



Digital

UK Authority Innovation & Data4Good 2021

Healthcare Data For Research

Creating positive health outcomes
through data

Presented by:
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Presentation Content

- NHS Digital – who are we?
- National Response to Covid-19
- Looking to the future with our Data Platform

NHS Digital – who are we?

NHS Digital is the national digital, data and technology delivery partner for the NHS and social care system



Researchers and planners use our data for discovery and insight

We publish 300 official health and care data sets every year, supporting life sciences research, helping local and national planning and enabling accountability



Over 500bn. health and care data points are stored in our records, from Accident & Emergency Admissions to Zero Bed Days

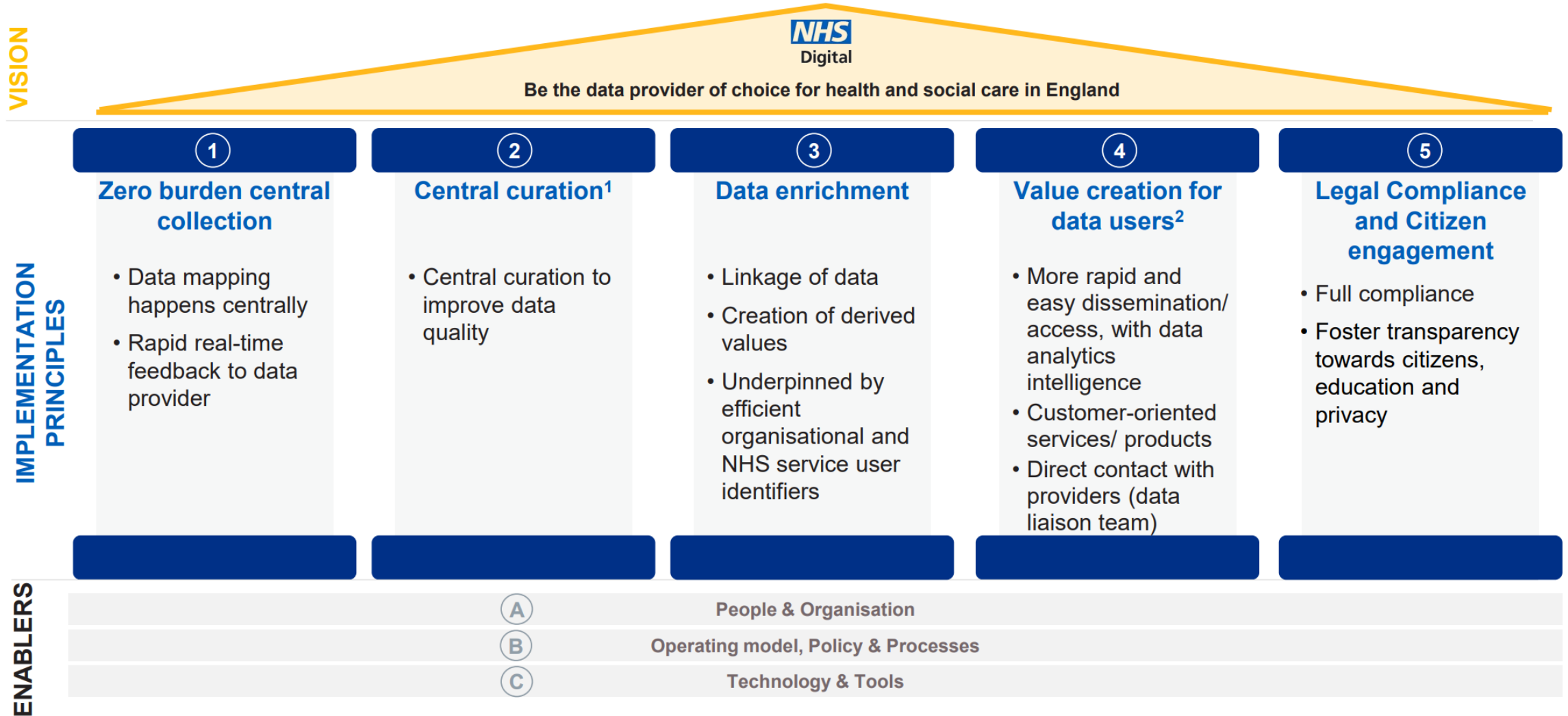
NHS Digital's place in the health and care system

NHS Digital supplies information and data to the health service, provides vital technological infrastructure, and helps different parts of health and care work together.

Our Responsibilities include:

- collecting, analysing and publishing health and care data
- making submitting data easier for health and care staff
- providing national technology for health and care services
- producing information standards
- improving the quality of health and care information and data
- publishing national indicators for health and care, to measure quality and progress

NHS Digital Data Strategy



1. Quality and standards; logical, coded and medical data model | 2. Health and Social care providers, national entities, life science industry and citizens

National Response to Covid-19

This time last year...

Some examples of NHS Digital's work:

- The Recovery Trial
- The Shielded Patient List
- GPES data for pandemic planning and research (COVID-19)
- Test Trace, Contain and Enable
- Dashboards
- Trusted Research Environments

<https://digital.nhs.uk/coronavirus>



NHS DigiTrials

We have contributed data and data services that have resulted in:

- discovery of three successful treatments for COVID-19 (Dexamethasone, Tocilizumab and Budesonide)
- development of three effective vaccines (Oxford-AZ, Novavax and Janssen)
- fast scale-up of convalescent plasma donation programme to enable clinical trials
- enabling timely recruitment into community therapeutics trials
- discovery of genes which increase susceptibility to life-threatening COVID-19 (GENOMICC);
- novel data set allowing analysis of household transmission (HOSTED) underpinning strategic decision-making on the pandemic response e.g. school closures.

NHS Trusted Research Environment for England

Working in partnership with Health Data Research UK (HDR UK) and our first client, the [British Heart Foundation Data Science Centre](#) (BHF DSC)

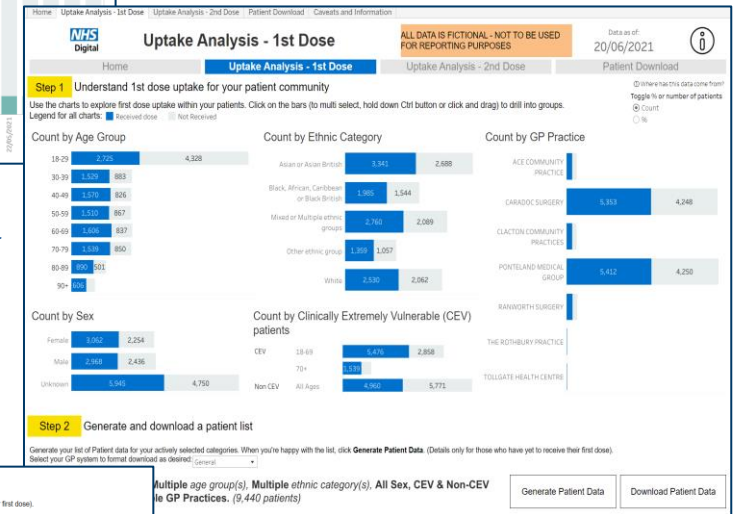
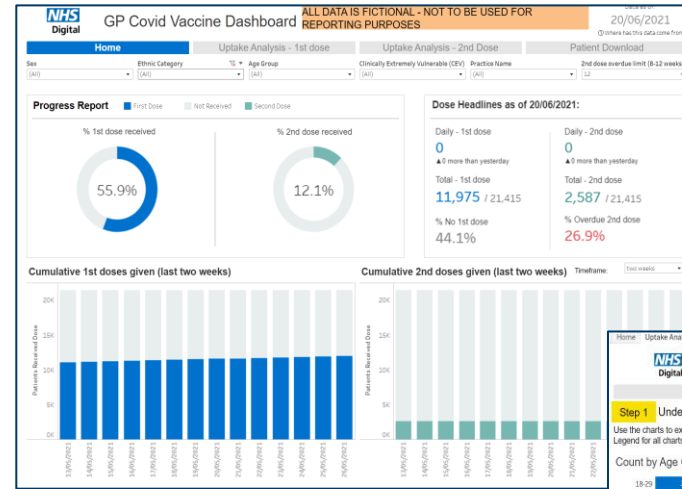
[DATA-CAN](#), the UK's health data research hub for cancer, recently completed the process necessary to access key cancer data within NHS Digital's TRE.

- CVD-COVID-UK consortium currently researching impact and effects of the COVID-19 on cardiovascular diseases.
- Currently [16 approved research projects](#) under way using data held by NHS Digital.
- Initial publication of [BMJ paper](#) which describes data covering 96% of the population.
- Approved researchers provided with secure access to de-identified cancer data for COVID-19 related research on rates of cancer referrals, diagnoses and treatment.
- Further national cancer data sets (Cancer Outcome and Services, Chemotherapy and Radiotherapy data) available from October 2021.

GP Covid Vaccine Dashboard

Targeted at GPs and PCN-led Local Vaccination Services, the dashboard is an optional tool which **visualises Covid Vaccine uptake** across patient groups and provides **patient contact information** to arrange a 1st dose or get a pending or overdue 2nd dose booked in.

The overall goal is to help PCN-led Local Vaccination Services boost vaccine uptake across all groups at that local level



Step 2: Generate and download a patient list

Generate your list of Patient data for your actively selected categories. When you're happy with the list, click **Generate Patient Data**. (Details only for those who have yet to receive their first dose). Select your GP system to format download as desired.

Selected patient details for 40-49 age group(s), Other ethnic group ethnic category(s), All Sex, CEV patients registered at Multiple GP Practices. (39 patients)

NHS Number	First Name	Last Name	Phone Number	Address Lines
020280274	Marilyn	King	Null	92 km estate, East Area, ESSEX
020801213	Delma	Wilkinson	+44(0)7700 962 177	420 Oliver gardens, South London, ABBEESDORSHIRE
020993242	Ellie	Ford	07700 900 299	Studio 14, Jordan Trail, East Kent, MONTIGOMERYSHIRE
030405971	Samantha	Stewart	Null	Flat 12, Donald common, North Nutealeburgh, CAERNAVDORSHIRE
030530478	Rhys	Sheppard	Null	987 Bryan brook, Patriciaville, WEST LOTHIAN
030739020	Milly	Turner	+44(0)770000020	88 Alexander street, West Main, NORTH ABERDEENSHIRE
040112429	Carveth	Gill	07700 900098	24 Henry hills, East Rulham, WILTSHIRE
040740444	Howard	Igdal	+447700 900 399	Studio 42, Margaret trafficway, North Bar, SCOTISH BORDERS
040820738	Shawnt	Davis	Null	4 Martin crossing, Cornforth, WILTSHIRE
042589991	Leslie	Graham	+447700990424	96 Dominic villa, Martindown, INVERCLYDE
0606947901	Melanie	Parsons	07700 900098	81 Arnie avenue, Reynoldsford, CUMBRIA
060840202	Alan	Graham	+44770000720	Flat 8, Redon squares, South Island, OMAN ISLANDS
060313688	Lynn	Carr	+447700 900149	Flat 8b, Colchesterpark, South Stockburgh, SOUTH ABERDEENSHIRE
080302736	Shane	James	+447700 900700	858 Anthony estate, West Lauriston, NORTHAMPTONSHIRE
087930824	Steven	Gibson	+44(0)7700 900 254	65 Holland center, Lake Laurenmouth, SURREY



COVID Oximetry @home

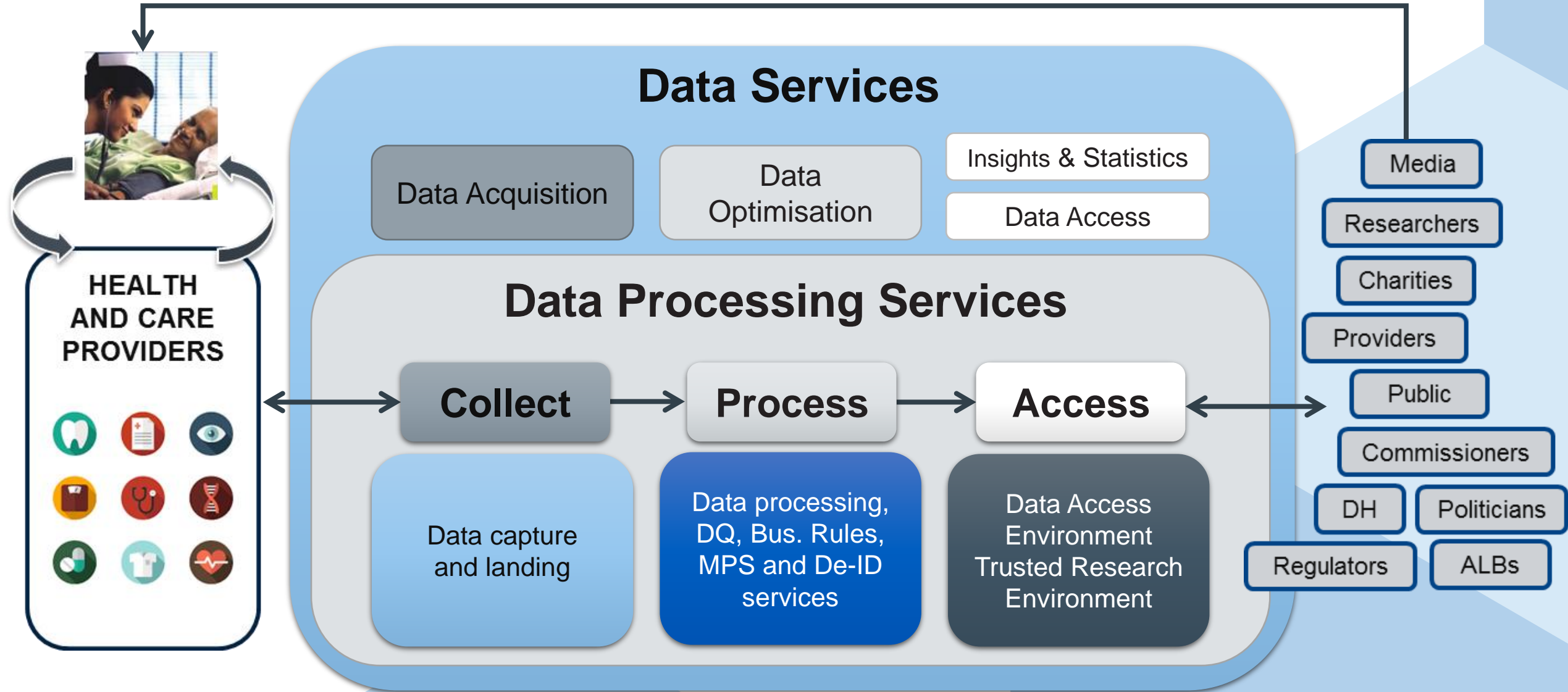
COVID Oximetry @home programme led by NHS England. NHS Digital's primary role is to deliver data, digital architecture and support evaluation.

- daily list of patients testing positive for coronavirus sent to Oximetry @home providers, with indicators included for those meeting recommended eligibility criteria
- weekly data collection from Clinical Commissioning Groups (CCGs) about patients onboarded and offboarded
- evaluation dataset provided to evaluation partners at Imperial Collage and the Health foundation to check the service effectiveness.
- Creation of new SNOMED codes for providers to code Oximetry @home activity accurately
- updating NHS Pathways to enable COVID Oximetry @home patients to be identified and triaged effectively
- updating NHS systems to make other services aware that a patient is being monitored by COVID Oximetry @home
- Support for the integration of COVID Oximetry @home apps with other NHS systems



**Looking to the future with
our Data Platform**

Our Evolving Data Processing Services



Our objectives

- **Process NHS data at scale**
 - Support greater collection capacity
 - Faster processing and availability
 - Standardising and simplifying legacy technologies
- **Linking data**
 - Flexible linking of data for richer analytics
- **Enabling 'Bring you own data' capability**
 - Analysts can bring in data to enrich analysis
 - Minimises the need for data to leave secure environment
- **Support data science innovation**
 - Industry recognised analytical tools for deep analysis



Why are we continuing to evolve?

- **Channel shift from data extracts to secure access - reducing the need for data to leave NHS Digital**
- **Greater automation – speeding up the time between authorisation and access**
- **Moving data to modern technologies - reducing risks associated with multiple legacy environments**
- **More component based – easier to adapt and change platform over time**
- **New capabilities to improve user experience and support our data directorate in the use of the platform**
- **Better management of compute per customer for a more performant service**





Thank You



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company/nhs-digital



digital.nhs.uk