NHS
Digital

NHS Digital coronavirus programme update

15 December, 2020

Information and technology
for better health and care

NHS Digital coronavirus programme update – 15 December 2020
Overview of <u>active</u> initiatives in NHS Digital's COVID-19 response

NHS Digital

COVID-19 strategic focus areas

- Provide support for delivery of Vaccinations (p.4-5)
- Deliver digital services for NHS Test and Trace (p.6-7)
- Provide digital channels for citizen guidance and triage (p.8-9)
- Identify and protect vulnerable citizens (p.10)
- Enable remote and collaborative care with systems and data (p.11)
- Support planning with data, analysis and dashboards (p.12)
- Get data and insights to research communities & support clinical trials (p.13)
- Provide secure infrastructure and support additional capacity (p.14)
- Plan for recovery, restarting services and new needs

Initiatives NHS Digital is delivering

☐ Significant milestone reported in this update   ☐ Work ongoing

Overall program management of Tech & Data support for Vaccinations	**Data infrastructure for COVID-19 & flu vaccinations**	**National Booking capability for COVID-19 vaccination**	**Cyber Security Operations Centre:** security services for Vaccination	**Service Operations:** operational support for the national vaccination service	**Connectivity & Infrastructure:** for PCN and mass vaccination centres	**Permission to Contact:** collecting data for recruitment into clinical trials
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			
111 First (EDDI): booking appointments from 111 telephony / online into EDs	**111 First (ED Streaming):** enabling efficient management of patients in EDs	**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	
Risk Stratification: platform to support more granular COVID-19 risk profiles	**Shielded Patient List (SPL):** developed & maintaining list of vulnerable patients					
COVID Oximetry @home: enabling monitoring of high risk patients in their homes	**"Bring Your own Device" for Primary Care:** enabling GPs to work remotely	**iPads for Social Care:** secure access to patient data for direct care	**Summary Care Record:** new data fields to record Vaccination status			
Secondary Care Medicines Data: developing new data collection	**Situation Reports:** collecting data for NHSE on COVID-19 patients/staff impacts	**Social Care Data Collection from Care Management Systems**	**Cancer:** linking data and performing analysis to support planning & research			
UK Biobank: large-scale medical and genetic database for health research	**PRINCIPLE Trial:** primary outcome data for trial focused on older people	**Enabling Research:** initiatives to accelerate production and improve access	**Central Disseminator of GP Data for research and planning**	**Trusted Research Environment for England (nominated by SAGE)**	**NICOR:** analysis for cardiovascular status / outcomes and COVID-19	**RECOVERY Trial:** Hospital and testing data for evaluating treatments
Connectivity: network upgrades and extensions within NHS and social care	**Authentication:** development of additional virtual smartcard solutions	**Other infrastructure and cyber support:** e.g. Laptops, cyber plans	**NHS Mail for health and social care:** rollout to social care and other new users	**Nightingale Hospitals:** connectivity, technical / cyber		
"Healthcare debt" analysing activity, referrals & outcomes						

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NHS Digital coronavirus programme update – 15 December 2020
Overview of __completed__ initiatives in NHS Digital's COVID-19 response

NHS Digital

COVID-19 strategic focus areas

Provide support for delivery of Vaccinations (p.4-5)

Deliver digital services for NHS Test and Trace (p.6-7)

Provide digital channels for citizen guidance and triage (p.8-9)

Identify and protect vulnerable citizens (p.10)

Enable remote and collaborative care with systems and data (p.11)

Support planning with data, analysis and dashboards (p.12)

Get data and insights to research communities & support clinical trials (p.13)

Provide secure infrastructure and support additional capacity (p.14)

Plan for recovery, restarting services and new needs

Initiatives NHS Digital has delivered

☐ Work complete

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

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

SPL Data for Public Health: private dashboards to facilitate planning

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

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

Self-Isolation 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

Microsoft Teams Deployment: deployment to 1.2m NHS Mail users

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

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)

HOSTED: monitoring of anonymised household transmission by PHE

111 Open Data: published open data / visualisation for COVID-19 triages

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

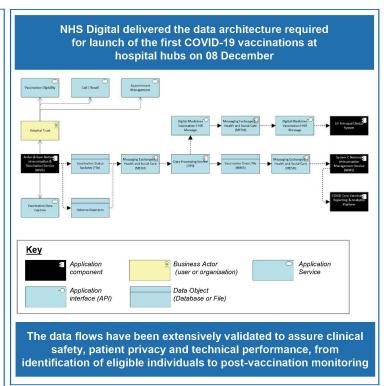**Data Access Environment for PHE:** accelerating epidemiology

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

Returning Staff: advice and technical support for onboarding

Your NHS Needs You: survey for recruitment of returning clinicians

INQ000083070_0003

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
Vaccinations	Overall program management of tech & data support for Vaccinations	• Took over responsibility from NHSX in early November for overall management of the Tech & Data workstream for NHS England's Vaccinations Program • Responsible for all systems, services and data flows for cohort identification, call/recall services, booking systems, pharmacy systems for vaccination event capture, flow of data to GP records and Summary Care Records, comms at new sites, analytics, reporting, data dissemination to approved parties and cyber security of solutions • Program team stood up, responsibilities transferred, new commercial arrangements in place and reporting into central program established during November for go-live in December

	Data architecture for the NHS Immunisation Management Service	• Delivered the data architecture required for launch of COVID-19 vaccinations These data flows include:
		  • demographics data feeds for cohort management and call/recall (covering ~55m people)
		  • data flows between the multiple systems involved (NIVS, Pinnacle, GP systems, the Summary Care Record system, the National Immunisation Management System (NIMS)
		  • pre-population of staff data into NIVS
		  • various MI & reporting feeds to parties including MHRA & medical research communities
		• Developed new services to manage identity-resolution issues, to ensure the highest possible fidelity of recording of vaccination events in personal health records
		• Continued to provide data to support NHS England's ongoing campaign to vaccinate ~25m people against influenza

NHS Digital delivered the data architecture required for launch of the first COVID-19 vaccinations at hospital hubs on 08 December

Key

■ *Application component*	☺ *Business Actor (user or organisation)*	▢ *Application Service*
○ *Application interface (API)*	*Data Object (Database or File)*	

The data flows have been extensively validated to assure clinical safety, patient privacy and technical performance, from identification of eligible individuals to post-vaccination monitoring

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
Vaccinations	National Booking Service for COVID-19 Vaccination	• Completed development for a new service, 'Book a coronavirus vaccination', that will allow health and social care workers and qualifying citizens in England to book appointments at mass vaccination centres • The service is made of 3 products: a staff-facing appointment management solution (Qflow), a citizen-facing booking service (hosted on NHS.UK), and a staff-facing appointment check-in app. Commenced end-to-end testing for all three products on 16 November and on track for deployment when NHS England mobilises vaccination centres
	Cyber	• Mobilised resources to provide a comprehensive, yet targeted, security assurance package across three distinct work streams: security assurance, security remediation, and Cyber Security Operations Centre (CSOC) onboarding • Current focus is to security assure critical components and onboard services / solutions into the CSOC Cyber Incident Response process
	Connectivity and Infrastructure	• Working with NHS England to ensure fast, secure connectivity in place for ~1200 Primary Care Network (PCN) vaccination sites and mass vaccination sites • Identifying procurement routes for NHS England to order and procure fixed connectivity, where appropriate, for non-NHS PCN sites • Working with Department for Digital, Culture, Media & Sport and telecoms providers to ensure prioritisation fixed lined connectivity orders, installations and service support for vaccination sites
	Permission to Contact (with NIHR)	• Continued to enhance the NHS COVID-19 vaccine research registry with the National Institute for Health Research (NIHR). As of 04 December, 360k people had registered an interest in being contacted for recruitment into vaccine trials and eligible volunteers continue to be invited to participate in trials with ~110k invitations sent to eligible volunteers across 3 trials (as of 08 December). We are progressing applications from a further 3 trials due to start recruiting in Dec or early Jan

NHS Digital is also supporting the Vaccinations programme through information provision on NHS.UK and social media channels

Home › Health A to Z › Coronavirus (COVID-19) › Coronavirus vaccination

Coronavirus (COVID-19) vaccine

The coronavirus (COVID-19) vaccine is safe and effective. It gives you the best protection against coronavirus.

Who can get the COVID-19 vaccine

The NHS is currently offering the COVID-19 vaccine to people most at risk from coronavirus.

At this time, the vaccine is being offered in some hospitals to:

- some people aged 80 and over who already have a hospital appointment in the next few weeks
- people who work in care homes
- health care workers at high risk

https://www.nhs.uk/conditions/coronavirus-covid-19/coronavirus-vaccination/coronavirus-vaccine/

These channels are being used to promote vaccine confidence and communicate important information about deployment of the COVID-19 vaccine

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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

Initiative	Focus area	Deliveries and impact
Digital Platform for Testing	Lateral Flow Tests	• Delivered digital solution for Lateral Flow Tests (LFTs) on 28 October enabling decentralised use of these tests by organisations such as Local Authorities, universities and Care Homes. These devices provide rapid results on COVID-19 status in community settings and are an important part of the NHS Test and Trace strategy to significantly increase asymptomatic testing capacity. The new digital capability supports use of LFTs in professional settings, linking the subject to a lateral flow device and capturing test results for onward communication to the person who was tested and downstream systems (contact tracing services and systems for national reporting) • Development is underway on capabilities to support use of LFTs in non-professional settings, including Artificial Intelligence (AI)-driven visual reading of results
	Volumes	• Continued work to scale the Testing infrastructure to support rapidly increasing testing volumes. This includes a number of infrastructure upgrades, architecture enhancements and process improvements • Expanded monitoring of live services to ensure that testing systems remain performant as volumes continue to increase (e.g. through enhanced monitoring and alerting for each step of booking to result process)
	User Accounts	• Delivered new capability on 19 November to create accounts linked to NHS Login. NHS Login enables patients to securely access digital health services via a single login. This linkage will streamline registration for individuals who need to be tested multiple times (e.g. key workers in asymptomatic surveillance programmes)
	Mobile Test Units ("Lab in a Van")	• Developing solutions to enable roll-out of mobile testing laboratory units to support point of care testing in response to outbreaks (currently in pilot)

The digital solution for Lateral Flow Tests was delivered on 28 October, enabling expansion of asymptomatic testing capacity

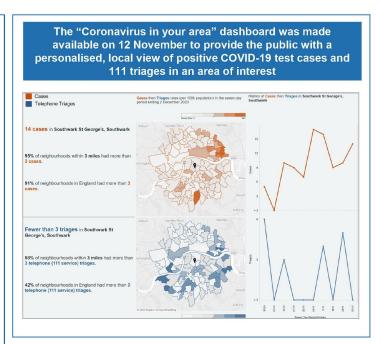**Lateral Flow tests are being used by Care Homes to screen visitors and by Local Authorities for community testing**

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NHS Digital

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

Initiative	Focus area	Deliveries and impact
Contain	Dashboards for Public and Local Government	• Delivered a public dashboard on 12 November that shows the number of positive COVID-19 cases confirmed by a lab test with the numbers of patients triaged for a COVID-19 by 111 and 111 online. The "Coronavirus in your area" dashboard provides the ability to view local information by entering a postcode in England and selecting the distance around the postcode to be displayed
Cyber	Cyber Defence Operations Centre (CDOC)	• Rapidly scaling capacity to enable 30 additional NHS Test and Trace systems to be onboarded by the end of March 2021 • Continuing to mature CDOC's capabilities to ensure it remains threat lead and threat relevant. Since June, ~5k alerts have been triaged
	Contact Tracing App	• Continued to provide protective monitoring and active cyber support for the Contact Tracing App since the national launch on 24 September
Trace	Digital Systems for Tracing	• Following successful delivery of design and procurement for the strategic solution for Trace, a Salesforce-centric contact tracing system, transitioned the delivery of the programme to NHS Test and Trace

The "Coronavirus in your area" dashboard was made available on 12 November to provide the public with a personalised, local view of positive COVID-19 test cases and 111 triages in an area of interest

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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

Initiative	Focus area	Deliveries and impact
111 First	Emergency Department Digital Integrator (EDDI)	• Delivered a tactical Emergency Department Digital Integrator web service ("EDDI") which enables 111 Online and 111 Telephony services to book patients into emergency departments (EDs) and to provide EDs with a view of expected patient flow. This will help reduce crowding in waiting rooms, enable better capacity management of EDs, and facilitate sharing of clinical information between 111 providers and EDs • EDDI Release 1 (01 November) was rapidly developed with only 14 weeks from initial concept to deployment and provides basic appointment booking functionality. Subsequent releases on 16 and 30 November allowed EDs to manage capacity and view 111 referral information. The final release is planned for 16 December and will provide management reporting capability • All 111 Providers / Clinical Assessment Services (bar one) have successfully integrated with EDDI, providing coverage for 99% of the country • As of 01 December, 84% of the 141 EDs that have opted to use EDDI had deployed the solution. Deployment to the remaining sites is planned by 31 January. Initial feedback has been strongly positive • The Urgent and Emergency Care - Directory of Service (UEC DOS) has been configured to support the deployment of EDDI in line with the wider 111 First business change programme. Additional referral codes have been added to UEC DOS to support areas using both EDDI and local solutions • The strategic "system to system" solution is being progressed in parallel and allows ED software suppliers to integrate directly to the 111 service via CareConnect APIs. Ten EDs and Urgent Treatment Centres using EMIS Symphony, Cleo Systems or Wasp Software have successfully gone live in November

The Emergency Department Digital Integrator (EDDI), a key enabler for NHS England's 111 First Campaign, has had positive feedback from ED staff

"…we are really grateful for all the support provided by NHS Digital colleagues with the roll out of EDDI… Since implementation [EDDI] has been working well with patients slotted into arrival times. We now need to work with our system suppliers to agree on a standardised SMS confirmation and DOS colleagues to make the booking mandatory to consider as not all patients are getting booked in yet.." Andrew Cooke, Head of Service Development, Yorkshire Ambulance Service

"…"We've managed to introduce the EDDI tool into our reception processes almost seamlessly over the past 2 weeks. Being able to see the expected patients from 111 does allow the clinical team to prepare for surges in referrals. Accessing the clinical information from the 111 report helps understand why the patient has been directed to us." Dr. Alastair Pickering, CCIO & ED Consultant, Hull University Teaching Hospital
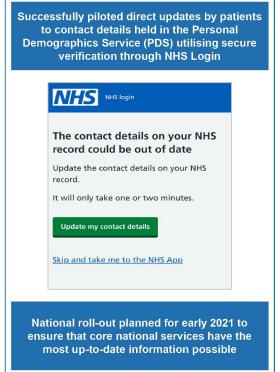
Providing digital channels for citizens to access information and guidance, self-manage and be routed to the most appropriate care, minimising contact and reducing the burden on clinical staff

Initiative	Focus area	Deliveries and impact
111 First	ED Streaming	• NHS Digital has been commissioned to provide a 'front door' streaming product for ED that allows walk-in patients who have not been triaged through a 111 service to be managed in a similar way on arrival via a self-service triage on consoles in EDs. Patients will be directed to the most appropriate care setting based on the self-service triage (which may not be the ED) • The Beta version of the product has been built and will be piloted in 5 ED's from December 2020
NHS Pathways	Injuries Light Module	• Completed Beta testing for the "injuries light module" that allows NHS 111 Health Advisors to refer injury calls to less specialised Service Advisors. This product increases capacity in 111 services by enabling Service Advisors to manage injury calls (~10% of 111 call volumes)
	Pathways Clinical Consultation Support (PaCCS)	• Developed the PaCCS product to provide an 'aide memoire' for clinicians performing remote clinical consultations. PaCCS provides NHS Pathways content in a consultation format (rather than a question and answer format) and supports ambulance dispatch, DoS service searching and home care advice. NHS Pathways team are working with host system suppliers and a range of Urgent & Emergency providers to start Beta testing
NHS Login	Improving data quality in the Personal Demographics Service (PDS)	• Conducted pilots in Leeds CCG (94 GP practices) and Nottinghamshire (127 GP practices) to test acceptability and effectiveness of direct updates to the Personal Demographics Service (PDS) by patients using NHS Login. The Personal Demographics Service (PDS) is the national electronic database of NHS patient details and NHS Login enables patients to securely access digital health services via a single login • Patients participating in the pilot were asked to check and update their contact information if it differed from the data held on PDS. Practice staff were then asked to accept the changes to PDS the next time they accessed the patient's record on their clinical system • Between 12 October and 08 December, 136k users were authenticated via NHS Login and, of these, 18k (12%) were asked to update the contact details held on the NHS record and 10k of these patients provided the missing information. Approval has now been provided for a national roll-out of this capability in early 2021
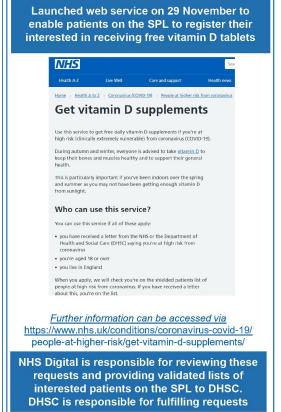
Successfully piloted direct updates by patients to contact details held in the Personal Demographics Service (PDS) utilising secure verification through NHS Login

NHS NHS login

The contact details on your NHS record could be out of date

Update the contact details on your NHS record.

It will only take one or two minutes.

[Update my contact details]

Skip and take me to the NHS App

National roll-out planned for early 2021 to ensure that core national services have the most up-to-date information possible

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

Initiatives	Focus area	Deliveries and impact
Risk Stratification	Digital Infrastructure	• At the request of DHSC, NHS Digital has developed digital infrastructure to support a more sophisticated approach to identifying individuals with increased vulnerability to COVID-19. DHSC commissioned Oxford University to develop the underlying risk calculator, which assesses risk based on a combination of characteristics (e.g. age, sex, medical conditions) • Delivered private beta release for clinical-facing risk stratification tool on 19 November to a small cohort consisting of GPs, CCGs and primary and secondary care. Initial feedback has been positive and private beta will continue until mid-January. We continue to work closely with the Department of Health and Social Care to review findings from the private beta release to inform delivery of future phases and wider applications of the technology • We are currently assessing the potential use of the Oxford Risk Calculator to support the prioritisation of clinically extremely vulnerable individuals for COVID-19 vaccination
Shielded Patient List (SPL)	Identifying vulnerable citizens	• The Shielded Patient List (SPL) identifies patients at the highest risk from COVID-19, based on criteria set by the Chief Medical Officer for England. The shielding scheme was paused nationally on 01 August but NHS Digital continues to issue weekly iterations of the SPL to enable support to be targeted at clinically extremely vulnerable people. The list size remains at ~2.2m patients • The Shielding Oversight Board approved expansion of the SPL criteria on 04 December to include patients with Down's Syndrome and stage 5 chronic kidney disease (CKD-5). Work is underway to add these patients to the SPL and an increase of ~50k expected to the list size
	Communicating with vulnerable citizens	• ~2.4m letters and 810k emails (via the Government's Notify service) were sent to vulnerable people on the SPL to provide guidance ahead of the move to the national tiering system on 02 December. The SPL query service responded to ~3k emails from patients following the cascade, with generally positive feedback on engagement via digital channels. This provides an opportunity to expand use of email as a more dynamic, and lower cost, approach for engaging with patients
	Vitamin D Supplements	• To enable provision of free vitamin D supplements to patients on the SPL, we issued letters to patients on the SPL informing them of their eligibility for free supplements and launched a web portal on NHS.UK to enable patients to register their interest in receiving the tablets. The new service cross-checks expressions of interested with the SPL and provides validated lists to DHSC who are responsible for fulfilment of the requests

Launched web service on 29 November to enable patients on the SPL to register their interested in receiving free vitamin D tablets

Further information can be accessed via https://www.nhs.uk/conditions/coronavirus-covid-19/people-at-higher-risk/get-vitamin-d-supplements/

NHS Digital is responsible for reviewing these requests and providing validated lists of interested patients on the SPL to DHSC. DHSC is responsible for fulfilling requests

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Making data and systems available to enable remote and collaborative working by health and care staff, minimising transmission and managing strained capacity (e.g. with practices closed or staff unwell)

Initiative	Focus area	Deliveries and impact
Remote Digital Care	COVID Oximetry@ home	• Mobilised programme to provide data and digital capabilities for national implementation of remote monitoring of patient's oxygen levels in their homes, including residential and care homes, following successful evaluation of the pilot project. The national programme is led by NHS England with local implementation led by Clinical Commissioning Groups (CCGs) • Initial phase has focused on delivering core digital capabilities for the programme: new NHS Pathways guidance to triage COVID-19 patients at home (17 November), 9 new clinical codes to enable Oximetry @home activity to be recorded (30 November); service to identify and communicate prioritised patients to local providers (i.e. patients with a positive test who are over 65 and/or clinically extremely vulnerable). Provision to early adopters will commence by 18 December • In parallel, we are developing data collections to support progress monitoring and ongoing evaluation (target delivery January 2021) and progressing detailed work (including user research) to define and prioritise additional requirements
RCD to support 'Bring your own device' (BYOD)	Enabling Remote Working for Primary Care	• We have deployed the remote clinical desktop (RCD) to a cohort of early adopters. As of 10 December, 332 end users have expressed an interest in using RCD/VDI with the solution being actively used by 298 primary care staff from 24 CCGs • Initial feedback has been positive with RCD being used where practices have had to close as a result of COVID-19 and for enabling primary care staff to continue working while they are shielding or self-isolating • The solution currently allows up to 500 primary care staff to work remotely on their own devices and discussions are underway to scale to 1000 users. Requests to trial the solution should be directed to remoteclinicaldesktop@nhs.net

NHS Digital is supporting national roll-out of COVID Oximetry@Home, including deployment of new SNOMED CT codes for home use of pulse oximeters

New SNOMED codes

New SNOMED codes have been created for COVID Oximetry @home providers to use.

1325251000000106 Referral to telehealth pulse oximetry monitoring service (procedure). Synonym: Referral to remote virtual care pulse oximetry monitoring service.

1325261000000109 Referral by telehealth pulse oximetry monitoring service (procedure). Synonym: Referral by remote virtual care pulse oximetry monitoring service.

1325271000000102 Discharge from telehealth pulse oximetry monitoring service (procedure). Synonym: Discharge from remote virtual care pulse oximetry monitoring service.

1325201000000105 Telehealth pulse oximetry monitoring ended (situation) Synonym: Remote virtual care pulse oximetry monitoring ended.

1325191000000108 Telehealth pulse oximetry monitoring started (situation). Synonym: Remote virtual care pulse oximetry monitoring started.

1325211000000107 Provision of pulse oximeter (procedure).

1325221000000101 Telehealth pulse oximetry monitoring not appropriate (finding). Synonym: Remote virtual care pulse oximetry monitoring not appropriate.

1325241000000108 Telehealth pulse oximetry monitoring declined (situation). Synonym: Remote virtual care pulse oximetry monitoring declined.

1325281000000100 Discussion about telehealth pulse oximetry monitoring (procedure). Synonym: Discussion about remote virtual care pulse oximetry monitoring.

Codes are being deployed by GP system suppliers with codes available now for users of TPP System One, from 18 December for users of Eva, and in early 2021 for users of EMIS and Vision

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

Initiatives	Focus area	Deliveries and impact
New data collections	Situation Reports (SitRep)	• The Community Health Services Restoration SitRep monthly data collection started on 17 November to capture the extent to which key services, such as community paediatric services, have resumed following the initial pause during the first wave of the pandemic. This will enable NHS England to understand the resilience of these services and to identify specific issues or challenges that are emerging as a result of the second wave of COVID-19 and wider winter pressures • The weekly 111 First SitRep started on 07 December to monitor the impact of NHS England's 111 First programme by looking at changes to flows of patients through the wider Urgent and Emergency Care (UEC) system and whether using 111 as the default triage mechanism for UEC patients results in more efficient use of NHS resources • The Long COVID Assessment Clinics Sitrep collection started on 14 December on behalf of NHS England to capture data on patient volumes, activities undertaken when assessing Long COVID-19 patients, and patient demographics. This information will enable planning for these clinics and the onward referral pathways. Demographic data will be used to ensure patients from BAME backgrounds, known to be disproportionately affected by COVID-19, are receiving the appropriate care
	Secondary Care Medicines Data	• Pilot collection of secondary care medicines from the 2 largest suppliers, WellSky and Cerner, continues and is being used to inform the specification for a secondary care medicines data set at patient level. • Collection of medicines data from all WellSky trusts (24 trust) commenced on 30 November, flowing historical data (back to January 2019) and implementing a daily flow • Collection of data from the first Cerner pilot site has been challenging so an additional trust has been engaged to provide sufficient data for analysis and allow standardisation of Cerner data, ensuring comparability (e.g. dm+d). • This data collection was accelerated to support the COVID-19 response by enabling a better understanding of the role of medicines used in treatment of COVID-19 patients in secondary care (e.g. dexamethasone) and provides an additional dataset for research.

NHS Digital is providing NHS England with critical information about the impact of Covid-19 through 16 Situation Reports

| Focus Area	Data Being Collected
Activity levels in Acute Trusts (4)	• Position on ventilators, PPE, staff impact, patients admitted & treated • Daily discharges • Aggregate counts for capacity, numbers of patients, staff absence • Impacts of 111 First programme on UEC
Independent Sector (2)	• Capacity, numbers of patients and staff absence related to Covid-19
Impacts on staff (2)	• Actual vs. planned hours of work (111 providers / ambulance trusts) • Use of lateral flow tests by NHS staff (incl. absenteeism post-testing)
Utilisation of mobile CT scanners (2)	• Type of use, utilised hours, staffing data for mobile CT scanners (covers Acute Trusts and Independent Sector)
Impact on MHLDA (2)	• Bed usage, patient #s, discharge #s, and staff absence for mental health, learning disability and community services (MHLDA)(covers Community and Mental Health Trusts; Independent Sector)
Activity levels in community settings (4)	• Restoration of community health services • Activity in Long COVID clinics • Discharges from community inpatient services • NHS Continuing Healthcare (NHS CHC)
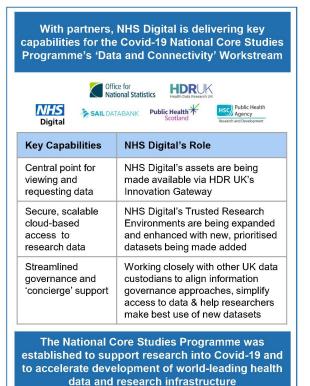
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- *Facilitating the sharing and availability of data and analyses to support research, enabling evaluation of different response interventions and increasing understanding of COVID-19 transmission, immunity and clinical outcomes*
- *Enabling acceleration of COVID-19 Drug and Vaccine clinical trials*

Initiatives	Focus area	Deliveries and impact
Enabling Research	UK Biobank	• Expanded data provision for UK Biobank to include a monthly flow of the GP Data for Pandemic Planning and Research (GDPPR) data set collected by NHS Digital. UK Biobank is a large-scale biomedical database, holding primary care data for over 500k participants, and provides an important resource for public health research, including on the longer term health effects of COVID-19. This additional data will enable a better understanding of the role of underlying health conditions in the presentation and progression of the disease
	PRINCIPLE Trial	• Enabled significant improvement in recruitment of patients for the PRINCIPLE trial through provision of lists of patients that tested positive for COVID-19 in community settings (Pillar 2 data). The PRINCIPLE trial aims to identify treatments for COVID-19 that can be taken at home to prevent hospitalisation. It targets individuals aged over 65 and those over 50 with underlying health conditions and needs to recruit within 14 days of symptom onset. Access to timely and comprehensive patient data, and the ability to reach out directly to patients, has improved recruitment rates and has reduced the burden on GPs. Increases in the number of patients recruited improves the predictive power of the trial and enables more treatments to be tested
	Accelerating Researchers' Access to Data	• On 25 November, jointly hosted an education session for researchers on opportunities to improve how they use health and social care datasets in research, with a specific focus on improving awareness of the available data assets, access routes, and approval requirements. Over 230 researchers attended the collaborative event which was co-led by the National Institute of Health Research (NIHR) together with Health Data Research UK (HDR UK), MRC Regulatory Support Centre, NHS Digital and the Health Quality Improvement Partnership (HQIP). Additional sessions are planned for early 2021 and requests to attend should be directed to researchsector@nhs.net

With partners, NHS Digital is delivering key capabilities for the Covid-19 National Core Studies Programme's 'Data and Connectivity' Workstream

Office for National Statistics — HDR UK Health Data Research UK — NHS Digital — SAIL DATABANK — Public Health Scotland — HSC Public Health Agency Research and Development

Key Capabilities	NHS Digital's Role
Central point for viewing and requesting data	NHS Digital's assets are being made available via HDR UK's Innovation Gateway
Secure, scalable cloud-based access to research data	NHS Digital's Trusted Research Environments are being expanded and enhanced with new, prioritised datasets being made added
Streamlined governance and 'concierge' support	Working closely with other UK data custodians to align information governance approaches, simplify access to data & help researchers make best use of new datasets

The National Core Studies Programme was established to support research into Covid-19 and to accelerate development of world-leading health data and research infrastructure

Provide Infrastructure and Support Additional Capacity
NHS Digital COVID-19 Response – 15 December, 2020

NHS Digital

Providing secure infrastructure and supporting additional care capacity through support and logistics for cross-system data access, fast authentication of new users, Nightingale hospital facilities and connectivity to private providers
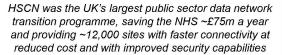
Initiatives	Focus area	Deliveries and Impact
Cyber	Monitoring	• CSOC continues to respond to cyber threats across the system and provide threat and vulnerability data through the weekly bulletins to key stakeholders. For example, in response to the threat from Zerologon identified in September, the CSOC issued specific alerts to senior leadership in the NHS and ensured appropriate remediation actions were completed • Secure boundary rules identified 2.13 million potential threats generating 6887 alerts and resulting in 164 raised security alerts.
	Remediation	• Continued to support Trusts to identify and remediate risks, particularly those that have emerged, or been exacerbated, as a results of COVID-19 • Delivered technical remediation services to 115 Trusts to with particular focus on reviewing use of backup and Active Directory • Trusts identified as being most critical to the COVID-19 response (such as large ICU's, Nightingale parent organisation, Ambulance Trusts etc) have been prioritised
Connectivity	Upgrades to offset Winter Pressures	• NHS Digital worked with NHSX on a winter pressures initiative to provide prioritised organisations with financial support to increase network capacity over the winter period • Available funding was allocated to 27 organisations (24 CCGs and 3 Trusts) to increase network capacity across 365 priority sites based on evidence of the greatest need • 85% of upgrades are expected to be completed by 31 December with remainder expected to be completed by 31 January
Fast and secure Authentication	Virtual Smartcards	• Continued to support deployment of Entrust virtual smartcards for use with key national systems including Lorenzo, eRS, ESR, SCR and Adastra. For further information please contact accesslogistics.hub@nhs.net

NHS Digital's Health & Social Care Network (HSCN) programme was selected for the Smarter Working "Efficiency Savings" award

NHS Digital

HSCN

Smarter Working Live 2020 Award Winner: Using technology to deliver efficiency savings

HSCN was the UK's largest public sector data network transition programme, saving the NHS ~£75m a year and providing ~12,000 sites with faster connectivity at reduced cost and with improved security capabilities

Smarter Working Live 2020 celebrates excellence in public sector transformation. Migration to HSCN halved connectivity costs across the NHS

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