ours with that. This was the first event I attended and it was really good to build my network and know where I can go for support. "

PSIRF celebration event attendee

Maternity and Neonatal

The Maternity and Neonatal Safety Improvement Programme (MatNeoSIP) comprises 3 wokstreams which aim to:

- Improve the optimism and stabilisation of the preterm infant
- Improve the early recognition and management of deterioration in women and babies.
- Support perinatal leadership teams to create and craft the conditions for a positive culture of safety and continuous improvement, enabling a more psychologically safe, collaborative, and supportive workplace.

This programme has supported maternity and neonatal providers in Greater Manchester and Eastern Cheshire (GMEC) to implement the nine key, evidenced-based preterm perinatal optimisation interventions that are proven to improve outcomes. We have supported the launch of the national Maternity Early Warning Score (MEWS) and Newborn Early Warning Track and Trigger (NEWTT2) across GMEC localities. Perinatal leadership teams have benefited from executive coaching in support of their safety culture improvement work and our work in rolling out **MOMENTS** in GMEC is leading to an increase in cultural conversations within the workforce.

OPTIMISATION AND STABILISATION OF THE PRETERM INFANT

Data shows that **GMEC** is now achieving its local ambitions around the **NINE** key evidenced based preterm perinatal optimisation interventions that are proven to improve outcomes.

The optimisation impact data for 2024 to the end of Dec (Q4 not available at time of reporting) shows that in GMEC:
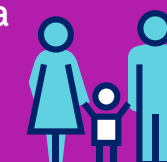
- Optimal place of birth = **3.9** babies surviving
- Antenatal steroids = **30.4** babies surviving
- Magnesium sulphate = **4.5** fewer cases of cerebral palsy
- Magnesium sulphate societal and wider cost savings (based on £800,000 per fewer cases of cerebral palsy) **£3,567,568**
- Intrapartum antibiotics = **9** fewer infections
- Optimal cord management = **8.1** babies surviving

EARLY RECOGNITION AND MANAGEMENT OF DETERIORATION OF WOMEN AND BABIES

HInM have been supporting GMEC providers to adopt the standardised national early warning tools through a range of activities such as **Breakthrough Series, study days** and special interest groups.

- **3** providers have implemented Maternity Early Warning Score (MEWS)
- **4** providers have implemented Neonatal Early Warning Track and Trigger tool (NEWTT2)

PERINATAL CULTURE AND LEADERSHIP PROGRAMME (PCLP)

Executive coaching provided to perinatal leadership teams from **4** GMEC providers

Delivered **3** MOMENTS

Train the Trainer sessions total of **64** attendees from the multidisciplinary perinatal workforce

MOMENTS is a framework developed by the University of Leicester, to help staff enhance communication, collaboration, and compassionate care in maternity care.

Medicines Safety

The Medicines Safety SIP in 2024-25 continued to focus on reducing harm from opioids in chronic non-cancer pain. A survey was undertaken at the end of the programme, which highlighted that some of the most helpful aspects of the BTS collaborative were:

"Working together on an area of prescribing that has mostly been neglected over the years and helping each other to manage it"

"Networking with different healthcare professionals gave us the opportunity to continue to work with them on further improvement work and share best practice."

Greater Manchester has one of the highest opioid prescribing rates in England, and prolonged use can lead to harm. The HInM team collaborated with system colleagues and people with lived experience to design the NHS Greater Manchester Pain Management Resources Hub, which brings together all GM Pain Management resources into one place in accessible, short-form formats.

A Breakthrough Series (BTS) on reducing harm from opioids in non-cancer pain has delivered 4 full day learning sessions. These sessions covered the Biopsychosocial model, included presentations from pain experts, and promoted co-production with patient involvement. Quality Improvement (QI) tools were shared, focusing on workforce planning, patient-centred improvements, and system resources. Regular coaching sessions were provided to improvement leads, integrating QI, strategic leadership, change management, and business intelligence. A whole system approach underpinned the series. Improvement priorities were co-developed with the system, focusing on discharge standards, embedding use of learning resources, handover to primary care, and increasing biopsychosocial elements. System-level insights into opioid use and prescribing across Greater Manchester (GM) were developed using ePact2 data.

The GM Pain Management Resources Hub, consolidates all GM Pain Management resources into one accessible location. A podcast on pain is also available for further insights.

The GM Pain Management Resources Hub >

Podcast on Pain >

The Digital First Primary Care (DFPC) programme was launched by Health Innovation Manchester, NHS Greater Manchester, and the Greater Manchester Integrated Care Partnership to support general practices and PCNs in delivering a digital transformation. Rooted in the Greater Manchester Primary Care Blueprint, this initiative was designed to addresses the pressing need for accessible, patient-centred care and reducing reliance on 8am appointment rushes.

Central to the success of the programme was the **Digital Facilitator Service.** This network of 17 digital facilitators provided hands-on coaching, training, and guidance to practices and PCNs. They focused on promoting the NHS App, digital inclusion, and reducing administrative workloads. These efforts empowered practices to enhance patient access and engagement, streamlining care delivery.

Testimonials reflect their success:

- "Learnt a lot today from this session and will pass on the info to our staff. Thank you."
- "Brilliant service for the elderly and those who are technologically challenged like me. Josh explained everything clearly and went at my pace. Thank you!"

The achievements underscored the effectiveness of the Digital Facilitator's contribution to the DFPC programme:

- **NHS App Engagement:** 227 events supported from January to September 2024 to drive app adoption.
- **NHS App Logins:** Monthly logins rose from 986,958 in September 2023 to over 2.3 million by September 2024.
- **Virtual Triage and Telephony:** 176 virtual triage and 187 cloud-based telephony support sessions improved patient access and streamlined operations.
- **Repeat Prescription Orders:** NHS App prescription orders increased from 127,468 in September 2023 to 224,829 by September 2024.
- **Practice Websites:** 484 website reviews facilitated quality improvements, with 79% of practices advancing towards national standards.

The DFPC programme also prioritised digital inclusion through community outreach—engaging with local councils, libraries, and community groups to raise awareness and capability. By shifting non-patient-facing workloads and optimising patient engagement, practices saw reduced administrative burden, improved workflows, and better patient satisfaction.
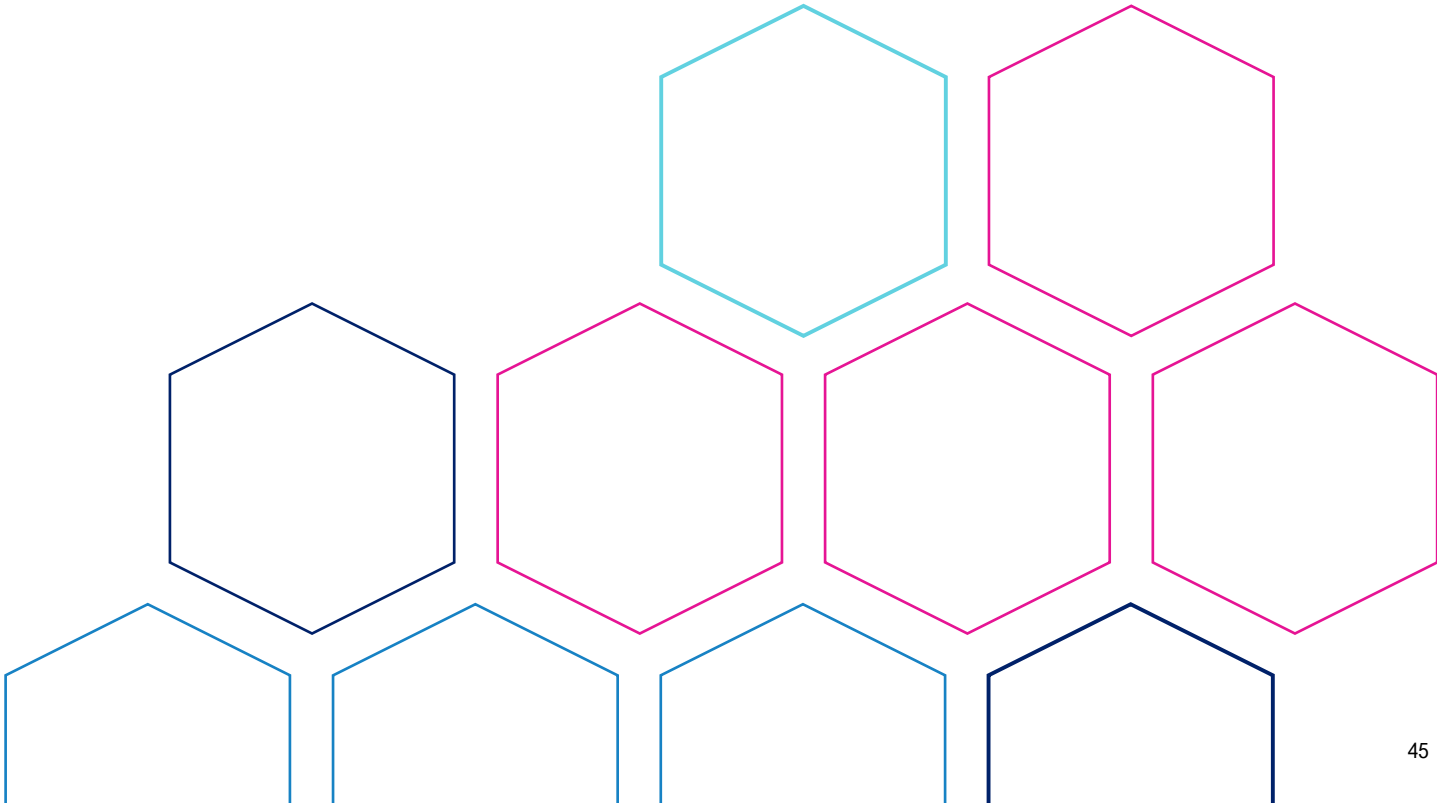
Greater Manchester has led the way in modernising adult social care through the Digital Social Care Record (DSCR) Adoption Project.

The programme empowered social care providers across all **10 Greater Manchester boroughs** to transition from paper-based systems to digital records - enhancing how care is delivered, recorded, and coordinated. The project was commissioned by **NHS Greater Manchester**, supported by **GM Combined Authority**, and project-managed by **Health Innovation Manchester**.

Backed by **£2.41 million** in funding from NHS England (2023–2025), the initiative far exceeded expectations - achieving **94.7% adoption** across 221 care settings, surpassing the original 80% target.

With **£1.89 million** issued in direct grants, more than **8,100 adult social care recipients** now benefit from safer, more personalised, and better-coordinated care. Digital records have transformed care environments - freeing up staff time, reducing duplication, and enabling instant access to up-to-date care plans and assessments. The benefits are seen daily by staff and service users alike.

The DSCR initiative didn't just deliver operational improvements - it laid a strategic foundation for **long-term integration** of health and care systems across the region. With consistent, accessible digital records now in place, Greater Manchester is better positioned to innovate in population health, preventive services, and multi-agency collaboration.

Frontline staff reported stronger confidence, improved workflows, and better outcomes. As one provider shared: "DSCR funding has helped us transform how we work - less paper, fewer errors, and the latest care plans at our fingertips."

As the project concludes, its legacy endures - creating a **digitally connected care sector** that continues to deliver **better, safer, and more efficient care** across Greater Manchester.

Jonathan Davies, Project Manager-Digital Social Care Record Adoption, Health Innovation Manchester, said,

"

In my thirty plus years of project management, this is the one project I will always remember. The opportunity to help over 8,100 service users of adult social care in Greater Manchester receive better care via the DSCR grants is a once in a career opportunity. "

8,100+ service users now receive more connected, personalised care

221 care settings (94.7%) adopted DSCRs — smashing the 80% target

£1.89 million in direct grants delivered across Greater Manchester

Significant **reduction** in paperwork - more time spent delivering care

Real-time updates & instant access to care plans for frontline staff

Paper, printing & storage savings — driving both financial & eco benefits

Traceable records & audit trails boost confidence and transparency

Better multi-agency collaboration with consistent digital information

Region-wide digital infrastructure now in place for future integration

4.3 IMPACT 3

Boost jobs and
economic growth for the
GM city-region through
industry collaboration
and partnerships

4.3 A) SURMOUNT-REAL UK - STUDY TO DEEPEN UNDERSTANDING OF WEIGHT LOSS MEDICATION IN GREATER MANCHESTER

In October 2024, Health Innovation Manchester, announced a partnership with **Eli Lilly and Company (Lilly)** to initiate a five-year real world evidence study (SURMOUNT-REAL UK), subject to relevant approvals. The announcement was made as part of a collaboration agreed between Lilly and UK Government and was unveiled at the Government's International Investment Summit in October 2024.

The study will evaluate the real-world effectiveness of tirzepatide in weight loss, diabetes prevention, and prevention of obesity-related complications for adults with obesity. The evidence generated will seek to increase the evidence base on the long-term impacts of weight loss medicines and potentially inform the UK's care pathway approach to the treatment of obesity.

The five-year study will also aim to collect data on healthcare resource utilisation, health-related quality of life and changes in participants' employment status and sick days from work.

> Greater Manchester is world-renowned as a hub for innovation in health and life sciences. The results of the study announced today could have a far-reaching impact on how we treat obesity globally, and our city-region is ready to make a significant contribution through our outstanding health data assets, R&D expertise, and the strong partnerships between industry, universities and public sector organisations.

Mayor of Greater Manchester, Andy Burnham

> At Lilly, we are deeply committed to improving lives by partnering across the health system to address complex health challenges like obesity. We're delighted to partner with Health Innovation Manchester on our plans for the SURMOUNT-REAL UK study. This collaboration will add to the evidence base on the real-world impact of obesity treatments on the health of people with obesity and will explore a broad range of outcomes including health-related quality of life and impact on individuals' employment status.

Professor Rachel Batterham, Senior Vice President for International Medical Affairs at Lilly

Further details about the study will be announced during 2025/26.

The **Health Innovation Accelerator** has been established to rapidly improve the diagnosis and treatment of disease across the 2.8m Greater Manchester population. The Accelerator encompasses two projects, the Advanced Diagnostics Accelerator and the **DEVOTE programme**, delivered through a partnership between Health Innovation Manchester, **Manchester University NHS Foundation Trust (MFT)**, **The University of Manchester**, and industry partners.

In April 2025, the programme received £5.6m of funding through the Innovation Accelerator programme and realised a further £2.7m in co-investment. This funding was awarded to focus on developing innovative pathways for early disease detection and targeted care than conventional testing, ultimately enhancing health outcomes and stimulating economic growth.

Two years since its launch these projects are demonstrating world-leading outcomes and impacts, with developments which put Greater Manchester at the forefront of health innovation, through collaboration between academia, industry, NHS stakeholders and communities across the region.

The Advanced Diagnostics Accelerator (ADA) is series of projects looking at major morbidities, including liver, heart and lung cancer. It brings together academic and industry excellence from advanced diagnostics, digital and data to work together to improve health outcomes for patients:

- Chronic Kidney Disease (CKD) Discovery.
- Early Detection of Liver Disease.
- Early Detection of Heart Failure.
- ASPIRE Remote Spirometry.
- Lipids Optimisation Point of Care Testing (POCT).
- Lung Cancer Screening.
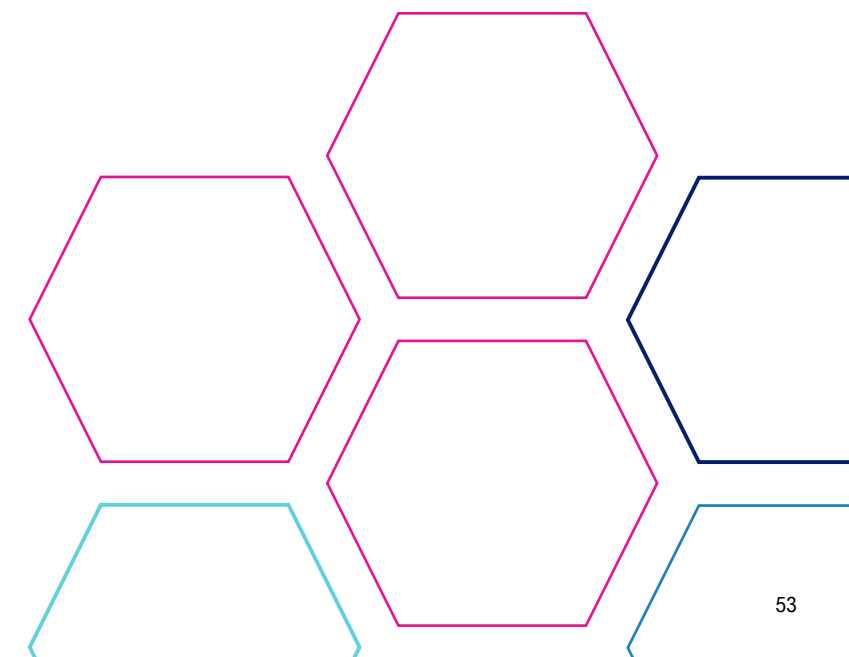- Chest Pain Point of Care Testing.

The Development and Validation of Technology for Time Critical Genomic Testing (DEVOTE) Programme draws on expertise from regional academic, industry and clinical partners to deliver enhanced genomic diagnostics to optimise precision medicines for patients.

The projects have included:

- **Rapid Diagnostic Testing in Stroke:** the project will develop a rapid, cost effective, point-of-care test to test for CYP2C19 genotype by the bedside to guide stroke therapy.
- **Rapid Genetic Point of Care Devices:** the project will use advanced materials to develop novel, ultra-rapid genetic point of care devices.
- **Pharmacogenetic Passport:** the project will develop an end-to-end solution for pharmacogenetic testing and reporting for a range of genetic variants to roll out across the NHS.

By enhancing early diagnosis, boosting business sustainability, and tackling health inequalities, Advanced Diagnostic Accelerator is contributing to the creation high value jobs and increasing productivity. It is also helping to reduce economic inactivity due to poor health and increasing life expectancy for GM residents.

Building on this momentum, Health Innovation Manchester, the University of Manchester, Manchester University NHS Foundation Trust and the industry partners have together secured a further £1.6 million Innovate UK grant for the Advanced Diagnostic Accelerator in GM.
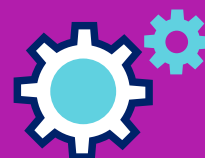
£1.8m secured in industry co-investment and Innovate UK funding

29 high value jobs created, and 50+ jobs sustained

Over 400 patients engaged via community events

Over 1200 patients engaged via treatment or research activities

NICE Approval of a new MedTech product

Increased access to screening and diagnostic services, to support early diagnosis in underserved communities

Blueprint developed to inform future engagement with underserved communities

4 grant applications submitted

Deployment of new engagement techniques and identification or creation of at least three new products or services

26 digital communication assets created

ENGAGING WITH UNDERSERVED COMMUNITIES TO UNDERSTAND THEIR EXPERIENCES AND BARRIERS

The **co-production and engagement** work stream aims to empower the public, particularly those facing the greatest health inequalities.

Engaging and involving people from socio-economically deprived and ethnically diverse backgrounds (including those experiencing digital poverty or exclusion) increases our understanding of how to improve their access to services.

As part of this, Health Innovation Manchester has worked collaboratively with creative agencies and industry partners to produce a series of assets, which outline this co-production and engagement work. Working with the likes of Mind Field Advertising Agency and By Gamers, For Gamers Ltd, these assets include an Insight Report to showcase the engagement work with conducted with members of the GM community and voluntary sector groups, as well as campaign assets used to sign-post communities to our Health Innovation Accelerator screening and research projects.

To date, our work across the co-production and engagement workstream has resulted in five patient stories published, six short films with communities across Greater Manchester including the LGBT Foundation, Awakening Minds in Rochdale and a series of HIA spotlight videos, commissioned four illustrations, and produced multiple reports.

Health Innovation Manchester has also published four blogs and launched a creative campaign for the Early Detection of Heart Failure programme, which included a series of assets and a bespoke website.

4.3 C) GREATER DATA: LAUNCHING A NEW DATA-LED INNOVATION SERVICE TO STRENGTHEN INDUSTRY AND ACADEMIC PARTNERSHIPS

Unlocking the potential of innovation is critical to responding to global health trends and the strategic drivers for population health, transforming healthcare and economic growth right here in Greater Manchester. To achieve our mission, we will strengthen Greater Manchester's position as a world leading health innovation centre to welcome an era of innovation-led growth.

Throughout this year we have been working on a new enhanced offer for strengthen Greater Manchester's life sciences and academic partnerships work, building on the system's collective strengths and ambitions. In early 2025/26, Health Innovation Manchester will be launching 'Greater Data' - an enhanced real-world data innovation service for industry and academia. It will bring the best of global innovation to benefit local people, powered by Greater Manchester's advances in health data and innovation.

Health Innovation Manchester is in a unique position to maximise the opportunities for health and care innovation as we combine rich population health data assets with system insights and innovation services to accelerate innovation and market access for novel diagnostics, medtech and therapeutics. We do this in collaboration with our GM health, care and academic partners.

We will work with innovation partners that can focus on tackling the biggest drivers of population ill health and productivity loss here in Greater Manchester, but with results that that can be translated to address global health challenges. Our core focus will be on innovation that addresses:

- Cardiovascular-renal-metabolic disease.
- Obesity and obesity and related complications.
- Respiratory disease.
- Mental health.
- Other core drivers of sickness absence and productivity loss.

For industry, we will position Greater Manchester as a global innovation partner of choice with the ability to deliver:

- Late-stage clinical trials.
- Real world evidence and implementation.
- Faster market access and reimbursement.
- Product validation in NHS settings.

As with all innovation projects that we run, there will be direct benefits of Greater Data back to patients and the health and care system by innovation happening here in Greater Manchester first and driving improvements in population health – with the wider economic and health benefits this will bring.

4.3 D) SUPPORT FOR INNOVATORS – ENGAGEMENT WITH SMALL TO MEDIUM-SIZED ENTERPRISES

Funded by the Office for Life Sciences, we are working closely with our local, regional and national partners, building on the expertise and cross-sector connections with the Health Innovation Network to identify, develop, including the NHS innovation service, test and spread proven innovation.

Our core functions include:

- Identifying need and communicating regional priorities: including innovation scans to identify existing and emerging technologies and innovations, and advancing cross-working through alignment with local, regional and national partners.
- Signposting and supporting innovators: including support through the Innovation Nexus to bring innovative products and services to the NHS.
- Validation in real world settings: including expert advice, support and evaluation to innovators to develop and improve their products.
- Adoption and spread of innovations across the system: including guidance, co-design and delivery plans for innovators to implement their service or solution into a health and/or social care setting.

HEALTH INNOVATION NETWORK IMPACT*:

A proportion of the overall funding leveraged was the result of the extension of Health Innovation Accelerator programme (£2.8m) - resulting in co-investment funding of **£17.7m**

- DEVOTE Programme: **£13m**

- Advance Diagnostics Accelerator (ADA) **£4.7m**

Other activity includes supporting Cancer Research UK's Clinical Training Programme, Local GM system activities and SBRI funded programmes.

These investments are a blend of Government, private and public sector funding focussed on developing healthcare innovations and transformation .

Jobs safeguarded **586**

Jobs created **326**

Additional investment:
£501,019,252

* This data was acquired via a survey sent to all companies supported by the Health Innovation Networks in 2024/25. The data is collated to understand the impact in relation to jobs secured, jobs safeguarded, and investment leveraged or sales obtained from products in the UK and the rest of the world. The figures represent the impact of all 15 health innovation networks collectively.

SUPPORT FOR INNOVATORS - APOS HEALTH

Musculoskeletal (MSK) conditions are the leading cause of pain and disability in England, accounting for one of the highest causes of sickness absence and productivity loss. Chronic knee pain is common, and often a sign of osteoarthritis. Previously patients had little choice but to have invasive steroid injections or surgery.

Patients in Greater Manchester are experiencing life-changing care for the treatment of osteoarthritis and chronic knee-pain by using the **Apos**® device, a **NICE recommended** clinical innovation that is supported by the MedTech Funding Mandate.

Apos® is a non-invasive medical device combined with a treatment plan worn on the patient's feet for up to one hour a day to help reduce pain and improve daily function. By considering each patient's unique anatomy, biomechanics, neuromuscular responses, and medical history, Apos® delivers personalised treatment tailored to individual needs – resulting in significant improvements in pain relief, functional ability, and quality of life.

Apos® is recommended as a cost-saving treatment for patients who have met the referral criteria for knee replacement surgery but would like a non-surgical alternative.

Beverley from Atherton has seen significant improvements in their knee-pain, following a consultation and a gait analysis session to be fitted for their devices.

> " I couldn't get on with my day to day activities, I struggled in work, I was constantly limping from being in pain... now I just wear them (Apos® device) in the morning for half an hour and I have even had a spell for about six-weeks where I didn't need to wear them at all, I had no pain whatsoever. "
>
> **Beverley, Patient, Wigan.**

This innovation has been supported through the MedTech Funding Mandate (MTFM) In collaboration with Accelerated Access Collaborative (AAC) and The Health Innovation Network.

PROJECTED REGIONAL ECONOMIC IMPACT:

assuming a conservative estimate where 1,000 patients in Greater Manchester receive Apos® treatment:

Total Treatment Cost:
£960,000

Potential Surgeries Avoided:
Approximately **490** over five years

Total Savings from Avoided Surgeries:
£4.8 million

Net Savings: **£3.84** million over five years

Apos® presents a cost-effective, non-invasive alternative to knee replacement surgery, offering significant savings for the NHS and improved quality of life for patients. Its implementation in Greater Manchester serves as a model for integrating innovative treatments into regional healthcare strategies, addressing both clinical and economic challenges associated with knee osteoarthritis.

Health Innovation Manchester

We are Health Innovation Manchester

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