

Impact Report

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Introduction

Introduction

A welcome by Mark Walport, Chair, and Axel Heitmueller, Managing Director

Creating impact is one of our core values at Imperial College Health Partners (ICHP). Improving the health of our population in North West London (NWL) is what we strive to do every day. This report highlights how we have done this over the past 12 months.

The last two years has been focused, almost exclusively, on supporting our partners in their efforts to combat Covid-19. This has continued – specifically in response to vaccination efforts for children and young people, in the wake of the Omicron variant, and in ongoing Covid-19 recovery. There has been important learning, new insights, the fortifying of collaborative relationships – all of which we continue to take forward as we return to our mission of making healthcare better through transformation and innovation. In this past year we are privileged to have been involved in broad-ranging projects and programmes of work in NWL and beyond. Some examples of impact in 2021/22 are summarised on the next page.

Our strengths lie in how we combine insights with partnerships across a range of external organisations to tackle local challenges. Discover-NOW, the Health Data Research UK Hub for Real World Evidence, hosted at ICHP, plays a central role in this, and continues to go from strength to strength. With £3M generated in the last two years, 16 publications and abstracts, and 145 data access applications approved, approximately 50,000 people have also signed up for the consent-to-be-contacted database. The Hub serves the local community by enabling population health. It helps industry by providing opportunity

to trial and co-develop new products with real world data. It also supports regulators to assess new treatments.

Combining our experience in the adoption of innovation, insight generation, and partnership formation has led us to develop and test the concept of a 'living laboratory' which we will seek to more formally launch over the coming months.

We succeed through the great people we have in our team, and we have continued to refine how we work as an organisation, including expanding our range of skills and capacity. The positive results of our annual staff survey demonstrate progress in our efforts to develop the organisation as we continue to grow.

In the New Year we were joined by our new Chair, Sir Mark Walport, former Government Chief Scientific Adviser and CEO of UK Research and Innovation. We would like to thank our outgoing Chair, Professor Andrew George, who had been with ICHP since 2018, for his tremendous support, particularly through the Covid-19 pandemic.

In these pages you can read more about where and how we have delivered impact for our population in NWL and beyond. Our case studies particularly demonstrate the benefits of bringing a combination of capabilities to wide-ranging projects and programmes of work. Additionally, we set out our future ambition, guided by a bold business plan for 2022/23 and driven by our desire to make healthcare better, safer, and more effective.

Mark Walport
Chair

Axel Heitmueller
Managing Director



Examples of impact in 2021/22



Covid-19 response and recovery

- Mobilising the first in-school vaccinations in London, and supporting the **roll-out of the vaccination programme in schools**, with over 240 sites visited and over 77,000 first doses delivered within a six-month period
- Managing operations to **turn Wembley Stadium into a vaccination centre** in response to the surge of the Omicron variant, with over 3,100 citizens coming to get their jab
- Re-designing the **NWL post-Covid referral pathway**, including implementation of a supported self-management solution to help people manage their recovery at home



Smart use of data

- Launch of the **Pan-London Respiratory Dashboard** – a new tool to support the diagnosis and care management for people with Asthma and Chronic Obstructive Pulmonary Disease (COPD)
- Designing a **new integrated pathway** (including a remote care service) for patients most at-risk of developing complications due to uncontrolled **Type 2 Diabetes**, in partnership with NWL Integrated Care System (ICS)
- Published findings of an investigation into whether the use of an atrial fibrillation (AF) risk prediction algorithm can **improve AF detection** compared with opportunistic screening in primary care



Children and Young People's Mental Health

- Launch of the **First episode Rapid Early intervention for Eating Disorders (FREED)** in two NWL Trusts: Central and North West London NHS Foundation Trust, and West London NHS Trust. This early intervention model, uniquely designed for 18-25 year olds, is key to preventing worsening of symptoms in eating disorders, and is designed to deliver rapid access to treatment
- Evidencing the **impact of the Covid-19 pandemic on children and young people** accessing Mental Health services, to help inform targeted real-world recommendations for care services as part of the North West London Networked Data Lab



Public involvement in policymaking

- Delivery of engagement programme to **understand patient, public and staff views and expectations in relation to diagnostic tests and community diagnostic centres**, with results being used by London ICSs to inform local design
- Recognition in the Goldacre Review of the OneLondon Citizens' Summit – a large-scale deliberation designed and delivered by ICHP in partnership with Ipsos – as an **example of excellence in engaging the public in the use of health and care data**
- Design and delivery of **pan-London deliberation to inform the London Health Data Strategy** – a partnership programme between the NHS, research community and citizens to underpin and enable the consistent use of data for planning, improvement, and research



Patient safety

- Supporting implementation of the **Paediatric Early Warning Score (PEWS) Chart** across NWL's four acute trusts, including the delivery of paediatrics-focused Patient Safety Network events
- Creating a **learning network for maternity and neonatal colleagues** across London, with the first Maternity and Neonatal Safety Improvement Programme (MatNeoSIP) Network Event attended by 110 colleagues
- Hosting NWL's first **Care Homes Safety Network Event** attended by 65 stakeholders across all eight NWL boroughs (ranging from care home managers and nurses to Primary Care Network pharmacists)

A large, white, stylized number '2' is positioned on the left side of the image. The background is a dark blue field filled with a complex network of glowing nodes and connecting lines, creating a sense of digital connectivity. A horizontal teal band spans the middle of the image, containing the text 'About us'.

2

About us

About us

ICHP is a partnership organisation bringing together NHS providers of healthcare services, across our local Integrated Care System and universities across North West London.

We are also the designated Academic Health Science Network (AHSN) for North West London and host of the Discover-NOW health data research hub for real world evidence. We were created by the NHS to support innovation and improvement across the sector, with a single, consistent purpose.

Since our inception over eight years ago, ICHP has established a successful track record in delivering complex change across the health and care sector. Through our deep understanding of the NHS, strong connections with industry and a rigorous approach to the generation and analysis of real world evidence, ICHP is in a unique position to create collaborations to address real world problems, to drive real world change.

Our team of diverse and committed experts have the tools, networks and skills to quickly understand and tackle these challenges. We are motivated by our values of creating high quality impact, asking the difficult questions and bringing together the right people to solve a challenge. We are determined to deliver the highest quality of service to help our clients deliver more effective and efficient health and care to their populations.

At ICHP we believe that impact is maximised by the combination of specific types of skills and approaches, and that the greatest impact comes from projects that can combine local need, real world insight, and partnerships with others, including the NHS, academia, and industry. We are increasingly looking to bring this combination together within our NWL and wider London geographies, to establish projects that are more systematic 'living laboratories'.



“To create healthier populations through innovation and collaboration.”

Our capabilities

The creativity, diversity, and dedication of our team is core to delivering impact for our customers, partners, and population. Our wide-ranging skills and capabilities ensures we can effectively help them to navigate and deliver complex change throughout the health and care sector. Our case studies across the following pages, particularly demonstrate the benefits of bringing this combination of capabilities to different projects and programmes of work.

Strategy and planning

We have an experienced team with significant expertise in policy and business strategy development, and a track record of developing politically-sensitive change programmes.



Solution sourcing

We efficiently scout for and find solutions, mapping on to clinical and operational challenges through our extensive international innovation networks, while being agnostic to type and source.



Engagement

Engagement of complex sets of stakeholders such as clinicians, patients and citizens, policymakers and other relevant groups in progressive ways and throughout our work is part of our core DNA.



Data analysis and insight

Grounding all of our thinking and work in robust, actionable insights derived from a variety of data assets including real-world evidence, using one of Europe's largest longitudinal linked-data sources.



Implementing change

Our diverse team and our value-driven business model allow us to support clients beyond problem definition and solution finding, and provide skills, experience and a deep understanding of the NHS, in order to facilitate the implementation of complex change, including whole pathway redesign.



Communications and storytelling

Using creativity and storytelling to inform, inspire and engage as well as amplify our learning.





3

Delivering impact

Covid-19 response and recovery

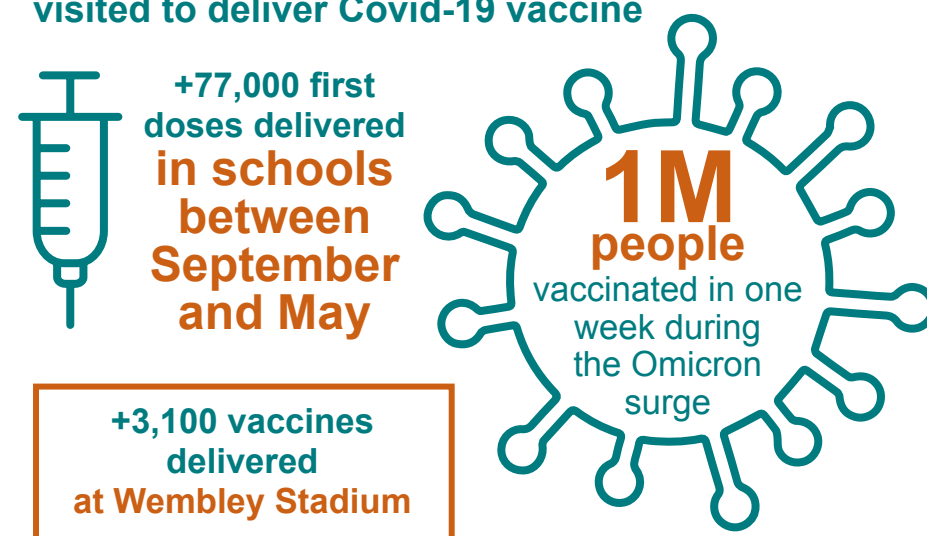
Supporting vaccine roll-out across North West London

The problem

We have continued to provide strategic and operational support to our local sector to roll-out Covid-19 vaccinations in NWL. In early September 2021, changing guidance around vaccinations for 12-15 year-olds required a standardised approach to vaccinations in schools across NWL, designed and implemented at pace. This was a complex environment, working across the health and education sectors where key stakeholders had different priorities and proposed approaches.

Subsequently, the Omicron variant of Covid-19, which surged in the UK last winter, presented new and immediate pressure on the NHS vaccination and booster programme. On 12 December 2021, the Prime Minister announced that every eligible adult in the UK should be offered the chance to get their booster jab by the end of the month.

+240 NWL schools visited to deliver Covid-19 vaccine



How we helped

ICHP played an essential part in the roll-out of the vaccination programme in schools, embedded as part of the NWL ICS team. This included leading the set-up of the operational model, developing a standard operating procedure (SOP), and creating and embedding a standardised approach for all schools across NWL. Alongside supporting the set-up of the vaccination programme in the first two schools in London, we worked with vaccine teams and headteachers to facilitate shared learning and to agree collective actions for both health, local authority and education sectors. This approach was reflective of our collaborative values and learning culture. The vaccination programme in schools represents a significant integrated effort between health and education professionals to deliver a health intervention at short notice. Within a six-month period, 240 schools were visited, and 77,083 first doses were delivered.

In response to the surge of the Omicron variant, ICHP played a key role in managing operations to turn Wembley Stadium into a vaccination centre. Coordinating partners across NWL Gold Command, vaccine operations, pharmacy teams, the Wembley Stadium team, and the local council, our team also provided high-level operational cover. This included responsibility for four permanent vaccine clinics and two daily pop-up clinics for a short period over the Omicron surge.

Our previous work, which included two large-scale trials, testing whether behavioral science-informed text messages and letters could increase Covid-19 vaccination uptake (in collaboration with Westminster Council, Healthcare Central London and the Institute of Global Health Innovation at Imperial College London) meant we could offer strategic recommendations to NWL partners for, not only the communication channels for contacting residents, but also the strategy for message content design for borough-level call centres and outreach letters.

“ICHP is an outcomes and results-driven organisation but at the same time its delivery managers are heavily invested in building and sustaining relationships. This approach has helped to forge new alliances with a range of system partners, most notably with the education sector, enabling vaccinations to be administered to children aged 12-15 years-old.”

Kevin Driscoll, NWL CCG Head of Immunisations & Vaccinations

“Being able to run large robust studies that can help to inform policy decisions in real time is what makes research most impactful. We were delighted to run these two studies to help inform the message content and communication channel for COVID-19 vaccination efforts in Westminster.”

Dr Sarah Huf, Breast Surgery Registrar, Imperial College Healthcare NHS Trust and Clinical Lecturer in Behaviour Economics at Imperial College London

Capabilities used:



Strategy and planning



Data analysis and insight



Implementing Change



Solution sourcing



Engagement

Covid-19 response and recovery

Innovation and improvement in post-Covid syndrome services

The problem

As a consequence of the pandemic, many people are experiencing post-Covid syndrome, or 'long Covid'. New clinics and community teams were set up in response to this new demand, however, it was recognised that GP practices were unsure of new local referral pathways for assessment and treatment, and patients across London were experiencing long waiting times for assessment clinics. Staff felt like they were working in silos, community teams were stretched trying to manage large caseloads of patients, and existing therapy pathways were not always appropriate for people with post-Covid syndrome.

The assessment and treatment service for post-Covid syndrome spans primary, acute, and community care, across both physical and mental health, reflecting the multiple symptoms of this new disease. As such, a collaborative and multidisciplinary approach is essential to develop this complex pathway and set of services.

113 referrals

sent to the triage team
since the end of April '22



How we helped

ICHP supported the NWL ICS Local Care team in three key areas: redesigning the NWL post-Covid referral pathway; implementation of a supported self-management app; and designing a tiered model of care.

The referral pathway was co-designed with patients and clinicians across acute and community settings. It comprises a single point of access triage service across NWL for all post-Covid referrals, hosted and staffed in the community by allied health professionals (AHPs) working in post-Covid services, with support from primary and secondary care. This collaborative approach is the first of its kind in London, and the new preferred model in the updated post-Covid commissioning guidance.

As part of a wider treatment offer for this patient cohort in NWL, we helped to identify a supported self-management solution – the Living With Covid Recovery application. This app helps people to manage their recovery at home with information and programmes of support co-developed with researchers and clinicians. This digital solution enables multidisciplinary teams of clinicians to manage and monitor a shared caseload of patients efficiently, and allows patients to interact directly with their care team to access regular support. To aid implementation, we support information governance approval at a NWL level, we have facilitated training for community teams, developed a SOP and approach for using the solution in NWL, identified 'champion' users, and set-up a learning forum to drive further iterations of best practice approaches.

Finally, we worked with clinicians to set up a tiered model of treatment offers across NWL. Tier 0 is self-management information, collated as a central resource which can be shared with patients at any point along the pathway. Tier 1 is the Living With app. Tier 2 is a wellbeing group therapy offer, co-designed with therapists. Tier 3 are specialist groups for people with more specific needs, such as brain fog. These specialist groups are currently being piloted and will be scaled across NWL if successful.



“The post-Covid syndrome pathway in North West London set out to be highly accessible to local people, to give physical and mental healthcare equal prominence, and to bridge the historic divides between primary, community, and acute hospital clinical staff. The fact that we have come a long way towards achieving this is because of the dedicated support we’ve had from the ICHP team. They have been brilliant at so many things – from strategic design to on-the-ground implementation. We have had nothing but unfailing enthusiasm and skilled execution.”

Paul Hopper, Divisional Medical Director, Central and North West London NHS Foundation Trust

Capabilities used:



Strategy and planning



Solution sourcing



Implementing Change



Engagement

Transforming out-of-hospital care

Respiratory Diagnostic Hublets

The problem

Despite having some of the highest levels of urbanisation and poorest air quality in the country, London consistently remains below the national average for diagnoses of Chronic Obstructive Pulmonary Disease (COPD) and asthma. In addition, approximately one third of patients admitted to London hospitals with COPD exacerbation have had no previous quality assured spirometry diagnosis (measure of airflow obstruction).

The closure – and/or partial closure – of respiratory services across the capital as a result of the Covid-19 pandemic severely reduced capacity for diagnoses further, and as such, there are potentially tens of thousands of Londoners at risk of or potentially suffering from COPD and asthma exacerbations, who will subsequently require hospital admission if left unmanaged. Inaccurate diagnosis and poor care management practice can also result in patients being given the wrong treatment and/or being placed on the wrong treatment pathway.

As systems look to recover from the impacts of Covid-19, it is imperative that specialist secondary and tertiary care services, alongside primary care colleagues, can find capacity and the resource to tackle the backlog. Integrated, community-based approaches to diagnosis are key to delivering this.

329 patients
seen at a
**Respiratory
Diagnostic
Hublet***



~20%
patients
seen are
reported to
have possible
obstruction*

[*Figure represents number of appointments attended for 5/8 boroughs from 29 Jan – 30 April '22]

[*Figure represents average % reported across 6/8 boroughs]

How we helped

We worked with NWL ICS to develop and implement a Respiratory Diagnostic Hublet (RDH) model: a dedicated service to provide access to quality assured spirometry and Fractional Exhaled Nitric Oxide to support accurate diagnosis of COPD and/or asthma at a population level, in a community setting.

Spirometry is the most accurate and reproducible objective measure of airflow obstruction for a number of respiratory conditions, and is an essential investigation in the diagnosis and assessment of the severity of COPD. National guidance also recommends the use of FeNO to support the differential diagnosis between COPD and asthma.

Our primary care-based community model, delivered in line with regional guidance on the development of Respiratory Spoke Services from the London Respiratory Clinical Network, provided quality-assured spirometry and FeNO testing across all eight boroughs in NWL.

We centrally coordinated a system-level steering group (with local and regional representation including ICS, primary and secondary care colleagues) who guided the execution of local delivery for this work.

We supported at each stage of implementation – from developing service specifications to pathway mapping; to curating a suite of patient and clinician-facing communication resources; and designing data templates to ensure adequate data flow across clinical systems, alongside clinical experts and technical teams.

Our work facilitated integrated working between the specialist respiratory teams delivering the service in the community, and the respiratory consultants supporting the Respiratory Diagnostic Hublet. The impact of this is a truly integrated approach to the transformation of out-of-hospital care, which brings acute and community teams even closer together, and relieves local hospital pressures.

“We’ve learnt a huge amount... The staff have learnt new skills and refreshed the knowledge they already had. Practices are engaging well and we are working towards our service improvements.”

Primary Care Programme
Delivery Manager,
Hillingdon, NWL ICS



Capabilities used:



Strategy and planning



Implementing Change



Engagement



Data analysis and insight

Supporting people at risk of cardiovascular disease

The problem

For the first time in 50 years, the number of people dying prematurely from cardiovascular disease (CVD) is on the rise¹. There is clear evidence that the management of cholesterol can reduce the risk of cardiovascular events. To address this challenge equitably, a more targeted and proactive approach to managing CVD is required. There are diagnostic and treatment gaps that we have the means to address if we work together differently.

Using population health management approaches, ICHP is supporting primary care teams in NWL to embed a lipid management pathway that enables early diagnosis and prevention. An important treatment option in this pathway for patients identified at risk of CVD, is Inclisiran – a novel anti-cholesterol drug approved by the National Institute for Health and Care Excellence (NICE) used for secondary prevention. This local programme of work supporting the NWL population is part of a wider national priority to reduce the incidence of CVD².

+50
patients

initiated with treatment of Inclisiran across two NWL Trusts

(as of April '22)



103
doses of Inclisiran

ordered in NWL across 23 Primary Care Networks

(as of May '22)

362 NWL attendees
to 3 online training sessions

How we helped

ICHP has facilitated the set-up of a Clinician Working Group, which has provided NWL clinical leadership groups with assurance of safe introduction of this new pathway. This group comprises secondary care clinicians and the GP Co-Chair of the Integrated Care System CVD Executive Leadership Group. One clinician in this working group has also become the AHSN clinical champion for this lipid pathway approach.

The development of clinician and patient resource packs has also helped us to deliver a clear, standardised approach across NWL. The packs include frequently asked questions about Inclisiran and a lipid management consultation template. This has helped to support and educate clinicians in their management of patients with or at risk of CVD, with information on the newer drugs and their place in treatment, safety profiles, as well as resources for patients.

To help empower clinicians to tackle lipid management, we worked collaboratively across the local healthcare system to host webinars which provided a forum for conversation and questions from primary care staff.



¹Heart UK. <https://www.heartuk.org.uk/downloads/health-professionals/heart-uk-cvd-prevention-policy-paper-july-2019.pdf> Accessed: January 2021

²NHS Accelerated Access Collaborative. <https://www.england.nhs.uk/aac/what-we-do/introducing-revolutionary-medicines-to-the-nhs/rapid-uptake-products/lipid-management> Accessed: May 2022



“ICHP has supported primary care in North West London to deliver on its priorities for lipid management. The team implemented case-finding systems and helped embed the new lipid management pathway through ongoing engagement and educational sessions for clinicians. They have been instrumental in encouraging dialogue and new ways of working between primary and secondary care teams.”

Dr Jai Cegla, Consultant in Metabolic Medicine, Imperial College Healthcare Trust, NHS England Clinical Advisor

Capabilities used:



Strategy and planning



Data analysis and insight



Implementing Change



Engagement

Public involvement through deliberation

Community Diagnostic Centres

The problem

Demand for diagnostic services in England has increased significantly over recent years and there is widespread consensus that this trend will continue¹. This growing demand has been outstripping increases in diagnostic capacity, resulting in a backlog and longer waiting times for patients.

The pandemic amplified this issue, with reduced staff capacity, lower attendance, and infection control measures. In February 2021 there were just over 42,000 patients waiting more than six weeks for a diagnostic test in London, compared to 5,240 in February 2020.

Community Diagnostic Centres (CDC), are a new NHS initiative borne out of Professor Sir Mike Richards' [Independent Review of Diagnostic Services](#), designed to increase diagnostic capacity in England. Placed in local community settings, they will be one-stop-shops for checks, scans and tests, enabling more diagnostic testing to take place outside of already pressured hospital settings.

As part of the regional planning process, NHS England (London Region) were responsible for developing a vision for CDCs across the capital. To ensure they were taking an approach that would meet the needs of all Londoners they commissioned ICHP and Ipsos to explore patient, public and staff expectations in relation to the implementation of CDCs in London.



How we helped

We worked in partnership with NHS England (London) and representatives from London's five ICSs to develop an engagement programme of dialogue, deliberation, and co-design.

The engagement comprised several virtual workshops involving 40 Londoners, recruited to be reflective of London's diverse population, and 30 diagnostic staff, representing each of the five ICSs and spanning a range of clinical disciplines. In parallel, we engaged a range of advocacy groups and people with lived experience to ensure those who often experience additional barriers to accessing and using services had a voice in the process. This was undertaken through a series of depth-interviews.

Our activity spanned two phases, with six virtual workshops delivered overall:

- **Phase 1:** participants were asked for their current views on diagnostic services in London and their feelings about potential new ways of accessing diagnostic services, identifying trade-offs and design principles to be tested in phase 2.

- **Phase 2:** participants were brought together in smaller cohorts from Phase 1 across public/patients, diagnostic staff and advocates to co-design principles for the roll-out of CDCs.

Across Phase 2, the participants' design principles were stress-tested using clinical expert feedback and fictional personas, which encouraged participants to root their discussions in a real-life context and consider the trade-offs associated with their recommendations. The result was a [set of feasible and inclusive principles](#) which ICSs across London can act on to ensure the implementation of these new services aligns to staff and patient expectations.

Through this pan-London activity we created an exemplar of best-practice and a strong foundation for future public involvement around service design and transformation, and as such were asked to present our approach at a co-production spotlight session with the London Clinical Senate Forum. We are also starting another large-scale engagement and deliberation project around transforming urgent and emergency care in London in-line with regional and national priorities.

¹[DIAGNOSTICS: RECOVERY AND RENEWAL - Report of the Independent Review of Diagnostic Services for NHS England - October 2020](#)



“The team at ICHP and Ipsos quickly got to grips with the content, engaged positively with a broad range of stakeholders and designed a really effective and inclusive engagement programme which incorporated dialogue, deliberative and co-design techniques. It concluded with a well written, accessible and hugely informative report. This work is already informing future planning and decision-making, not only at a regional level but within local Integrated Care Systems as well. Great team and brilliant to work with.”

Louise Dark, Programme Director for Diagnostics, NHS England (London Region)

Capabilities used:



Engagement



Communications and storytelling

Data Collaborations

Discover-NOW

Discover-NOW

Health Data Research Hub for Real World Evidence

At ICHP, data-driven insights are at the heart of everything we do.

Discover-NOW is a health data research hub for real world evidence (RWE) and gateway to one of the largest de-identified linked health and care datasets in Europe (2.5 million people), providing linked data from primary care, acute, mental health, community, and social care settings in a Trusted Data Environment, co-designed with citizens.

Hosted by ICHP, Discover-NOW enables us to connect clinicians, scientists and researchers to a RWE validation ecosystem, supporting them to recruit patients to treatments, develop new treatments, manage previous health conditions and test and evaluate innovations.

In 2021/22, we supported partners across a number of projects, including working with AstraZeneca to test the **feasibility** of a trial in relation to Chronic Kidney Disease (CKD). By collaborating with different experts and clinicians, we were able to identify 12,163 patients with a CKD diagnosis, from more than one million people in the Discover dataset who met the age and sex criteria. The dataset enabled us to refine the analysis further, testing the feasibility of the trial as we went, through the application of additional inclusion criteria. Although the outcome eventually meant there was not a sufficiently large enough population in North West London to progress the trial, it demonstrated the power of using de-identified linked data in conducting feasibility studies before investing large sums of money in clinical trials.

6 ways we can support health research, validation, and product development:



Feasibility

Run complex and powerful searches over the rich deidentified linked dataset of 2.3m population to inform protocol design and study feasibility.



Retrospective Studies

Generate data driven insights and analysis into populations and patient cohorts, using the rich linked longitudinal health and care data.



Patient identification and recruitment

Use leading edge tools such as FARSITE and the North West London Research Register to help find and match patients to clinical trials.



Health economic evaluations

Utilise RWE to evaluate new products and interventions, providing innovators/new products with the real world evidence as required by regulators to support agile market access



Artificial Intelligence (AI) and machine learning

Develop and test predictive AI approaches to determine if your technologies are effective and scalable.



Health implementation

Ensure learnings from your research can deliver real world impact for patients.

“The unique richness of the real-world Discover-NOW dataset was expertly navigated by the team, who delivered precise answers to our questions, all presented in a clear format accessible for interpretation by our diverse range of clinical, academic, policy, and industry stakeholders.”

Research Fellow, Imperial College

“The Discover-NOW team have been consummate professionals throughout our collaboration and a delight to work with. They have excellent capabilities, access to an enormous dataset and have contributed to what will end up being a very significant real-world evidence publication that will change practice.”

Besins Healthcare

Data Collaborations

Discover-NOW

Our collaboration with Hub partners, NorthWest EHealth, has continued to grow including the roll-out and implementation of online tool for feasibility and recruitment, FARSITE (Feasibility And Recruitment System for Improving Trial Efficiency), which enables effective **patient identification and recruitment** across primary care in NWL. FARSITE was successfully used in a diabetes exemplar project that involved a collaboration of Imperial College London, NWL ICS, Huma, ICHP and AstraZeneca to trial and evaluate a new diabetes service for high-risk Type 2 diabetes patients. The tool fast-tracked the identification and recruitment of patients in primary care into this important project.

We also collaborated with the Institute of Global Health Innovation (IGHI), Imperial College London, Imperial College Healthcare Trust, MyWay Digital Health (MWDH) and AstraZeneca on the Risk Algorithms for Decision Support and Adverse Outcomes Reduction (RADAR) project. Led by North West London Health and Care Partnership (NWL HCP), RADAR delivered better information visualisation and decision support directly to front-line clinicians and patients using **Artificial Intelligence (AI) and machine learning** to support with the risk prediction of complications for people with Type 2 Diabetes (T2D).

In collaboration with Novartis, we created a dashboard to help identify gaps in heart failure detection, diagnosis and treatment, by geographical region in England for the purpose of local, evidence-based **health implementation**. The dashboard, which uses quality outcome framework (QOF), hospital episode statistics (HES) and ePACT prescribing data to highlight opportunity gaps, providing the evidence they need to introduce changes that will have a positive impact on patients' lives. So far, over 20,000 new patients at risk of heart failure have been identified by the dashboard. NWL the Discover dataset can also be used to effectively deep dive into the outputs identified by the dashboard.

We also oversaw the approval of 145 data access applications, supporting researchers, our industry partners and NHS colleagues to conduct their **retrospective studies** and **health evaluations**, a number of which went on to be published as abstracts. A full list is available on the Discover-NOW website.

Most significantly, the learning and evaluation of these projects, alongside the partnerships and relationships formed, have allowed us to develop our 'living laboratory' approach to innovation and transformation (see *Future ambition* for more).



“The Hub’s role as a facilitator between the NHS, academia and industry partners to provide a level playing field and a safe environment to experiment is critical to the success of innovative and transformational work.”

AstraZeneca

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Data Collaborations

The Networked Data Lab, a Discover-NOW enabled project

The Networked Data Lab (NDL) is a collaborative network of analysts who use Discover-NOW's linked data, open analytics, and public and patient involvement to develop health and care insights. NDL, funded by the Health Foundation, one of just five UK labs, is made up of colleagues from ICHP, Imperial College London, and NWL ICS Business Intelligence. Not only does this work deliver insights to the health system accompanied by targeted real-world recommendations for care services and broader changes, but it also demonstrates how partnerships for data analysis can be formed and the benefits of a networked approach to complex challenges.

Through this programme, we've been exploring the health and care service utilisation of multiple groups, and the impact of the Covid-19 pandemic on this, split across three separate projects:

- **Clinically extremely vulnerable** people (those referred to as 'shielding') and their mental health during the pandemic ([Published report here](#))
- **Children and young people's (CYP) mental health**
- **Unpaid carers and looked after children**, through a social care lens

Thanks to the unique access afforded us by Discover-NOW, in NWL we have been able to delve deeper into health inequalities and use data to try and discover how different communities have been affected by the pandemic. We have carried out robust **patient and public engagement**, including delivering workshops with [shielding people](#) and [young people](#), thereby involving community representatives in the design of our analyses and incorporating their lived experiences into our recommendations.

Our children and young people's mental health analysis explored access to Mental Health (MH) services, severity of MH difficulties, and transition from Children and Adolescent MH Services (CAMHS) to Adult MH services and involves two workstreams:

1. **Quantitative analysis using the Discover database.** By describing the CYP population in NWL accessing MH services, conducting longitudinal analyses to estimate the impact Covid-19 had in access to MH services and MH admissions, and undertaking an interrupted time-series analyses to explore the trends in MH service use during the pandemic compared to what we would have expected if the pandemic hadn't happened, we were able to quantify how transitions from CAMHS to adult services were disrupted. Through further **quantitative analysis**, we will be describing this group of people and their characteristics, understanding those health conditions more prevalent in unpaid carers and the effect of Covid-19 on these, and exploring their use of healthcare services including the pandemic's impact.
2. **Qualitative insights from young people with lived experience of mental health challenges, and healthcare and academic professionals.** Our analysis on unpaid carers and looked after children is exploring the **pandemic's impact on their health and care**, with our current focus on unpaid carers. To generate **qualitative insights**, we have undertaken in-depth interviews with a small group of unpaid carers, and will be engaging with a broader group throughout the analysis.



“The North West London Lab has made a crucial contribution to the overall impact of the Networked Data Lab. The team have worked collaboratively, continually engaging with local decision makers, patients and the public, and other key stakeholders to provide actionable insights to support local service planning and delivery.”

Fiona Grimm, Senior Analytical Manager, The Health Foundation

Data Collaborations

The Networked Data Lab, a Discover-NOW enabled project

Our children and young people's mental health analysis unveiled several findings, including:

- **The pandemic significantly increased demand in new patients seeking mental health support** – the proportion of new patients requiring MH services increased since the start of the pandemic from 11% in March 2020 to 40.5% in May 2021.
- **Specific groups have been disproportionately affected by the pandemic**, compared to the trend which would have been expected if the pandemic had not happened:
 - **by age group**, 5-11 year-olds saw a decrease of 17% in the number of MH-related events during the pandemic, and 18-21 year-olds saw a decrease of 25%;

- **by gender**, males saw a decrease of 12.5% in the number of MH-related events during the pandemic;
- **by locality**, a significant decrease in utilisation was seen in Ealing (16%), Hounslow (15%), and Hammersmith & Fulham (10%) CCGs.

- **Transition between CAMHS to Adult MH services seems to have been affected by the pandemic**, with the median age of the transition between these services increasing from 18 to 19.

The Health Foundation's national report and our own NWL report are set to be released in summer 2022. In the interim, we've begun sharing our high-level findings and subsequent service recommendations with local healthcare colleagues and stakeholders more widely, including at an AnalystX webinar with 45 attendees, a Health Data Research UK webinar with 44 attendees, and at July's Health Services Research UK conference.

The chair of the NWL Children and Young People's Mental Health Steering Group praised the insights and recommendations from this report in a meeting of senior mental health colleagues, and we look forward to continuing to work with NHS partners to progress insight-driven actions.





4

Future ambition

Future ambition

Innovating for a healthier population means continuing to bring together the right people and capabilities required for transformation and complex change. Our future ambition, guided by a bold business plan, is driven by our core values – collaboration, courage, quality, and impact – and a desire to make healthcare better, safer, and more effective.

In the last two years we have grown and consolidated our areas of expertise, integrating our business areas, skills, and capabilities to create more impact and value for the NWL sector – as demonstrated by the case studies in this report. Crucially, this includes an internal focus on our ICHP team, and we will continue to invest in strengthening capability and providing development opportunities, enhancing collaboration through our shared vision, and aligning behaviours with our core values. This will ensure we're in the best possible place to deliver maximum impact across the sector. Moving forward, we are uniquely placed to continue to grow and integrate our diverse expertise to solve healthcare challenges in new and transformative ways.

Creating the greatest impact

At ICHP we believe that impact is maximised by the combination of specific types of skills and approaches. Whilst we are positioned to respond to wide-ranging programmes of work, the greatest impact comes from projects that can combine:

1. Local need
2. Real world insight (both quantitative and qualitative)
3. Partnerships with others, ranging from NHS, academia, and industry

This theory of change guides our intention for 2022/23 and we will be focusing more on projects where we can combine these elements alongside our existing capabilities. For example, our work on improving the identification and preventing progression of Chronic Kidney Disease. We have started to refer to projects that combine these three elements as 'living laboratory' projects – a concept that will be further developed in the coming year.

CASE STUDY: Creating impact by improving the identification and preventing progression of Chronic Kidney Disease

How do we improve identification and prevent avoidable progression of Chronic Kidney Disease in North West London?

Use real world data-led service design and health economic modelling to quickly learn in NWL how to better identify, diagnose and provide optimised medical treatment at scale to patients across London and Surrey.



Future ambition

Areas of growth

- **Focus on 'living laboratory' projects**

As highlighted, developing the concept of a 'living laboratory' is a major focus, including how we proactively develop opportunities to ensure maximum impact. Continued investment in the elements which make up this 'living laboratory' offer (including real world evidence and deliberation) is therefore key.

- **Public involvement and deliberation offer**

Delivered jointly with our strategic partner, Ipsos, this relatively new service offer has gained significant momentum over the last 18 months with increasing appetite from the healthcare sector to use this form of engagement to address complex problems and help build trust and relationships with citizens.

- **Real World Evidence offer to industry**

At the beginning of 2022 we launched the service offer available to industry through Discover-NOW, hosted at ICHP. This includes feasibility and retrospective studies, patient identification and recruitment, health economic evaluations, Artificial Intelligence (AI) and machine learning, and health implementation (see *Data collaborations: Discover-NOW* for more detail and examples). This blend of services, our expertise, our data and partnerships will continue to add value for our industry clients.

Strengthening partnerships

Everything we do happens within the context of partnerships. Some of these are within the NHS and wider public sector of NWL. Others are with external partners including industry and the voluntary sector, as well as regional and national policy. We continue to develop and strengthen these relationships, with a focus on:

- Maximising impact locally within evolving NHS structures, including the establishment of the NWL Integrated Care Board (IBS), and new collaboratives across the NWL ICS, including the unitary chair for all four acute trusts
- Involvement in the set-up of a NWL ICS dedicated Research & Innovation Board, chaired by ICHP Chair Mark Walport and supported by ICHP as the secretariat
- Fortifying relationships with NHS England's new Transformation Directorate following a period of significant national and regional change
- Strengthening industry collaborations, particularly through our Discover-NOW hub partners, including Janssen, AstraZeneca, Novartis, Telstra Health UK, and North West EHealth.
- Continuing to work with international partners to access global networks of innovation, including Health XL and Avia

We are committed to evolving as an organisation, and always with a focus on continuous improvement, developing both our service offer and our team members. We look forward to continuing to support our colleagues, partners, and stakeholders in the year ahead.





Find out more

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