

digitalhealth

**REWIRE**  
BIRMINGHAM 12-13 MARCH 2024

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# PROFESSOR GRAEME BLACK

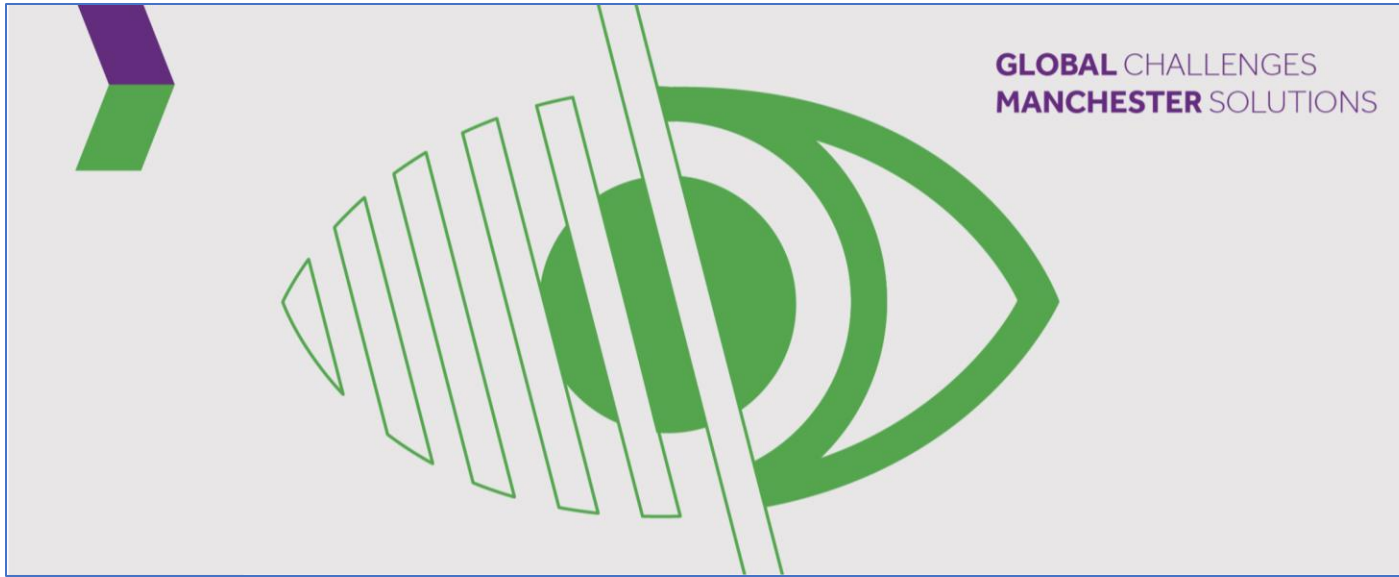
CONSULTANT GENETICIST AND OPHTHALMOLOGIST AND GEN-O  
PRODUCT OWNER,  
MANCHESTER UNIVERSITY HOSPITALS NHS FOUNDATION TRUST



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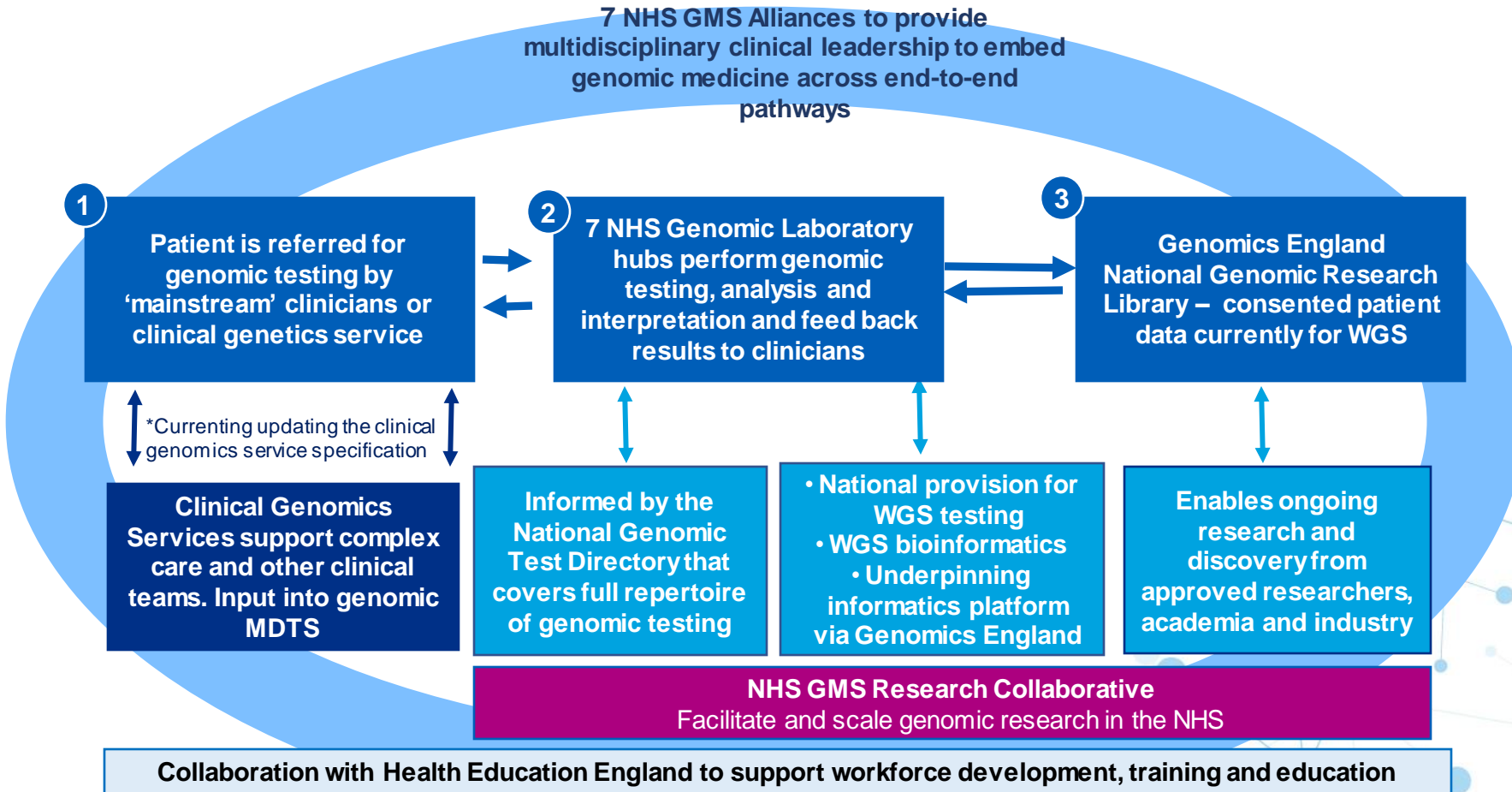




# GEN-O: Enhancing decision-making for genomic medicine

# The NHS Genomic Medicine Service

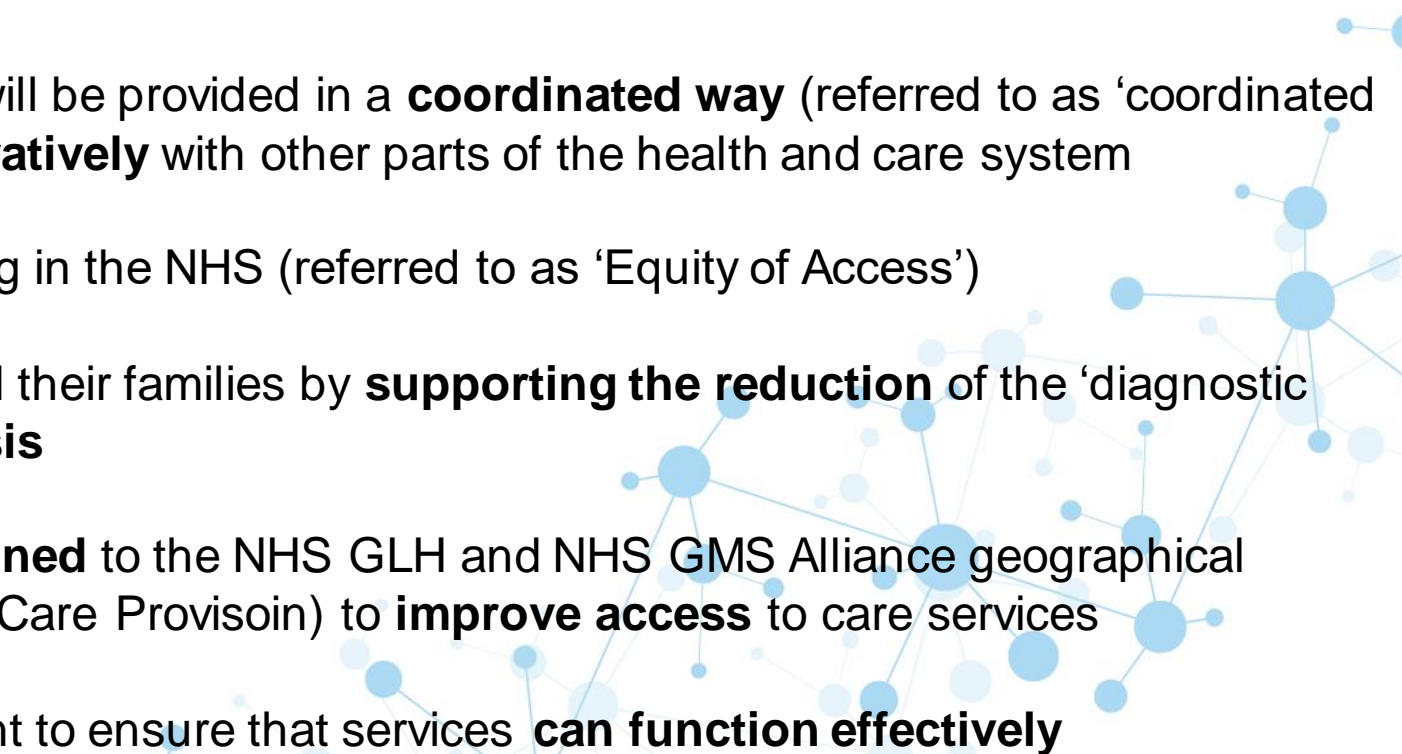
**Aim:** To enable the NHS to harness genomic technology and scientific advances to improve population health and patient outcomes



## Key principles:

- Be **clinically and scientifically led**
- Have **patients and public involved** at all levels
- Ensure **equity of access** for all patients
- Have a **standardised** model of delivery and commissioning across the country
- **Be responsive** to innovation and new technologies
- Inform and drive change using **data led insights**

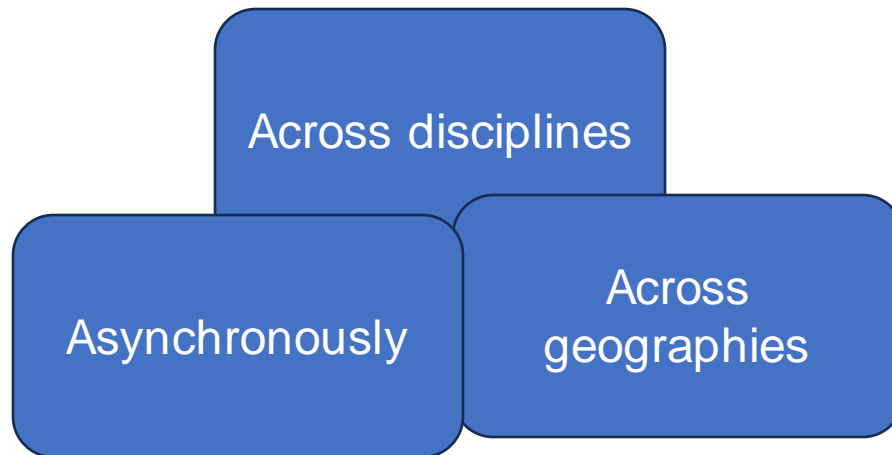
# Key changes and improvements

- ✓ The **embedding** of genomics into **mainstream clinical pathways** (referred to 'mainstreaming' genomics)
  - ✓ Care for patients and their families will be provided in a **coordinated way** (referred to as 'coordinated care') with CCG's **working collaboratively** with other parts of the health and care system
  - ✓ **Equitable access** to genomic testing in the NHS (referred to as 'Equity of Access')
  - ✓ Improving outcomes for patients and their families by **supporting the reduction** of the 'diagnostic odyssey' and **speeding up diagnosis**
  - ✓ NHS CGS's will **form networks aligned** to the NHS GLH and NHS GMS Alliance geographical footprints (referred to as Networked Care Provision) to **improve access** to care services
  - ✓ Workforce planning and development to ensure that services **can function effectively**
- 

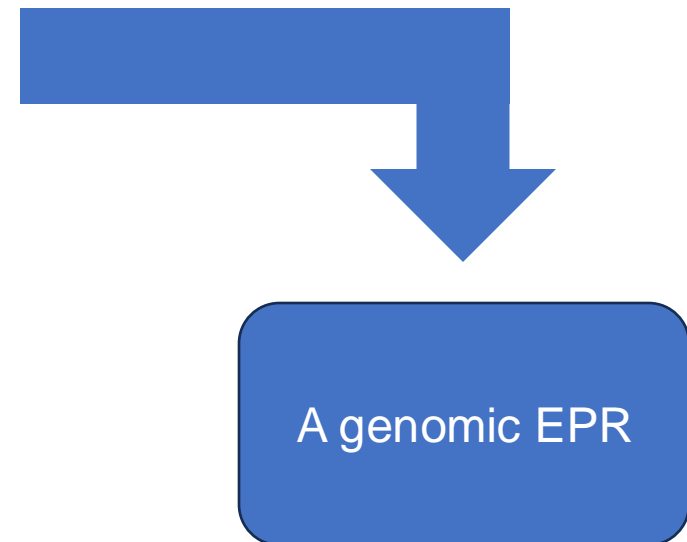
# *What's missing? 'The clinical gap'*

Clinical needs:

An increased workforce that can work...



The solution: an IT solution that supports the adoption of genomic medicine



# Existing practices

Current solutions are limited:

## Traditional EPR

Family based record

## Clinical solutions

Research origin, often  
laboratory based

***“Genomics is no longer a technical problem, it is a data handling problem”***

# What is GEN-O?

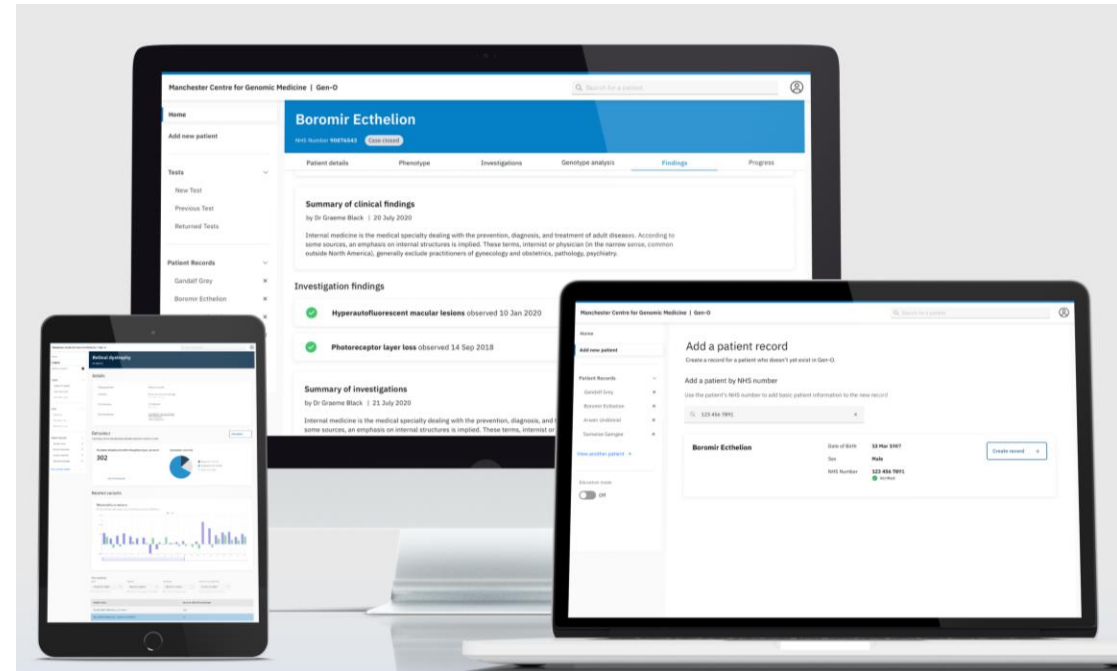
## GEN-O is a...

Genomic patient record management and collaboration tool  
Currently underpinning clinical practice in ophthalmology at MFT

## It was created...

By a team at Manchester University NHS Foundation Trust and is used as a tool underpinning clinical practice in the:


- MFT clinical genomics service
- Manchester Centre for Genomic Medicine (MCGM)



## Pilots are being run...

- At Alder Hey and the Northern Care Alliance (Salford) to gather feedback and test with new groups of users
- In ophthalmology and neurology specialties

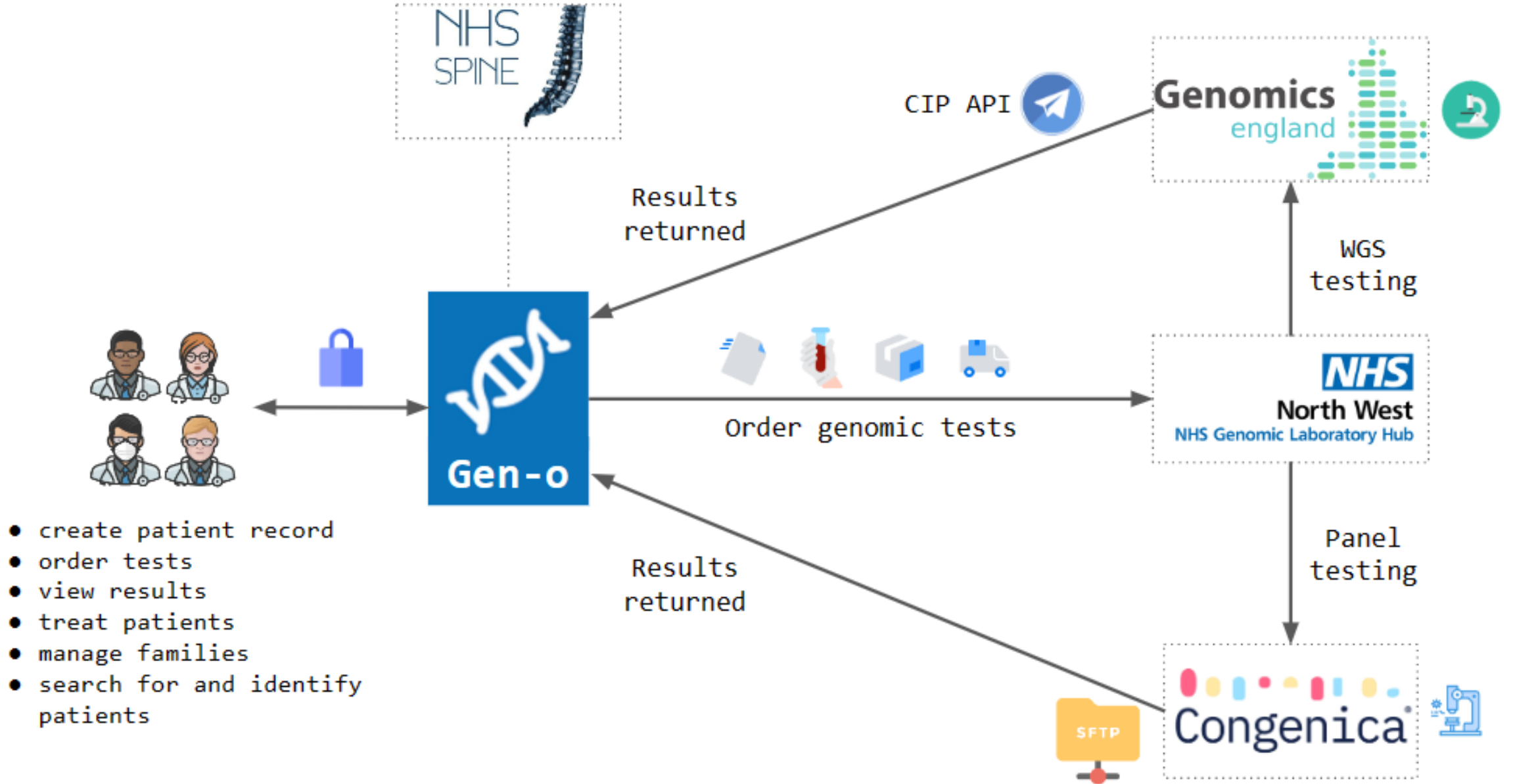
# Scaling across Greater Manchester with Answer Digital

- **Scale** GEN-O to function across to multiple trusts
  - MFT  Northern Care Alliance; Alder Hey
- **Connect** to national solutions
  - Genomics England Clinical Interpretation Platform
  - Developing an API to bring in data from Genomics England
- **Mitigate** challenges
  - Working with IG / IT across multiple trusts
  - Intercalating with EPR
  - Limited financial headroom



Scan to read the case study about the scaling of the project





# Results so far

- ✓ Successfully bringing genomics to mainstream medicine to improve clinical practice
- ✓ Expanded utilisation has been well received by clinicians
- ✓ Expected to reduce time spent on administrative tasks by 70%
- ✓ Improving the utility of multidisciplinary team (MDT) meetings
  - Next steps remain challenging
    - Wider roll out to further sites and specialties
    - Strategic ownership and vision