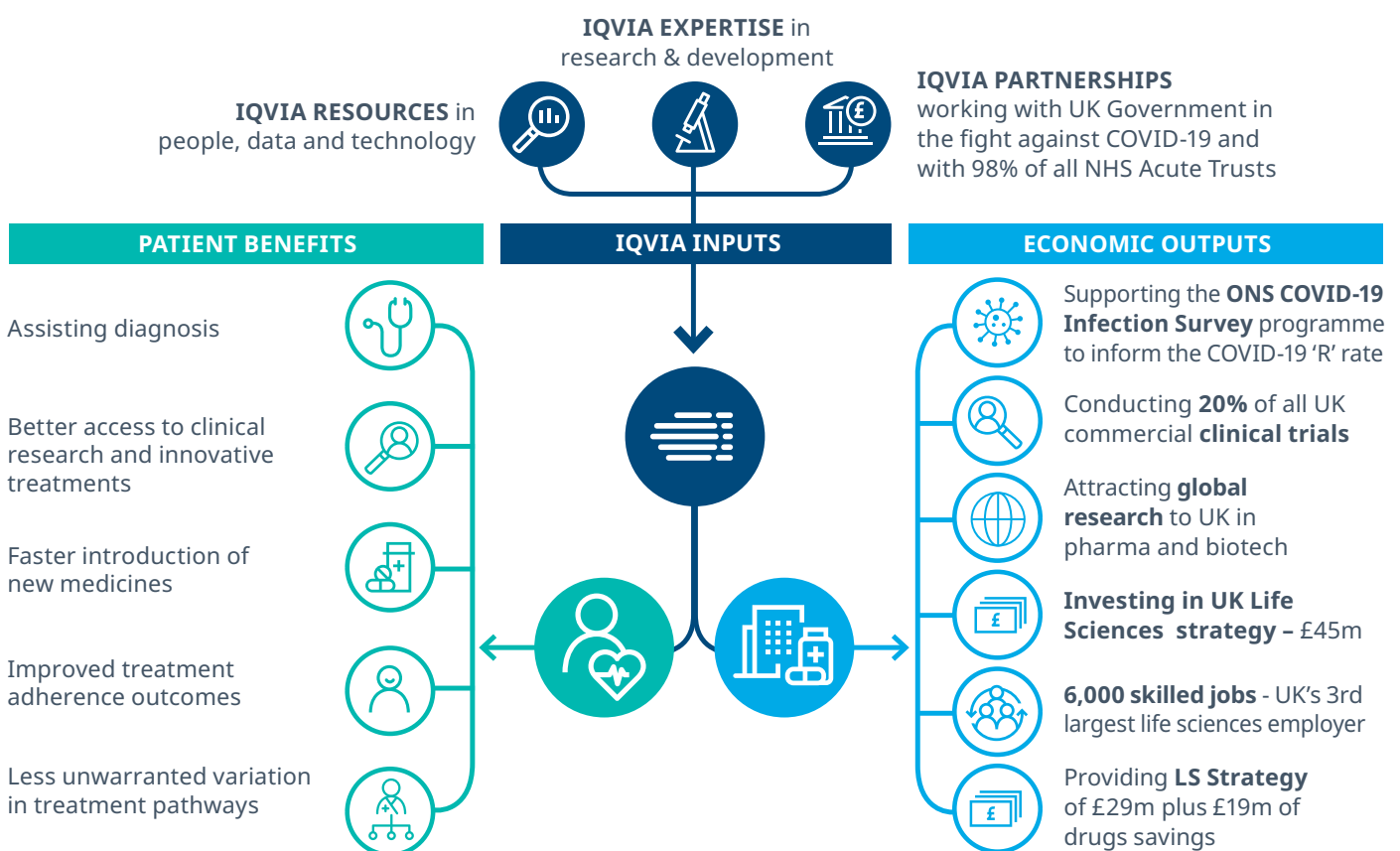**IQVIA**

Unlocking Health Data to Transform UK Patient Care

Maximising the impact of NHS data to improve patient outcomes

IQVIA is at the forefront of unlocking the potential of NHS health data to realise future health improvements for the UK, and deliver transformative benefits for the patients of today and tomorrow. IQVIA believes that the value of NHS health data is not in the data per se, but in the clinical decision-making it can inform.

IQVIA EXPERTISE in research & development

IQVIA RESOURCES in people, data and technology

IQVIA PARTNERSHIPS working with UK Government in the fight against COVID-19 and with 98% of all NHS Acute Trusts

PATIENT BENEFITS	IQVIA INPUTS	ECONOMIC OUTPUTS
Assisting diagnosis		Supporting the **ONS COVID-19 Infection Survey** programme to inform the COVID-19 'R' rate
Better access to clinical research and innovative treatments		Conducting **20%** of all UK commercial **clinical trials**
Faster introduction of new medicines		Attracting **global research** to UK in pharma and biotech
Improved treatment adherence outcomes		**Investing in UK Life Sciences strategy** – £45m
Less unwarranted variation in treatment pathways		**6,000 skilled jobs** - UK's 3rd largest life sciences employer
		Providing **LS Strategy** of £29m plus £19m of drugs savings

IQVIA - Supporting the UK's potential as a global life sciences leader

IQVIA believes in the UK's potential to be a global leader in the life sciences sector, and our investments announced in the 2018 Second Life Sciences Sector Deal further support the UK Government and the industry's aim to make that potential a reality.

IQVIA is a leading player in, and committed to, the UK's life sciences Sector. The value of our contributions to patients, the NHS and the UK economy include:

- 20% share of the UK's clinical trials environment which delivers £1.2bn of economic impact
- £45 million investment by IQVIA over 5 years in the Second Life Sciences Sector Deal, 2018
- 6,000 skilled jobs, making IQVIA the UK's 3rd largest life sciences employer (and the largest in Scotland)
- UK Prime Sites and collaborations to support access to health data-enabled clinical research (e.g. collaboration with Genomics England and Health Data Research UK's (HDR UK) DATA-CAN, the national cancer Health Data Research Hub)
- Collaboration with UK universities to support career development programmes (e.g. recently launched MSc in data science)

Delivering value to NHS patients

IQVIA believes that the value of NHS health data is in the patient-level care decisions it can inform – enabling a better understanding of disease, causes, prevalence and symptoms. The UK's uniquely rich health data ecosystem is the key that is unlocking health improvements for NHS patients; providing new ways of diagnosing and treating their condition. For example, as part of the HDR-UK DATA-CAN collaboration, we are potentially contributing to saving the lives of 30,000 cancer patients a year by using cancer data more effectively.

In the first wave of the pandemic, research led by the Institute for Cancer Research, and co-authored by DATA-CAN's scientific lead Prof Mark Lawler, on the effect of delays in the two-week-wait cancer referral pathway during the COVID-19 pandemic used a primary/secondary care linked data set of nearly 4m citizens, concluded the impact of the delays could be excess deaths in the region of 7,165–17,910 people.[1] This critical data analysis and early warning triggered the Government to mobilise the Cancer Recovery Plan post pandemic.[2]

Patients must be at the heart of any assessment of the value of NHS data. The de-identified personal health information that patients may consent to sharing is done on the explicit understanding that it will be used to deliver improved outcomes for themselves as well as for others. Evidence suggests that patients tangibly benefit from the real world insights derived from research informed by health data. Hospitals that are research active have lower mortality rates than those that are not – and this improved outcome is not limited to research participants.[3] In the UK, for every £1 spent on research the combined health and economic return is between £24 and £27 per annum in perpetuity.[4]
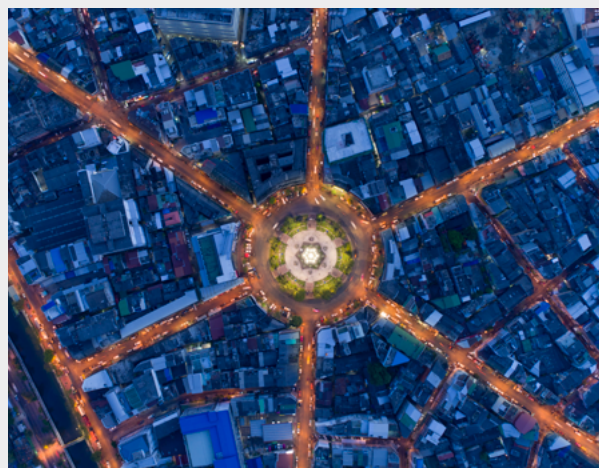
As a result of our leadership in health data-enabled research, NHS patients are receiving better healthcare, and are able to live longer, more productive lives. Our dedicated IQVIA nurses provide care by delivering treatments to over 2,000 patients across the UK.

IQVIA works to make the healthcare experience better for many more patients and carers, through:
• Earlier diagnosis
• Access to clinical research and innovative medicines
• Faster delivery of new medicines
• Improved treatment outcomes
• Enhanced insight into their condition

CASE STUDY: ACCELERATING IDENTIFICATION OF RARE DISEASE PATIENTS THROUGH AI

We are working with clinicians and researchers in Sheffield Teaching Hospitals NHS Foundation Trust to use artificial intelligence (AI) to identify patients at risk of developing a rare, life shortening condition known as idiopathic pulmonary arterial hypertension (iPAH). This condition is usually only diagnosed at an advanced stage. However, our AI algorithm provided a detection rate of 1 in 10 patients in this rare disease with a prevalence of 50 in 100,000. Further national validation is underway; however, this algorithm could provide low-cost screening at a population level for a rare and fatal disease, facilitating earlier diagnosis and improving patient outcomes.

COMMITMENT TO PATIENT CONFIDENTIALITY

IQVIA is a global leader in the development and application of privacy-enhancing technologies and safeguards to protect individual patient confidentiality. We work with UK Data Custodians to ensure that de-identified patient data is handled according to General Data Protection Regulations (GDPR), and we are committed to the DHSC Framework for the Value of NHS Research,[5] which sets out the principles for the use of NHS data for research.

Supporting our NHS

CONTRIBUTING TO NHS INFRASTRUCTURE

The value we bring includes our contribution to NHS research infrastructure investment and through realising efficiencies in hospital revenues. We make the NHS medicines budget stretch further through our clinical research and data analytics programmes being delivered in most of the UK's NHS hospitals.

450k
Covering **450,000 UK citizens**, IQVIA manages the Government COVID-19 Infection Survey operations, ensuring high quality data is delivered to inform the 'R' rate in the fight against COVID-19

£29m
£29m in direct payments every year to NHS research activity

£19m
£19m of savings efficiencies created in the NHS medicines budget, through the free provision of innovative and often life changing medicines provided in clinical trials delivered through IQVIA

£3.75m
£3.75m investment in DATA-CAN which is improving the ability of researchers to access to high-quality cancer data so they can learn from every cancer diagnosis

£2.3m
£2.3m of NHS efficiencies released in 2019 alone. Over the last 30 years, IQVIA nurses have helped care for NHS patients – with 166,000 patient interactions supporting treatment last year

SUPPORTING NHS RESEARCH CAPACITY

12,500
12,500 NHS patients taking part in our UK research programmers, including 6,000 patients enrolled in our late-phase real world studies and 300 patients involved in on-going studies in primary care. 8500 participants were enrolled into COVID-19 treatment and vaccine programmes in 2020-2021. In the UK, IQVIA has 150 new clinical trials a year and currently has 250 research studies underway, placed in over 100 NHS hospitals.

$\frac{1}{3}$ +
Over a third of all of our UK clinical trials target cancer and its causes

£24m
£24m investment supporting Genomics England to combine clinical and genomics data to accelerate diagnosis and development of personalised medicines, attracting global pharmaceutical and biotech investment to the UK

£50k
£50k average saving or efficiency opportunity identified at each of our partner NHS hospitals. Extensive work to improve NHS Trust financial and operations performance, identifying unwarranted variation and opportunities for service transformation

Our investment in hospital partnerships (including technology infrastructure, skilled data analysts and statistical programmers) is focused on unlocking the potential of data science to deliver improved outcomes for NHS patients.

CASE STUDY: COVID-19 INFECTION SURVEY (CIS)

The survey was set up in April 2020 as a unique research study in the UK that provides prevalence data and immunity status for COVID (SARS-CoV-2) in the general population. IQVIA manages the survey operations, ensuring high quality data is delivered.

CIS participants provide swabs and bloods each month. Our large sample size (450k participants) allows us to provide a gold-standard surveillance survey for tracking the spread of the virus and determining the impact of the vaccine programme on antibody levels in communities.

The CIS has become a trusted source of information providing valuable evidence to enable the government to make decisions and support the UK's post-pandemic.

www.ons.gov.uk/cis and www.ndm.ox.ac.uk/covid-19/covid-19-infection-survey

The Prime Minister of the United Kingdom, Boris Johnson, has praised the survey, saying **"this study, unique in the history of science, is a key weapon in our continuing fight against COVID-19"** *in a letter to the National Statistician for the UK, Sir Ian Diamond, earlier this year (September 2021).*

Delivering health and value to patients, the NHS and the UK

IQVIA has created highly skilled jobs across the UK and delivers value across the economy. We do that by attracting international inward investment to our country from the global pharmaceutical, biotechnology and medical technology sectors in world-leading clinical trials, real world evidence and artificial intelligence studies.

IQVIA is a key contributor to the UK's reputation as a global leader in life sciences. We're demonstrating industry leadership by:
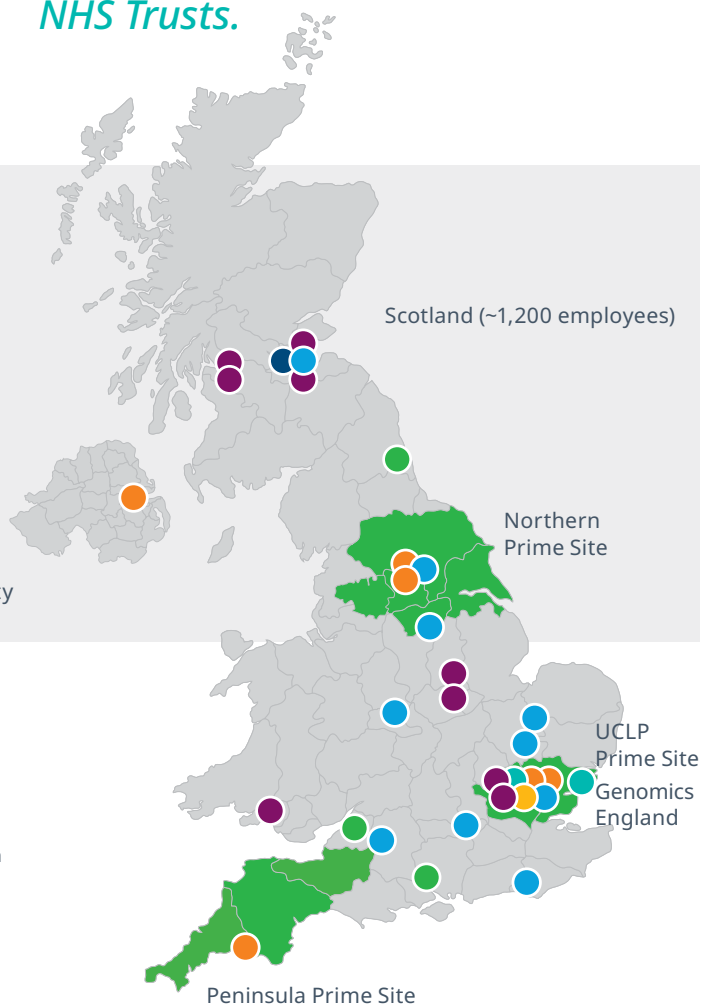
- **Helping to develop 93% of top pharmaceutical and 82% of biotech oncology drugs** in 2016 through our clinical research programmes
- IQVIA has more than 250 UK-based clinical researchers, epidemiologists, statisticians and data scientists who collect and interrogate non-identified real world data to understand and demonstrate how patients can be treated safely, effectively and economically

- Innovating through **virtual clinical trials**, reducing the need for patients to have to travel to hospital for research investigations
- Providing clinical trial and genomics **reference testing** services at the world's largest clinical laboratory company
- Analysing **9 million biological samples** from clinical trials across the world every year through our state-of-the-art clinical research laboratory services located in Livingston

IQVIA delivers £50 million per annum of medicines efficiencies and revenue to our four UK Prime Sites and other NHS Trusts.

IQVIA WORKING ACROSS THE UK

- 🟢 IQVIA prime and partner sites
- 🔵 IQVIA offices
- 🟠 DATA-CAN partners
- 🟢 CDN sites
- 🟡 Genomics England
- 🟣 Academic relationships
- 🔵 Q² Solutions central genomics & diagnostic lab facility

Scotland (~1,200 employees)

Northern Prime Site

UCLP Prime Site
Genomics England

Peninsula Prime Site

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1. https://www.data-can.org.uk/news-item/effect-of-delays-in-the-two-week-wait-cancer-referral-pathway-during-covid-19/
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3. Ozdemir, B.A; Karthikesalingham, A; Singha, S; Poloniecki, J.D; Hinchliffe, R.J and Thompson, M.M, et al (2015) 'Research Activity and the Association with Mortality' PLoS ONE 10(2)
4. Health Economics Research Group, Office of Health Economics & RAND Europe (2008; 2014) Medical Research: What's it worth? Estimating the economic benefits from medical research in the UK King's Fund
5. DHSC Framework for the Value of NHS Research: https://www.gov.uk/government/publications/creating-the-right-framework-to-realise-the-benefits-of-health-data/creating-the-right-framework-to-realise-the-benefits-for-patients-and-the-nhs-where-data-underpins-innovation

CONTACT US

For further information on our work with patients and the NHS, or the wider value we create in the UK, contact Angela McFarlane, Vice President, Strategic Planning Northern Europe, on Angela.McFarlane@iqvia.com
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