



G-Cloud 15

NHS Genomics Service

Contacts

Julian Young

Partnerships Lead

julian.young@prescribing.org

Jake Finney

Contracts Lead

jake.finney@prescribingservices.org



NHS Digital Assurance with FRA certification
NHS England Section 251 Accredited

© 2026

Except as provided by the Copyright Designs
and Patents Act 1988, no part of this
publication may be reproduced, stored in a
retrieval system or transmitted in any form
or by any means without the prior written
permission of the publisher.

Company No: 05913240

Data Protection Registration Number: Z2536678

Established Eclipse Accreditations, Governance and Procurement Status

GP IT Futures

Lot 1 Qualification

NHS Digital Assurance

Phase 1 Assurance December 2016

Phase 2 Assurance October 2017

Full Rollout Approval (FRA) Certificate issued
Nov 2017

NHS England Section 251

Prescribing Services are accredited as a supplier
of risk stratification solutions.

Data Security and Protection Toolkit 2023-24 (v 6)

Approved NHS Health Research Authority Database

CyberEssentials Certification Plus

ICO. Data Protection Register

SCCIO129 Clinical Risk Management

Teleradiology Services

East of England NHS Collaborative
Procurement Hub

NHS SBS Technology Enabled Care Services 2 Framework Agreement Reference: SBS10144

LOT 1 Remote Clinical Monitoring

LOT 2 Alarm Receiving Centre Platforms

LOT 3 Digital Alarm Solutions and Peripherals

LOT 4 Intelligent Activity Monitoring

LOT 5 Patient Controlled Personalised Records

LOT 6 One Stop Shop / Combined Solution

Clinical Digital Health Solutions (CDHS) Framework

3.5 Patient Support System Solutions

3.6 Specialist Clinical System Solutions

3.7 Shared Care Record System Solutions

NHS England Community Diagnostic Centres Framework

Pathology

Physiological Measurements

G-Cloud framework supplier (RM1557.15)

Crown Commercial Services (CCS) Spark DPS

NHS SBS Medicine Optimisation Prescribing Decision Support Systems 3

Lot 1: Medicine Optimisation System

Lot 2: Data Population Health Medicine
Optimisation System



Service Background

The delivery of NHS Genomics Services requires the coordination of complex data flows across primary care, secondary care, Genomic Medicine Service Alliances, laboratories, and specialist services. Effective delivery depends on the ability to identify eligible patients at scale, prioritise testing based on risk, manage consent and engagement, and track outcomes across pathways while maintaining the highest standards of information governance.

Historically, genomics pathways have been constrained by fragmented data, manual referral processes, limited population-level insight, and inconsistent access to specialist services. These challenges can result in variation in access, delayed diagnosis, missed opportunities for cascade testing, and limited visibility of outcomes at local, regional, and national levels.

ECLIPSE provides a centralised, NHS England-aligned platform designed to support the optimisation of genomics services through integrated population health data, advanced risk stratification, and coordinated patient engagement. The platform enables the secure aggregation and utilisation of genomics, clinical, demographic, and outcome data to support consistent, equitable delivery of genomics pathways. Through integration with primary care systems, secondary care datasets, pathology and radiology systems, and NHS England integrated genomics data platforms, ECLIPSE supports the identification of patients who may benefit from genomic testing, including the ability to trigger cascade testing where appropriate.

The platform supports structured patient engagement to manage consent, education, and activation for genomics programmes, while enabling referral into specialist services for patients with actionable results. Outcomes and pathway performance are tracked continuously, providing commissioners and clinical teams with real-time insight into activity, variation, equality of access, and impact.

ECLIPSE is already in use across multiple NHS programmes at national, regional, and ICB level. Its application to NHS Genomics Services enables a scalable, secure, and consistent approach aligned with NHS England priorities for earlier diagnosis, reduced variation, and improved equality of care.

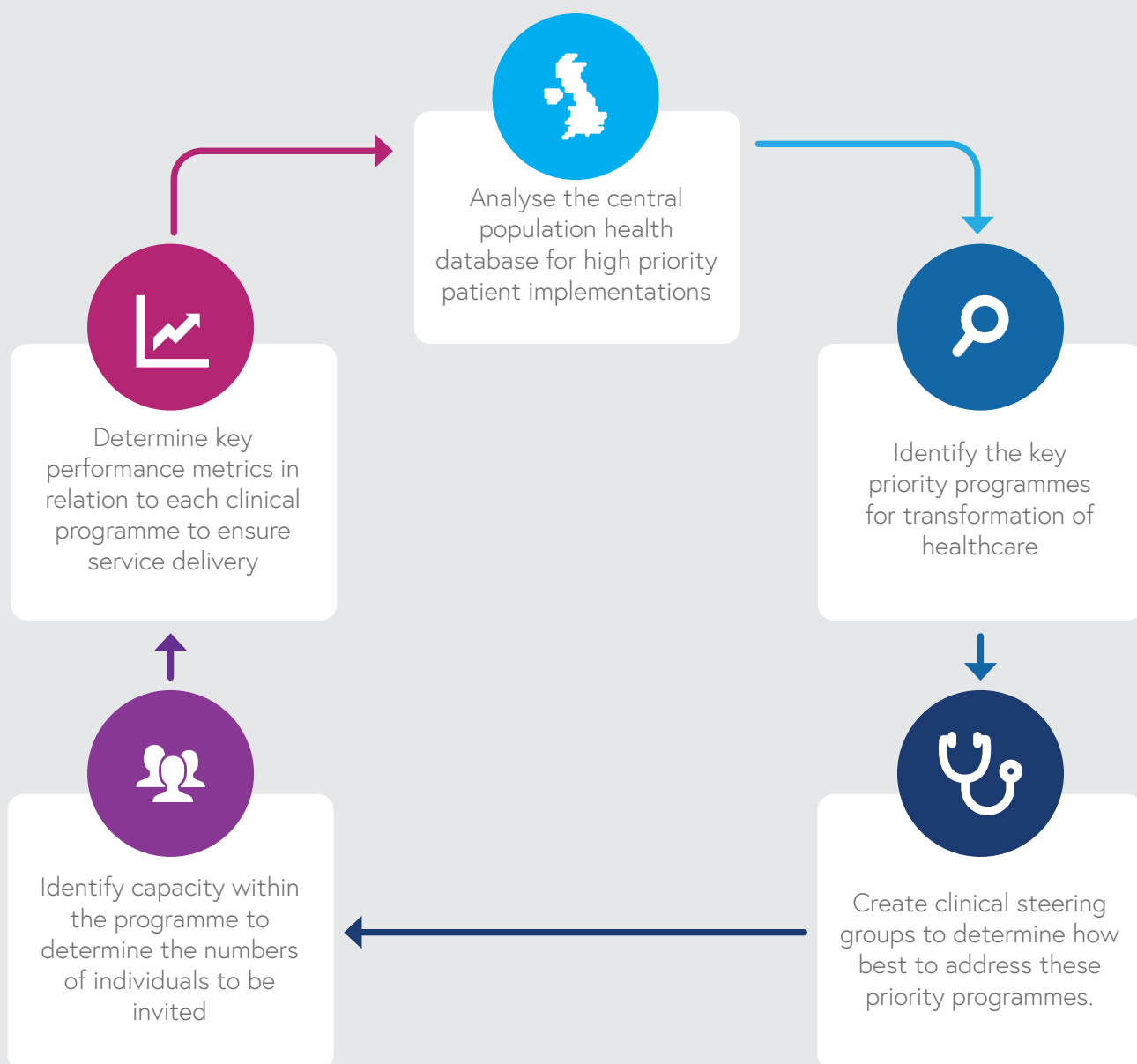
Programme Identification

The first step in modelling is to assess the differing costs for each region and each NHS organisation responsible for delivering the service to identify opportunities for cost savings.

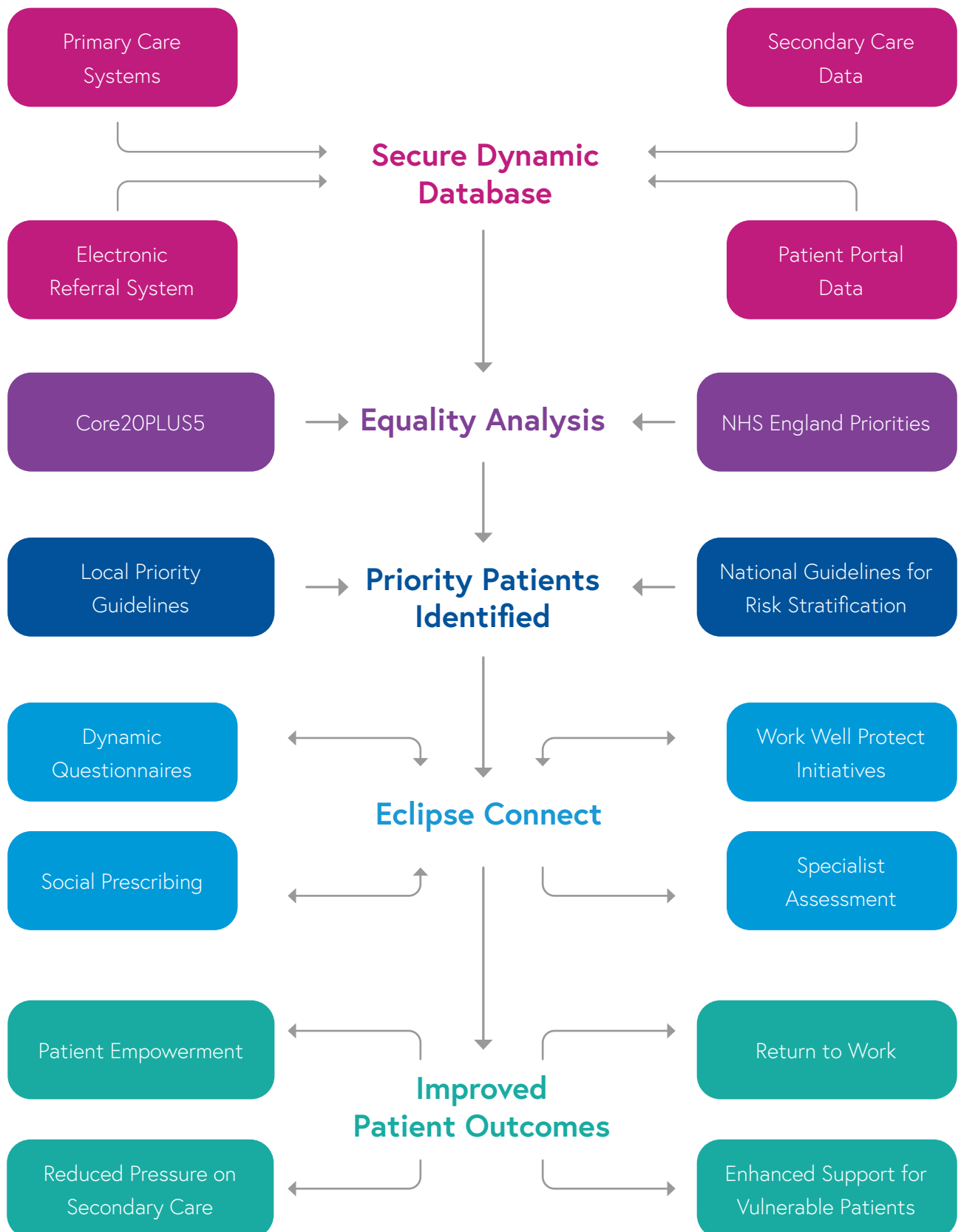
This can assist in identifying where a region can focus in relation to reducing negative variability and getting significant cost optimisations through high impact low workload implementations.

Having Identified a Priority Programme there then needs to be a detailed analysis identifying which key implementations are required and the requirements needed to deliver.

Steps to identify key programmes:



ECLIPSE System Flow



Ensuring Equality & Reducing Variability

ECLIPSE applies a standardised, objective approach to support the delivery of equitable care across entire populations. The platform enables consistent implementation of clinical pathways while allowing configuration to reflect local population need.

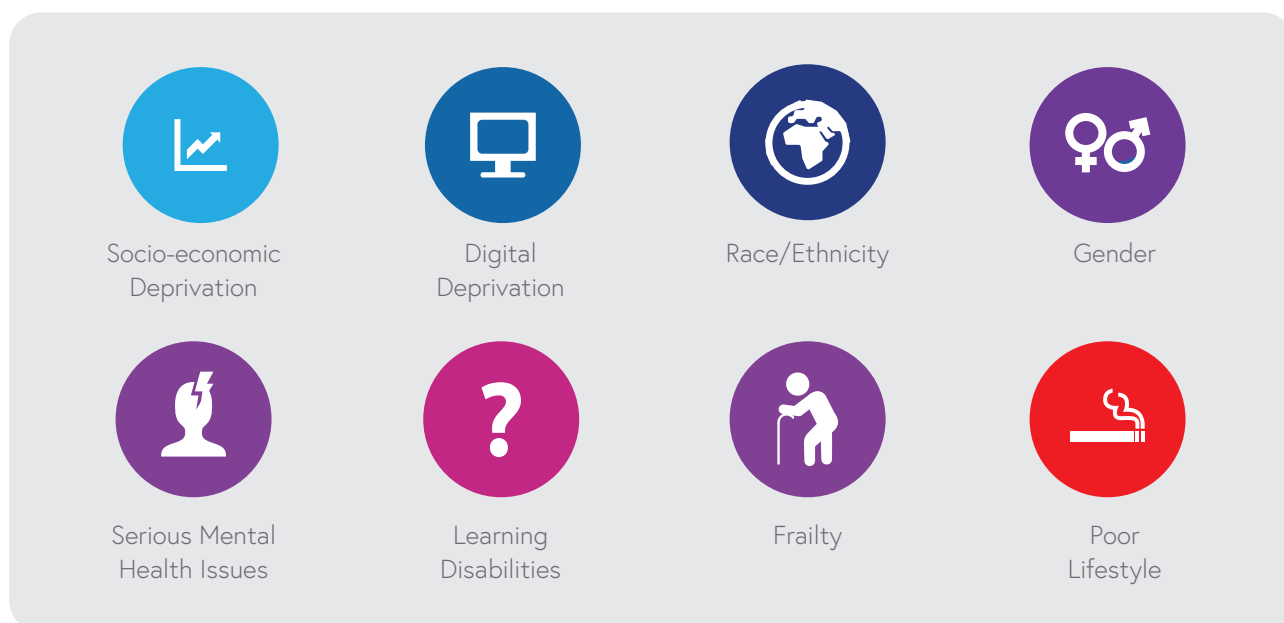
The service is built around a patient-centred model that prioritises identification of risk, proactive engagement, and shared accountability. This ensures that care delivery is driven by need rather than access, engagement capability, or digital confidence.

By engaging patients in their own healthcare through appropriate risk identification, monitoring, education, and feedback, ECLIPSE supports improved diagnosis, communication, and outcomes without increasing workload for NHS services.

NHS England has identified defined vulnerable patient cohorts requiring enhanced support. ECLIPSE enables these cohorts to be identified, analysed, and prioritised through integrated population health data and equality analysis.

The patient engagement platform continuously validates the effectiveness of questionnaires, interventions, and support materials. This enables ongoing refinement of engagement strategies and targeted interventions based on real-world patient responses and outcomes.

Equality impact can be assessed and monitored across a range of protected and vulnerable characteristics, including:



This approach supports NHS organisations in reducing unwarranted variation, improving equality of access, and delivering measurable improvements in outcomes for underserved populations.

How Eclipse Works

The following section provides a high-level overview of how the Eclipse system works to:

1. Improve patient outcomes
2. Improve capacity and access for NHS services
3. Reduce admission rates
4. Improved workforce sustainability
5. Improved equality of care

Step 1: Data Aggregation

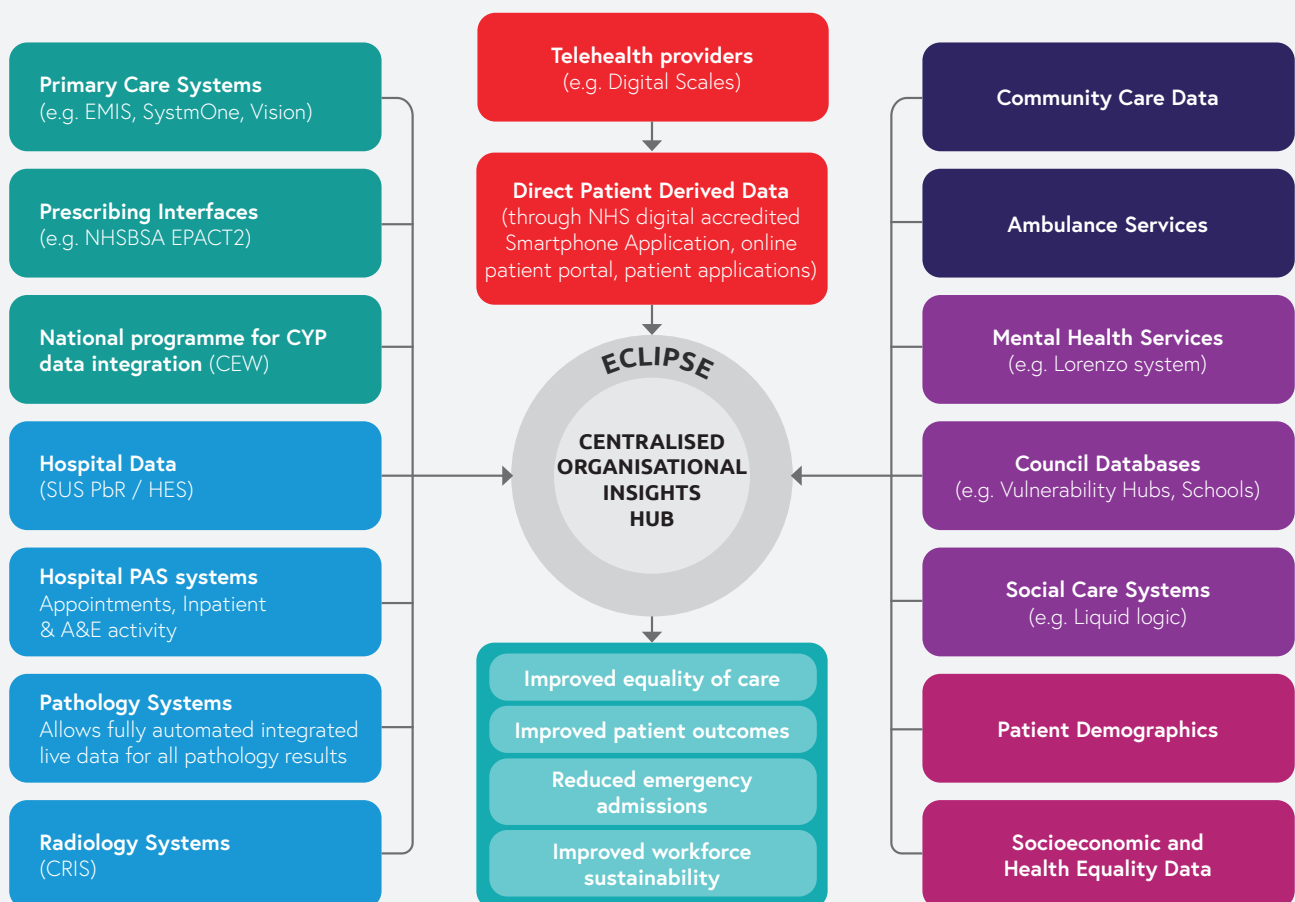
The platform securely aggregates patient-level, local population-level, and large-scale population data from a wide range of sources, including primary care, secondary care, community services, social care, and patient-derived data.

Individualised patient records are created that enable analysis at:

- Patient level.
- Practice, PCN, and ICB level.
- Regional and national population level.

Access to comprehensive, integrated population data is essential to delivering high-impact clinical programmes. The platform supports detailed healthcare modelling, prioritisation, implementation, and tracking of outcomes across pathways.

Create individualised patient portals containing all the relevant data in relation to:



Eclipse has the ability to integrate with each of the above data services, enhancing the data curation of your centralised data hub.

Step 2: Data Curation

Data is curated to ensure accuracy, completeness, and relevance for clinical and operational decision-making.

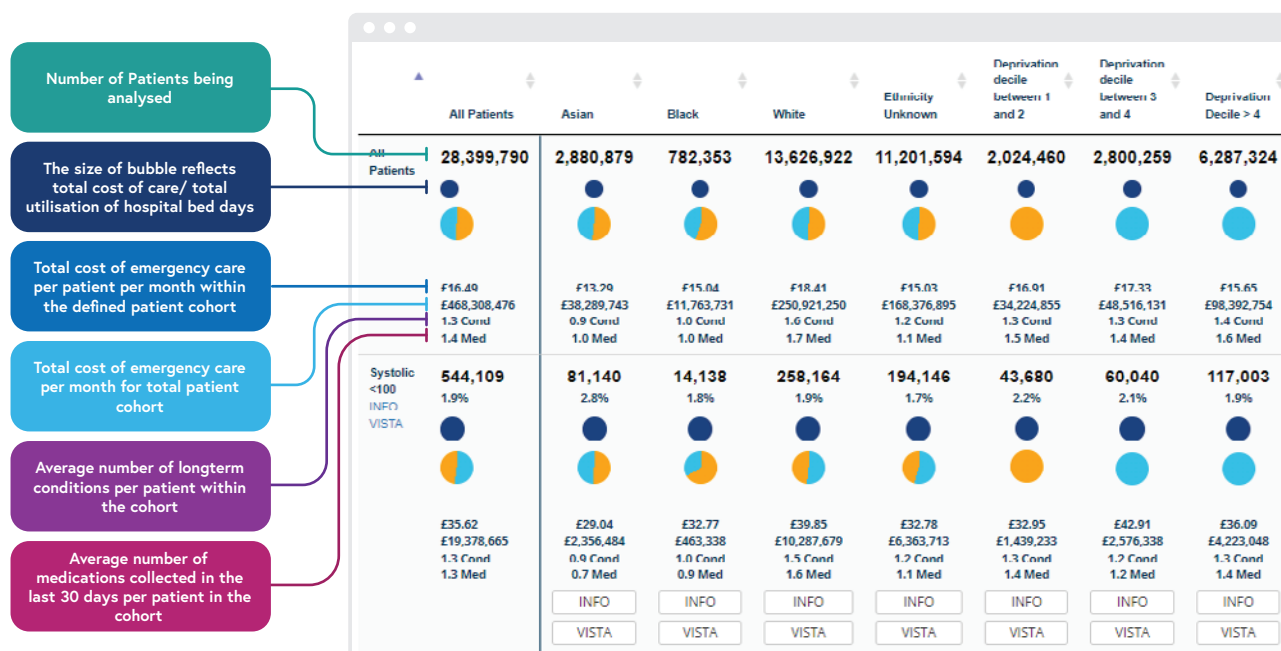
This includes:

- Validation of data quality.
- Identification of missing or incomplete data points.
- Use of a data priority matrix to focus on the most clinically relevant fields.

Automated patient engagement at regional scale supports consistent data completion, improving data quality without increasing workforce burden.

Step 3: Risk Insights for Quantitative Precision Based Programmes

The platform uses advanced analytics to model both population-level and individual risk, helping commissioners identify high-impact clinical programmes. It provides clear insights into the risk of hospital activity, the risk of preventable harm, and opportunities for targeted intervention. Analysis can be carried out at national, regional, and local levels, supporting informed commissioning decisions and effective prioritisation of resources.



Step 4: Programme Risk Stratification

Whole-population modelling enables structured risk stratification based on:

- Clinical risk.
- Anticipated impact of intervention.
- Preventable harm.
- Equality and deprivation indicators.

This supports targeted programme deployment, ensuring resources are focused where they deliver the greatest clinical benefit and economic value.

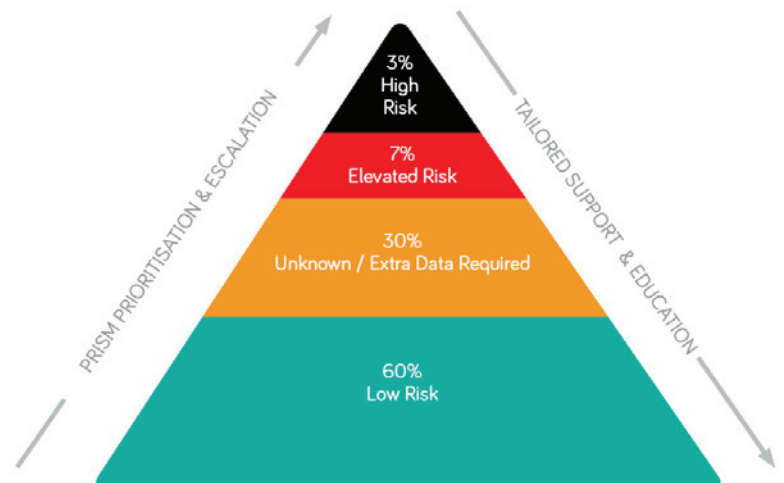
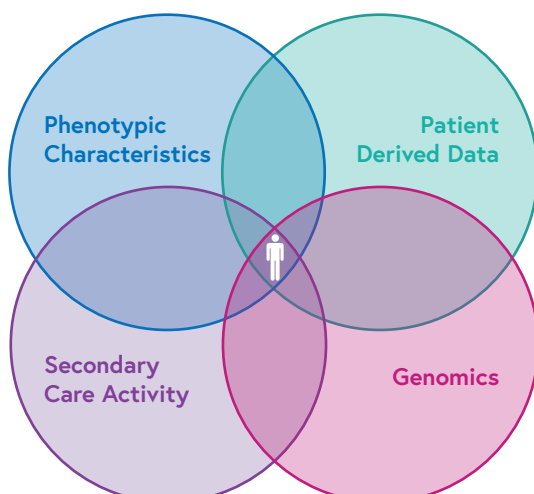
At an individual level, dynamic risk profiles enable intelligent prioritisation across pathways and services.

Step 5: Personalised Risk Stratification

Multiple risk factors are automatically combined to create high-, medium-, and low-risk patient groups. These parameters are continuously refined through feedback loops linked to outcome data.

This approach supports:

- Review of patients waiting for appointments in line with regional specifications.
- Identification of high-risk patients requiring specialist intervention.
- Ongoing refinement of risk profiles based on real-world outcomes.



Step 6: Identification & Prioritisation

The platform undertakes a structured gap analysis to identify patients requiring review or additional information. Standardised criteria are applied to support consistent prioritisation across pathways and services.

Patients from vulnerable cohorts and areas of higher deprivation can be identified to enable targeted support. This ensures that healthcare capacity is focused on individuals with the greatest clinical need and potential benefit.

The PRISM risk stratification tool can be used to define cohorts that are not currently compliant with best practice interventions. Patients are grouped into very high, high, medium, and low-risk categories to support prioritised action.

Vulnerable cohorts, including those within Core20PLUS5, can be filtered and stratified separately to support focused delivery of equitable care.

Step 7: Patient Engagement



Effective patient engagement is critical to the success of prevention, wellbeing, and clinical improvement programmes, particularly for harder-to-reach populations.

The platform supports motivational patient engagement, enabling healthcare professionals to work in partnership with patients to better understand care needs, goals, and barriers. This strengthens patient involvement in care planning and improves adherence to agreed interventions.

Patient engagement is delivered through a secure, web-based patient portal, supported by structured questionnaires, education, and feedback tools. This enables large-scale engagement while maintaining patient privacy and clinical oversight.

Step 8:

Automate Results Back onto the Shared Care Record

The patient application is fully integrated with primary and secondary care systems, enabling dynamic engagement and timely updates to the shared care record.

The Connect service supports identification of patients who may benefit from technology-enabled care by:

- Engaging patients who have expressed interest.
- Supporting implementation and data integration.
- Generating alerts and management plans linked to patient outputs.
- Validating programme impact, including equality of care analysis.
- This supports coordinated, joined-up care across services.

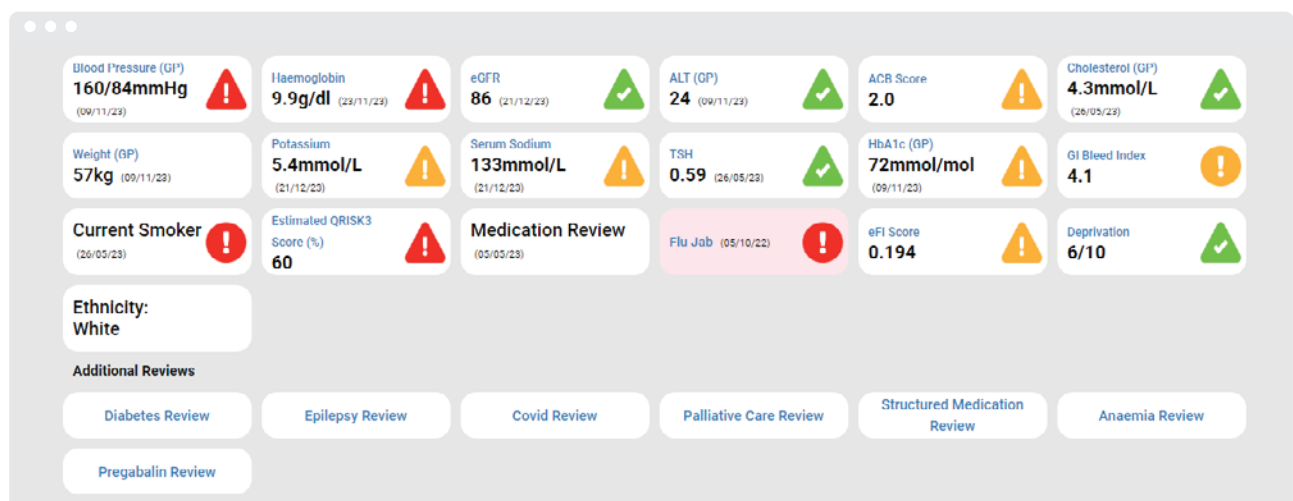
Step 9:

Prioritisation of Access to Services Based on Risk

All key information relating to patient reviews is collated within the platform.

Patient questionnaires are automatically assessed, with required actions clearly highlighted. This supports consistent clinical decision-making and prioritisation of access to services based on risk.

A standardised approach ensures that patients receive timely and appropriate intervention, supporting improved outcomes and more efficient use of clinical capacity.



Step 10: Action Plans (Personalised Care)

Personalised action plans are generated to support structured, proactive care delivery.

These plans include:

- Standardised reports.
- Automated reminders.
- Clear identification of outstanding tasks.

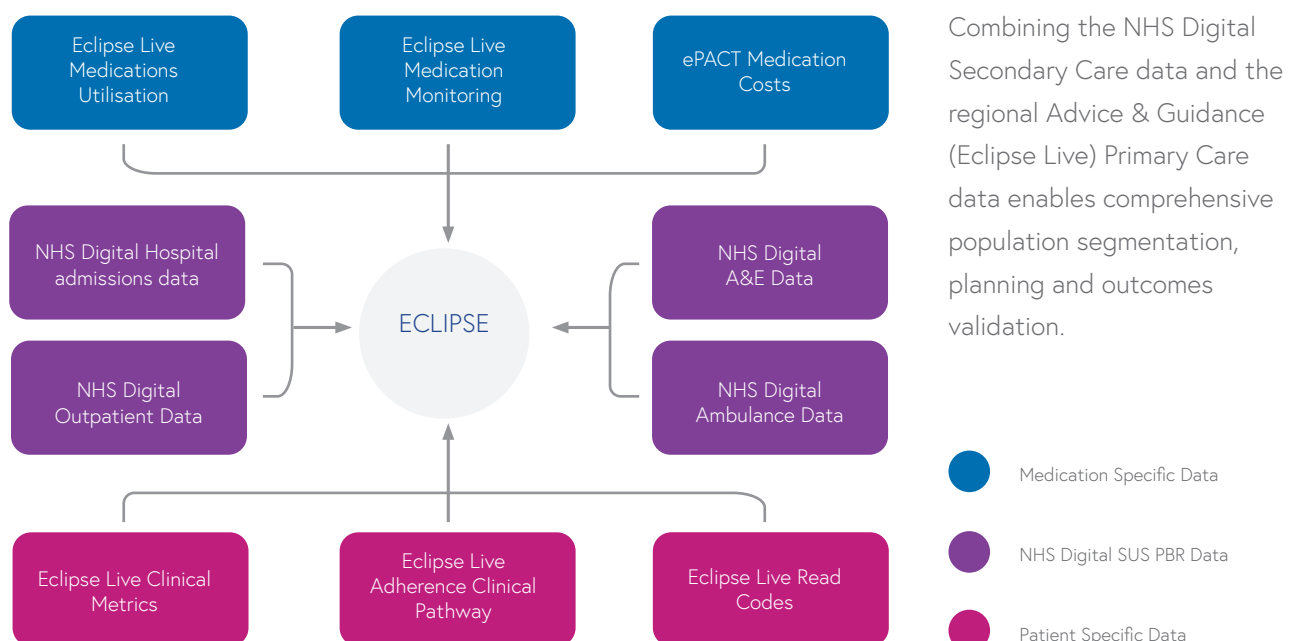
This supports continuity of care and ensures that agreed actions are completed in a timely and consistent manner.

Step 11: Assess Outcomes

The interface enables NHS organisations to monitor implementation, outcomes, variability, and cost at pathway, programme, and population level.

Outcomes data can be used to assess admissions avoidance and calculate cost savings, supporting validation of programme impact. Analysis can be undertaken at national, regional, and local levels.

By combining NHS Digital secondary care data with primary care and regional datasets, the platform supports comprehensive population segmentation, service planning, and outcomes validation.





NHS Digital Assurance with FRA certification
NHS England Section 251 Accredited

© 2025

Except as provided by the Copyright Designs
and Patents Act 1988, no part of this publication
may be reproduced, stored in a retrieval system
or transmitted in any form or by any means
without the prior written permission of the
publisher.

Company No: 05913240

Data Protection Registration Number: Z2536678



ECLIPSE