

NHS Digital COVID-19 Gold Report

17 May, 2021




Overview of active initiatives in NHS Digital's COVID-19 response – 17 May, 2021

COVID-19 strategic focus areas

	Technology & Data workstream for Vaccinations (p.4-5)
	Deliver digital services for NHS Test and Trace (p.6)
	Provide digital channels for citizen guidance and triage (p.7)
	Identify and protect vulnerable citizens (p.8)
	Enable remote and collaborative care with systems and data (p.9)
	Support planning with data, analysis, and dashboards (p.10)
	Get data and insights to research communities & support clinical trials (p.11)
	Provide secure infrastructure and support additional capacity
	Plan for recovery, restarting services and new needs

Initiatives NHS Digital is delivering

 Significant milestone reported in this update

 Work ongoing

Booking systems: deliver national & local booking capabilities	Monitoring Adverse Reactions: data flows & analysis to support system partners	Communication Infrastructure: connectivity, NHSmail, devices	Data flows and dashboards: data architecture, quality checks & visualisation	Point-of-Care systems: assure performance and data integrity	Service Operations: operational support for the end-to-end vaccination service	Cyber Security Operations Centre: cybersecurity services for Vaccination
Digital platform for Pillar 2 & 3 Testing: all out-of-hospital testing for the public	Contain: public and private access to COVID-19 dashboards	Cyber Defence Operations Centre: security services for Test, Trace & Contain	Service Operations: ensuring performant operation of Pillar 2 testing infrastructure			
Covid Status: provide citizens with testing and/or vaccination status	Covid Therapeutics: enable delivery of Covid-19 therapies by primary care	NHS Pathways: new products and content to enable wider COVID-19 response	111 Online: enhancements to enable wider COVID-19 response	NHS App: over 1m users now accessing personalised health services via NHS App	NHS.UK: up-to-date health information and various digital services for citizens	
Shielded Patient List (SPL): developed & maintaining list of vulnerable patients	Risk Stratification: platform to support more granular COVID-19 risk profiles	SPL Data for Public Health: private dashboards to facilitate planning				
COVID Oximetry @home: enabling monitoring of high risk patients in their homes	Microsoft Teams Deployment: deployment to 1.2m NHS Mail users	GP Connect for Social Care: access to GP records to support direct care	Long Covid: data and digital capabilities to enable treatment and info provision			
Analysis of confirmed and suspected Covid-19 in primary care	Coronavirus in your area dashboard: local views of cases and 111 triages	Situation Reports: collecting data for NHSE on COVID-19 patients/staff impacts				
HOSTED: monitoring of anonymised household transmission by PHE	Trusted Research Environment for England (nominated by SAGE)	PRINCIPLE Trial: primary outcome data for trial focused on older people	RECOVERY Trial: Hospital and testing data for evaluating treatments	Novavax Trial: supporting Phase 3 trial for COVID-19 vaccine candidate	NHS COVID-19 Vaccine Registry: facilitating recruitment into clinical trials	Enabling Research: initiatives to accelerate production and improve access
Other infrastructure and cyber support: e.g. Laptops, cyber plans	Connectivity: network upgrades and extensions within NHS and social care	Authentication: development of additional virtual smartcard solutions	NHS Mail for health and social care: expansion and upgrade of capability			
"Healthcare debt" analysing activity, referrals & outcomes						



Overview of completed initiatives in NHS Digital's COVID-19 response – 17 May, 2021

COVID-19 strategic focus areas

Initiatives NHS Digital has delivered

Work complete



Technology & Data workstream for Vaccinations (p.4-5)



Deliver digital services for NHS Test and Trace (p.6)



Provide digital channels for citizen guidance and triage (p.7)



Identify and protect vulnerable citizens (p.8)



Enable remote and collaborative care with systems and data (p.9)



Support planning with data, analysis, and dashboards (p.10)



Get data and insights to research communities & support clinical trials (p.11)



Provide secure infrastructure and support additional capacity



Plan for recovery, restarting services and new needs

Service Design:
targeted reviews to ensure coherence across Test & Trace

Trace: digital infrastructure for contact tracing

NHS Login: secure identity verification for access to App and other NHS services

Self-Isolation Notes: digital service to self-certify for COVID-19 if evidence required

111 First (EDDI): booking appointments from 111 telephony / online into EDs

Find my NHS number: service to rapidly provide NHS number to patients

111 First (ED Streaming): enabling efficient management of patients in EDs

SPL Open Data: providing open data / visualisation of aggregated data

Vulnerable children: support safeguarding by sharing data with nurses, health visitors

Mental Health Survey: impact of COVID-19 on children and young people

Shielding Notes: digital service to self-certify for COVID-19 if evidence required

Video-consultations for Primary Care: assurance and rollout to >90% of practices

Video Consultations for Outpatients: rollout/implementation support to NHSE

GP Connect: information sharing across primary and urgent care

"Bring Your own Device" for Primary Care: enabling GPs to work remotely

Electronic Prescription Service (EPS): electronic by default (Phase 4)

iPads for Social Care: secure access to patient data for direct care

Ethnicity Outcomes Analysis: analysis to investigate high BAME fatalities

Diabetic risk factors: linking data from national audit to support analysis

REACT1: data for community prevalence testing (antigen testing)

Social Care Data Collection from Care Management Systems

Secondary Care Medicines Data: developing new data collection

e-Referral Dashboard: open data showing referral trends during COVID

Cancer: linking data and performing analysis to support planning & research

Plasma Trial: identification of eligible (recovered COVID-19) patients

UK Biobank: large-scale medical and genetic database for health research

Central Disseminator of GP Data for research and planning

Returning Staff: advice and technical support for onboarding

Your NHS Needs You: survey for recruitment of returning clinicians

Nightingale Hospitals: connectivity, technical / cyber



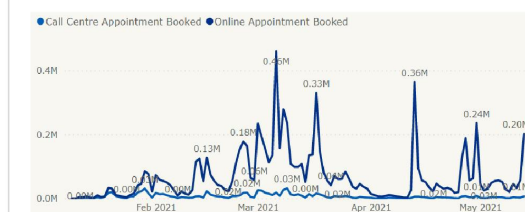


NHS Digital's COVID-19 response – Support delivery of vaccinations (1 of 2)

NHS Digital is leading the Technology and Data workstream of the Vaccinations programme, providing data, analysis, and infrastructure to support delivery of vaccination programmes and facilitate post-vaccination monitoring

Initiatives	Focus area	Deliveries and impact
Appointment Booking	National Booking Service	<ul style="list-style-type: none">Enhanced the national 'Book a coronavirus vaccination' service on 13 May to reflect changes in guidance on use of the AstraZeneca vaccine in people younger than 40* and to enable pregnant women to book a vaccination. The service continues to be optimised on a day-to-day basis to support emerging priorities (e.g. acceleration of vaccination in areas with higher prevalence of new variants of concern) (Book a coronavirus vaccination - NHS (www.nhs.uk))More than doubled system capacity to ensure service remains performant during the large peaks in demand that have occurred as younger cohorts become eligible for vaccinations (see graphic)As of 17 May, the service has been used to book ~20.7 million appointments at NHS vaccination centres and community pharmacies (bookings into PCNs and Hospital Hubs are currently managed directly by those providers). The service is also used to check patients into these vaccination sites and to manage appointments
	Call and Recall Service	<ul style="list-style-type: none">Continued to manage service that sends vaccination invitations to eligible citizens and issues reminders to people who have not attended or booked appointments. Following a successful pilot, text messages are now the primary means of communicating with citizens. As of 13 May, 27.8m invitations had been issued through letters (17m), letters and texts (5.9m), and texts (5m)
Data Analysis	Monitoring Adverse Reactions	<ul style="list-style-type: none">NHS Digital's NHS Pathways team is analysing data from calls to 111 to assess the likely impact of post-vaccination symptoms on the demand for health services. The analysis focuses on triages that record a vaccination event reported by the patient, and examines the symptoms commonly reported following vaccination (e.g. fever, headache, unexplained bruising). The analysis shows trending for both symptoms and dispositions (recommended action) and has provided an important, quantifiable indicator of the likely impact on health services from side effects following COVID-19 vaccinationAt the request of our partner organisations, these data are now being provided each week to the Integrated Urgent Care team in NHS England and to the UK Chief Medical Officers

NHS Digital has continuously increased the capacity of the National Booking Service (NBS) to accommodate periodic peaks in booking activity



The service is now ready for surge vaccinations and management of younger cohorts

*JCVI advises on COVID-19 vaccine for people aged under 40 - GOV.UK (www.gov.uk)



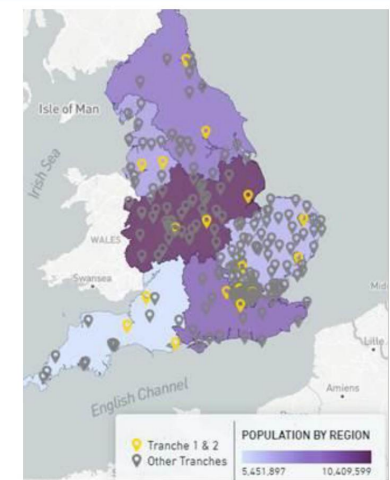


NHS Digital's COVID-19 response – Support delivery of vaccinations (2 of 2)

NHS Digital is leading the Technology and Data workstream of the Vaccinations programme, providing data, analysis, and infrastructure to support delivery of vaccination programmes and facilitate post-vaccination monitoring

Initiatives	Focus area	Deliveries and impact
Communication Infrastructure	Connectivity	<ul style="list-style-type: none">Worked closely with NHS England and telecommunications suppliers to ensure that fixed connectivity, WiFi and back-up 4G connections are available for vaccination centres, primary care sites and community pharmacies. As of 17 May, NHS Digital had facilitated procurement and overseen installation of communication infrastructure to 138 sites with work underway with a further 8 sitesStarted gathering data on longer-term requirements and strategy for vaccination sites to enable planning for ongoing connectivity and contractual arrangementsSuccessfully assured decommissioning of the first vaccination site to be returned to original use on 23 April - Nonsuch Mansion
Data Quality	Data and Dashboards	<ul style="list-style-type: none">Continued to provide assurance over completeness and quality of vaccination data. Data quality dashboards are used to proactively identify issues including timeliness of data entry and data flows, accuracy of data entry and missing informationContinued to operate a data quality helpdesk to support clinical and administrative staff, including General Practice staff, hospital vaccination service managers and staff managing NHS vaccination hubs
Strategic Planning	Supporting Future Vaccination Campaigns	<ul style="list-style-type: none">Working with NHS England's COVID Vaccination and Flu Vaccination teams to define technical and data deliverables required to support emerging plans for Autumn / Winter 2021 vaccination campaignsInitiated strategic planning to investigate how to leverage the technical infrastructure established for COVID-19 Vaccination for wider benefit

NHS Digital continues to ensure appropriate connectivity in place for all vaccination sites, including ~160 Vaccination Centres (shown below)



In parallel, work is now underway with NHS England to review the longer-term plan for vaccination sites so that connections are appropriately managed



NHS Digital's COVID-19 Response – Deliver digital services for NHS Test and Trace

NHS Digital is the primary digital delivery partner for Testing within NHS Test & Trace, supports Contain via a series of dashboards plotting the infection spread within the UK, and provides IT service management and cyber security management for Testing and Contain

Initiatives	Focus area	Deliveries and impact
Asymptomatic Testing	Universal Offer	<ul style="list-style-type: none"> Implemented digital changes to support expansion of COVID-19 testing to anyone who wants to be tested. This 'universal offer' was enabled for England on 09 April and for Northern Ireland, Scotland and Wales on 26 April. ~6m lateral flow device (LFD) test kits were requested between 03 and 09 May
	Events Research Programme*	<ul style="list-style-type: none"> Delivered integration on 06 May with ticket booking agents supporting HMG's Events Research Programme*, which is running pilots to determine the best way to safely re-introduce mass events. This integration enables automatic home delivery of identifiable PCR kits to the people participating in these pilots, facilitating investigation of the effectiveness of 'test-on-entry' protocols
	Self-Test Results Reporting	<ul style="list-style-type: none"> Extended self-reporting of test results to include early years settings in Scotland on 8 April, primary care in Wales, Local Authorities and independent hospitals on 15 April, additional adult social care settings on 25 April, and higher education institutions on 28 April. Self-reporting of results from lateral flow devices is now available in over 20 settings with over ~6.5m results reported via this service each week
Surveillance	Variants of Concern	<ul style="list-style-type: none"> Delivered new data flow on 07 April that provides test results from a new type of lab analysis ('reflex assay') directly to Public Health England's national register for notifiable diseases. These new assays enable more rapid identification of COVID-19 cases caused by variants of concern and the new data flow ensures results are rapidly communicated to public health experts Implemented changes on 17 May that enable samples of interest to be identified at point of test registration, enabling prioritised processing of these samples by analytical labs and faster tracing of individuals that test positive for variants of concern
Border Control	Test Ordering for International Arrivals	<ul style="list-style-type: none"> Supporting expansion of permitted international travel by enabling international arrivals from 'Green' countries to order PCR tests for use 2 days after arrival in the UK on 17 May and to register the results of these PCR tests from 18 May
Contact Tracing	Testing Contacts	<ul style="list-style-type: none"> Continued to enhance digital capabilities supporting contact tracing. Enabled ordering of PCR tests for confirmed and self-identified contacts of positives cases in England on April 12. Also delivered facility to capture the 'trace ID' on the 15 April to facilitate tracking of whether contacts of positive cases have been tested following a request from NHS Test and Trace to book a PCR test

NHS Digital is supporting the Events Research Programme which is investigating how to safely reintroduce mass events*



Digital integration with ticketing agents has enabled home delivery of test kits to pilot participants so 'test on entry' protocols can be assessed

*[*Information about the Events Research Programme \(ERP\), paving the way for larger audiences to attend sport, theatre and gigs safely this summer - GOV.UK \(www.gov.uk\)](#)*



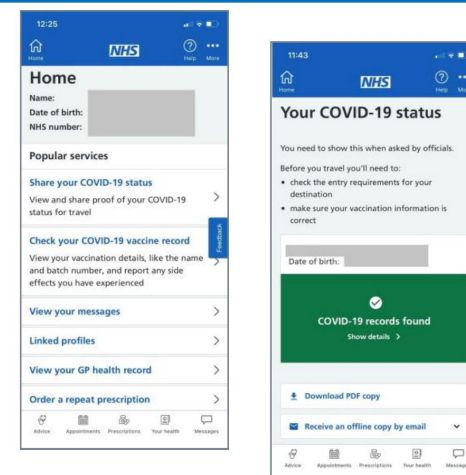


NHS Digital's COVID-19 response – Provide digital channels for citizen guidance and triage

Providing digital channels for citizens to access information and guidance, self-manage and be routed to the most appropriate care, minimising contact and reducing the burden on clinical staff

Initiatives	Focus area	Deliveries and impact
COVID 'Status'	Data and Infrastructure	<ul style="list-style-type: none">Continued to support HMG's policy to facilitate expansion of permitted international travel by allowing citizens to demonstrate their COVID-19 'status'*Delivered initial set of digital capabilities on 15 May that allow people in England to demonstrate their COVID-19 vaccination status through the NHS App (see graphic). The NHS App provides a simple and secure way for people to access a range of NHS Services on their smartphone or tablet (NHS App - NHS Digital)Increased capacity of the infrastructure supporting the NHS App and for processing identification checks through NHS Login, which provides secure access to digital health and care services (NHS login - NHS (www.nhs.uk)). As of 16 May, people in England had viewed their COVID-19 vaccination status 835k times using the NHS App and NHS Login had recorded the largest number of new requests ever received in a single day. Over 4 million people have now registered to use the NHS App
COVID Therapeutics	Primary Care	<ul style="list-style-type: none">Delivered the minimum viable product (MVP) required to support NHS England's programme for providing therapeutics through primary care to people who have tested positive for COVID-19NHS Pathways updated on 16 April to include decision support for first likely therapy and 111 Online enhanced on 29 April to align with changes to NHS Pathways. NHS BSA delivered new text message capability on 06 May to inform eligible people about potential therapies following a positive test. These capabilities have been delivered but will not be 'turned on' until the first therapy is approved for treating COVID-19 outside of hospitalThis preparatory work has been completed to enable more rapid mobilisation of delivery channels as soon as novel therapies are approved for treatment of COVID-19 patients in primary care. Additional work may be required once the first therapy is approved

NHS Digital has delivered changes to enable COVID-19 vaccination status to be demonstrated via the NHS App for people in England



From 17 May, people who have had a full course of a COVID-19 vaccine can demonstrate their status via the NHS App or by ringing 119 to request a letter (GP practices are unable to assist)

* [Demonstrating your COVID-19 vaccination status when travelling abroad - GOV.UK \(www.gov.uk\)](#)





NHS Digital's COVID-19 response – Identify and protect vulnerable citizens

Identifying and protecting vulnerable citizens, to ensure that they can be shielded or receive additional support

Initiatives	Focus area	Deliveries and impact
Shielded Patient List (SPL)	Identifying vulnerable citizens	<ul style="list-style-type: none"> At the request of the Department for Health and Social Care (DHSC), continued to maintain the Shielded Patients List (SPL) following the pause of national shielding guidance on 01 April*. Maintenance of the SPL ensures clinically extremely vulnerable (CEV) patients can be rapidly identified if targeted support needs to be provided in the future (e.g. further vaccinations or new requirements for shielding)
	Optimising the Service	<ul style="list-style-type: none"> Progressing work to migrate the digital infrastructure supporting the SPL into the cloud. This will reduce the time required to produce the SPL and increases the resilience of the service DHSC has commissioned the SPL for a further 12 months and work now underway to optimise the service. Key areas of focus include reducing technical debt, improving the choices for patient correspondence, publishing more information about the patient population through dashboards, and working to ensure that any updates to the Q-COVID** algorithm can be incorporated in the list
Risk Stratification	Expanding the Service	<ul style="list-style-type: none"> Working with DHSC and other stakeholders to agree priorities for expanding the Coronavirus (COVID-19) risk assessment service. DHSC commissioned NHS Digital to develop digital infrastructure to support a more sophisticated approach to identifying individuals with increased vulnerability to COVID-19. This infrastructure has been successfully used to prioritise ~1.7m people with increased risk from COVID-19 for vaccination as part of Cohort 6** and to provide clinicians with tools to facilitate their review of individual patients' risk from COVID-19 (COVID-19 Clinical Risk Assessment Tool - NHS Digital). Progressing discussions about updating the QCovid risk calculator developed by Oxford University (to reflect improvements in understanding of factors that affect risk from COVID-19) and expanding the use of the service to devolved administrations (it is currently only in use in England)

While national shielding guidance was paused in England on 01 April*, NHS Digital is supporting clinically extremely vulnerable patients through advice and guidance on NHS.UK



We continue to produce the Shielded Patient List each week to ensure support for CEV can be rapidly mobilised if required in future

* [Guidance on shielding and protecting people who are clinically extremely vulnerable from COVID-19 - GOV.UK \(www.gov.uk\)](#)

** [Coronavirus \(COVID-19\) risk assessment - NHS Digital](#)

*** The Joint Committee on Vaccination and Immunisation (JCVI) has defined Cohort 6 as people between the ages of 16 and 64 with underlying health conditions which put them at higher risk of serious disease and mortality from COVID-19 ([Priority groups for coronavirus \(COVID-19\) vaccination: advice from the JCVI, 30 December 2020 - GOV.UK \(www.gov.uk\)](#))





NHS Digital's COVID-19 response – Enable remote and collaborative care

Making data and systems available to enable remote and collaborative working by health and care staff, minimising transmission and managing strained capacity

Initiatives	Focus area	Deliveries and impact
Remote Digital Care	COVID Oximetry@home	<ul style="list-style-type: none"> Delivered enhancement to daily lists of new patients with a positive COVID-19 test who are over 65 and/or clinically vulnerable. As of 06 May, 99 CCGs had registered to receive these patient lists via secure electronic file transfer (SEFT) with 87 CCGs downloading lists Introduced provision of data via Data Services for Commissioners Regional Offices (DSCROs) to facilitate notification of eligible patients to individual GP practices (13 April) Issued specification to remote monitoring suppliers (30 March) to enable automated data collection from remote monitoring apps and GP systems. Automated collection is expected to commence in June, reducing the burden on front line staff and improving coverage of the data collection Issued guidance to primary care on 20 April to ensure data on patients onboarded into the COVID Oximetry@Home pathway is available in the Summary Care Record (SCR) with Additional Information (see graphic) Delivered data on 19 April for ~20k patients that participated in the COVID Oximetry@Home programme to the evaluation team from Imperial University, University College London and the Health Foundation. Further data will be delivered for evaluation in June. The evaluation will assess the impact of the programme on mortality and length of stay in hospital
Collaboration Tools	MS Teams	<ul style="list-style-type: none"> MS Teams remains an important enabler for remote collaboration with over 26 million chats, 3.1 million calls, and 6.8 million meetings taking place on the platform between 30 March and 09 May 2021

Issued guidance to primary care on 20 April to ensure data about patients onboarded to the COVID Oximetry@Home pathway is added to the Summary Care Record

To add the SNOMED code in SCR Additional Information:

- EMIS Web users should record the code as an active problem - please ensure that the problem status is configured so that it remains active for a duration appropriate to the COVID Oximetry@home pathway
- SystmOne users record the code as an active problem - on or after discharge from the pathway, the problem status should be made inactive to update the patient's SCR so that it is no longer included
- Vision users should record the code as Priority 1 or an active problem - on or after discharge from the pathway, the Priority 1 or active problem status should be removed to update the patient's SCR so that it is no longer included

The SNOMED code '1325191000000108 Telehealth pulse oximetry monitoring' should be used. Full guidance is available on [COVID Oximetry @home - digital and data services - NHS Digital](#)

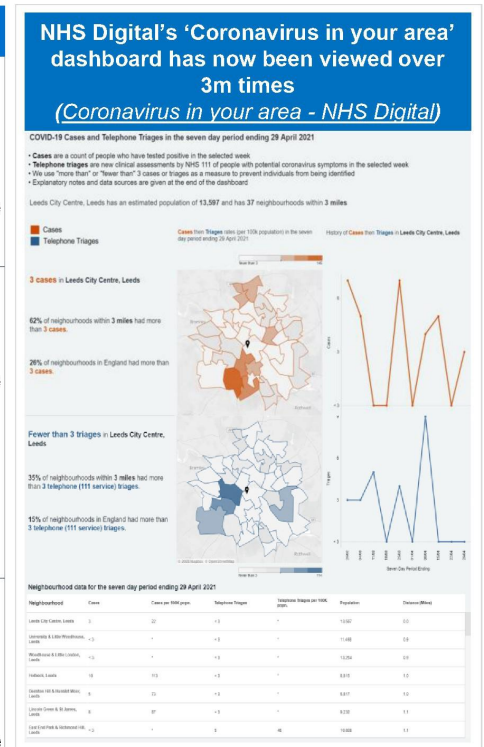




NHS Digital's COVID-19 response – Intelligence to support planning

- Providing data, analysis & dashboards to help the system understand the prevalence and spread of infection & manage capacity

Initiatives	Focus area	Deliveries and impact
Data Analysis	Coronavirus Recorded in Primary Care	<ul style="list-style-type: none"> Completed analysis that examines trends in confirmed and suspected cases of COVID-19 recorded in primary care settings. The analysis was commissioned by the Department of Health and Social Care (DHSC) and focused on cases in England with specific drill-downs by region, age, sex, socio-economic status and ethnic group. The report provides new insights into the extent and patterns of COVID-19 cases during the early phases of the pandemic when testing was less widely available. The report will be published on 20 May and will be available via Coronavirus as Recorded in Primary Care - NHS Digital
Dashboards and Open Data	Coronavirus in Your Area	<ul style="list-style-type: none"> Reached 3m views of the 'Coronavirus in your area' dashboard on 16 March. This dashboard provides the number of COVID-19 cases confirmed by a lab test and the number of triages where COVID-19 is suspected (following assessment of symptoms by 111 telephony service) over a seven day period for a local area. Users can select the postcode of interest and the size of area they wish to view (based on the distance from the postcode). The dashboard provides a view of cases and triages along with a comparison of the numbers in the selected postcode with those reported for neighbourhoods within the area of interest (see graphic) 10 COVID-19 dashboards have now been developed for public and private use, providing visibility on case numbers in local areas, vaccination update, data quality, the Shielded Patients List, testing, and participation in research. The full set of dashboards can be accessed at Data dashboards - NHS Digital
Data Collection	GP Data	<ul style="list-style-type: none"> Continued to collect and analyse data from GP systems as part of the pandemic response, in order to support urgent, COVID-19 related planning and research needs including identifying those most vulnerable to coronavirus, rolling out vaccines, and testing treatments NHS Digital has been directed by the Secretary of State for Health and Social Care to establish a new strategic system to provide the data required to plan health and care services and facilitate research going forward beyond the COVID-19 pandemic. As part of the establishment of this new General Practice Data for Planning and Research (GPDPR) service, we published a Data Provision Notice on 12 May for a collection from general practices in England of pseudonymised patient data which can be made available through NHS Digital to planners and researchers for approved health and social care purposes. Data collection will commence on 01 July (Improved collection of GP data launched - NHS Digital)





NHS Digital's COVID-19 response – Enable research and clinical trials

- *Facilitating the sharing and availability of data and analyses to support research, enabling evaluation of different response interventions and increasing understanding of COVID-19 transmission, immunity and clinical outcomes*
- *Accelerating COVID-19 Drug and Vaccine clinical trials*

Initiatives	Focus area	Deliveries and impact
Enabling Research	HOSTED Study	<ul style="list-style-type: none"> Continued to provide data to support Public Health England's HOSTED study, which is investigating patterns of household transmission of COVID-19. Findings published on 28 April reported that a first dose of both Pfizer and AstraZeneca vaccines reduce household transmission of COVID-19 by up to 50%*
	Trusted Research Environments	<ul style="list-style-type: none"> Continued to provide Trusted Research Environments (TREs) to facilitate investigation of nationally prioritised COVID-19 research questions. A comparison of trends in GP-diagnosed depression in adults in England during the pandemic with pre-pandemic levels was published on 05 May** by the Office for National Statistics (ONS) and was based on analysis completed in their TRE Provided approval for the first group to use the ONS & NHS Digital COVID-19 Public Health Research Database***. This new research asset was commissioned by Health Data Research UK and DHSC's Scientific Advisory Group on Emergencies (SAGE) and consists of a linked dataset, combining data from the 2011 census and health data (hospital episode statistics and primary care data), enabling approved researchers to analyse whether particular illnesses, conditions or societal circumstances increase likelihood of adverse outcomes from COVID-19. We have worked with ONS to establish data sharing and governance arrangements. The first approved application is from the University of Leicester and will investigate COVID-19 outcomes by ethnicity
Enabling Clinical Trials	PRINCIPLE	<ul style="list-style-type: none"> Continued to support recruitment and provide data to the PRINCIPLE trial, which aims to identify treatments for COVID-19 that can be taken at home to prevent hospitalisation in patients aged over 65 or over 50 with underlying health conditions. On 12 April, the trial published findings**** that budesonide, an asthma drug, shortens recovery times in non-hospitalised patients with COVID-19

Public Health England's HOSTED study used data from NHS Digital to show that COVID-19 vaccines significantly reduce transmission within households



* [One dose of COVID-19 vaccine can cut household transmission by up to half - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

** [Coronavirus and GP diagnosed depression in England: 2020 - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)

*** [ONS & NHS Digital COVID-19 Public Health Research Database: Privacy Policy - NHS Digital](#)

**** [Asthma drug budesonide shortens recovery time in non-hospitalised patients with COVID-19 — PRINCIPLE Trial](#)





Thank You



@nhsdigital



company/nhs-digital



www.digital.nhs.uk