

Data Protection Impact Assessment National Immunisation, Vaccination System – Health Care Workers

Version 1.6

Status: Approved

Template Version number: 6.0 Published Date: 13th May 2020 Prepared by: Corporate Information Governance

Classification: OFFICIAL

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Purposes

Is this a new DPIA or update to a	Update
previous assessment?	

Fully describe what is the purpose of the project and how is the processing of information necessary to that work?

NHS England has commissioned NHS Arden and GEM CSU (which is part of NHS England) to implement a National Immunisation Vaccination Service (NIVS).

The implementation of this service will deliver a centralised data capture tool for clinical teams delivering the seasonal flu immunisation and covid vaccinations once these are available. The service is an essential component of NHS England's response to the COVID-19 pandemic. This is because

- 1. it will help to ensure that any further "spikes" in coronavirus infections in England separated in time as far as possible from the annual flu epidemic so minimising pressures on NHS resources
- 2. it will support the delivery of the expected national COVID-19 mass immunisation programme using the NIVS data capture tool which is capable of capturing, at point of delivery, the recording of vaccinations undertaken.

It is essential that the two vaccination programmes are coordinated to accommodate the developing characteristics of the pandemic, and any interfaces between the flu and COVID-19 vaccines, and their delivery processes as they are established.

For the purposes of flu vaccination the National Immunisation Vaccination System (NIVS) will be populated with records of completed vaccinations via bulk upload from immunisation providers using the NHS Vaccination App.

For for the purposes of COVID vaccination, NIVS will be populated with:

- 1. Demographic information from the Electronic Staff Record of current NHS staff to be offered a vaccination.
 - a. NHS Digital will receive a flow of ESR Data from NHSBSA.
 - b. This data set will be forwarded to AGEM as a data feed into the secure NIVS database where it will be accessible by the user application for pre-populating and validating vaccination events. The ESR demograhics database provides a MPI for the NHS Staff COVID vaccination service.

[Note: Users of the NIVS App will only be able to access the copy ESR record of a member of staff whne they have uniquely identifyind data e.g. employee ID or name, date of birth and postcode. There is no ability to scroll and select, and ambiguous search criteria will not return any records]

- 2. A record of extended attributes captured at registration to support monitoring by the program.
- 3. Capture the patient's email address at registration to enable post vaccination advice and information to be sent.
- 4. A record of the vaccination decisions undertaken entered at the point of delievery via the NIVS App
- 5. A record of adverse reactions observed within 15 minutes of vaccination, also entered at the point of delivery by the NIVS App.

Data will be disseminated to NHS Digital acting as a processor acting on instructions from NHS England.

NHS Digital will trace the identifiable data against the spine to identify the patients NHS Number and GP Details. This data will be used to provide the primary care systems with a record of a completed vaccination

Data will also be used to update the National Immunisation Management Service (NIMS) with details of completed vaccinations, so that those who have been vaccinated are not sent invitations for vaccination.

NHS Digital will also provide aggregated data to NHS England (the COVID-19 datastore populating the Foundry dashboard provided by Palantir) and Public Health England to enable their duty to monitor the uptake of vaccinations and commissioning of the vaccination services.

Work will be carried out with NHS Arden and GEM CSU (under an SLA) who will develop the technical solution and application infrastructure.

The seasonal flu programme is a long-established and successful vaccination programme that is proven to save lives and deliver a cost-effective prevention programme, along with reducing pressures on NHS services during the winter.

The annual vaccination programme is a critical element of the system-wide approach for delivering robust and resilient services throughout the year. The service has been traditionally offered to all NHS Staff Workers.

Originally the flu vaccination programme was mainly delivered by the registered General Practice of the patient but this model has expanded to include community pharmacists, maternity units, school-aged vaccination providers and others as the programme developed and the cohorts increased. Some provision is universally offered and there are also additional regional variations to suit the local populations and to ensure that diverse groups are catered for and that inequalities are reduced.

The tool which is the focus of this DPIA is being developed to support the delivery and recording of vaccinations in a range settings, including those offered to NHS staff. The ability to record COVID-19 vaccinations via the NIVS tool was initially focussed on the vaccination of heath and care staff but has now been expanded to include inpatient and outpatient attendees in hospital settings and will extend to Mass Vaccination Sites for recording of general public vaccinations.

Uptake of the flu vaccination varies locally and regionally and is different for each cohort. In 19/20 the flu vaccination uptake rates ranged from 43.8% for 2 & 3 year olds to 72.4% for the '65 years and over' cohort. In all cohorts coverage has failed to reach the desired aspirational targets each year.

Collection of the data in a single system will enable further analysis to explore how uptake may be increased by identifying cohorts for targeting more accurately

and in a more timely way. Collecting more comprehensive and timely data about vaccinations via NIVS will also help to enure that the correct care is given to people who have had the vaccine for flu or coronavirus. Maximimsing uptake of the flu vaccine is important to reduce flu-related hospitalisation, reducing the impact on NHS services and potential co-infection with COVID-19.

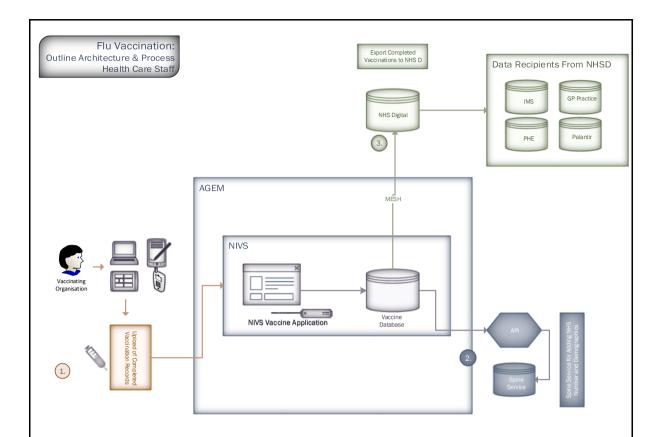
Having the data for both programmes available in a consistent format in the same system will enable better coordination of the different vaccination programmes with the aim of achieving better outcomes across both programmes. The COVID-19 pandemic and the measures introduced by the Government in England subsequently to contain and control the spread of the covid-19 virus will have an impact on how the seasonal flu programme will be delivered in 20/21.

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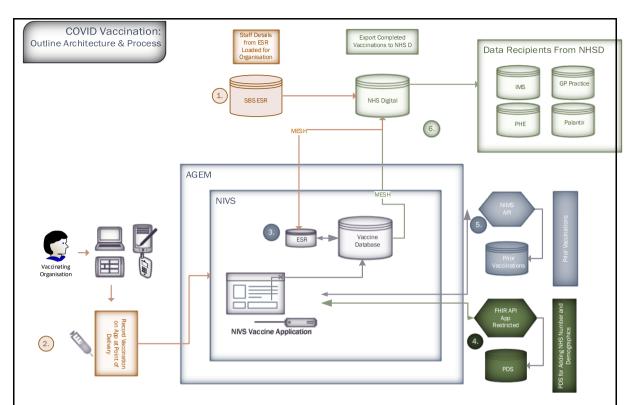
Social distancing, shielding of the most vulnerable patients, and the public awareness and perceptions of viruses, herd immunity in order to protect the most vulnerable and infection control, alongside the public drive to protect the NHS are all contributing factors. The current uncertainty of when and how the measures put in place by the Government are likely to be relaxed or changed is also a limiting factor requiring a number of different delivery options to be explored in this plan to give delivery flexibility as required. A cohort by cohort approach to operational planning and delivery has been taken below with the addition of some cross-cutting themes.

The flows of information that support the NIVS for the vaccination of NHS staff are presented in the diagrams below:

Flu Vaccination: A Summary of how the Service will Work



- 1. Data Upload of completed vaccination events upload of completed vaccination data as a .csv file using the NHS Vaccine Application. If staff are not immunised, the data is submitted to NHS Digital, used to inform service that recalls people for vaccinations.
- 2. NHS Number from SDS Not implemented: system relies on NHS number being provided from source system in upload
- 3. Disseminate records of completed vaccinations to NHS Digital. The system will disseminate to NHS Digital daily to update all vaccinations reported as complete. This will be uploaded nightly through a highly secure MESH mailbox to NHS Digital.
- 4. NHS Digital disseminates records of completed vaccinations to
 - i. IMS (NHS England controller)
 - ii. GP Practices
 - iii. Public Health England (DHSC controller)
 - iv. Covid 19 Data Store to populate the Palantir Foundry Dashboard (NHS England controller)



COVID Vaccination: A Summary of how the Service will Work

- 1. **ESR Data:** The application will receive demographic ESR data from NHS Digital. This is transferred to NHS Digital from SBS who holds the ESR data for all NHS organisations. This will be updated weekly and will be the repository of demographic information used to pre-populate the vaccination record of NHS staff for data entry support and data quality purposes.
- 2. **Patient Monitoring:** The data set for Patient Registration has been extended to include a number of questions for NHS England's monitoring purposes, including the collection of the patient's stated ethnicity and their email address.
- **3. Recording Pre-Screening:** The clinics record answers to pre screening clinical assessment questions and enhanced consent to vaccinate
- 4. **Recording Vaccinations:** The vaccination providers use the NIVS App to record vaccinations by direct entry at the point of delivery.
- Pre Population: To support direct entry for the vaccination of NHS staff the ESR data set provides a MPI of demographics and employing organisation data.
- **6. Retrieve NHS Number:** Users retrieve the NHS Number as a lookup in real time. This is sourced through connectivity to PDS.

- 7. Retrieve recent vaccination history: The NHS Number will be used to return the patients recent vaccination history recorded on the Immunisation Management System (IMS) that supports the National Immunisation Management Service (NIMS).
- **8. Dissemination:** The system will disseminate to NHS Digital daily to update all vaccinations reported as complete and a further dissemination of any recorded adverse reaction. This will be disseminated nightly through a highly secure MESH mailbox to NHS Digital.
- 9. NHS Digital disseminates records of completed vaccinations to
 - i. IMS (NHS England controller)
 - ii. GP Practices
 - iii. Public Health England (DHSC controller)
 - iv. Covid 19 Data Store to populate the Palantir Foundry Dashboard (NHS England controller)

Nature of the data

Will the processing involve anonymised information ¹ ?	No
Will the processing involve pseudonymised personal data?	No
Will the processing involve fully identifiable personal data?	Yes

Will the processing involve processing pseudonymised	Yes
data about NHS patients?	
Will the processing involve processing fully identifiable	Yes
data about NHS patients?	

Assets

Does the proposal involve	Yes.
creating a new information	
asset?	

¹ anonymous information is information which does not relate to an identified or identifiable natural person or to personal data rendered anonymous in such a manner that the data subject is not or no longer identifiable

Does the proposal involve processing data held on an existing information asset or assets?	Yes - this is hosted on the Arden & GEM Cloud Infrastructure
Is/are the asset owner(s)	Yes
aware of the proposal	

What is the timeframe for the project/programme/initiative?

Please include commencement dates and any foreseen end dates

09/09/2020 - Project commencement	
26/09/2020 - Vaccination Capture	

Controllers²

NHS England	Yes
TDA	No
Monitor	No
Other (Please do not include any third	
party that we are contracting with to	
process personal data for us as a	
processor.)	

Screening questions

Does the proposal involve any of the following – drop down list to include: NCDR Pseudonymised by NHS Digital Aggregate data Anonymised data	Yes – aggregate and anonymised data as an output to PHE and NHS England
Has processing of this nature already been captured and considered within a previous DPIA? If so, link to reference Number	Yes - Data Protection Impact Assessment for National Immunisation, Management Service
Will the processing involve a large amount of personal data (including	Yes

 $^{^{2}}$ 'controller' means NHSE, alone or jointly with others, determines the purposes and means of the processing of personal data

pseudonymised personal data) and affect a large number of data subjects?	
Will the project involve the use of a new technology(ies) which might be perceived as being privacy intrusive? i.e. using biometrics, facial recognition, Artificial Intelligence or tracking (such as tracking an individual's geolocation or behaviour)?	No
Will the processing introduce or make use of a new platform not currently in use?	No – based on existing system established for school vaccination programme
In the absence of proper controls is there the risk that the processing may give rise to discrimination, identity theft or fraud, financial loss, damage to the reputation, loss of confidentiality of personal data protected by professional secrecy (e.g. health records), unauthorised reversal of pseudonymisation, or any other significant economic or social disadvantage?	Yes but only in the absence of proper controls
Does the proposal introduce difficulties in ensuring that individuals are informed or able to exercise their information rights?	No
Will there be processing of genetic data, data concerning health, sex life, racial or ethnic origin, biometric data, political opinions, religion or philosophical beliefs, or trade union membership?	Yes
Will there be processing of data concerning criminal convictions and offences or related security measures?	No
Will the project involve the targeting of children or other vulnerable individuals for marketing purposes, profiling or other automated decision making?	No
Will the processing result in you making decisions or taking actions against individuals in ways which can have a significant impact on them? e.g. decisions about an individual's access to a product, service, opportunity or benefit, or recruitment aptitude test based on automated decision making (including profiling)?	No

Will there be a systematic monitoring of a publicly accessible area on a large scale (e.g. CCTV)?	No
Will the processing include any data matching e.g. the combining, comparing or linking of personal data obtained from multiple sources?	Yes
Will personal data about individuals be shared with other organisations or people who have not previously had routine access to the data?	No
Will the project/proposal use personal data about individuals for a purpose it is not currently used for or in a new way?	No
Will the project require you to contact individuals in ways which they may find intrusive? i.e. telephoning or emailing them without their prior consent.	No
Are you using a Data Processor/third party supplier or is a service/processing activity being transferred to a new supplier/organisation (or re-contracted) at the end of an existing contract?	Yes

NB. If the answer to any of the above questions is Yes, please complete the rest of the form. If all of the screening questions are answered No, you do not need to complete the rest of the form, but the central or regional Corporate IG team must still review and approve the document.

Personal data³

Why would it not be possible to do without personal data?	The system needs to include patients' personal and clinical details in order to be able to record the appropriate vaccination outcome.
What are the required personal data? Please itemise them or supply a dummy sample, blank forms, screenshots from the prototype system etc.	The data that is loaded in to NIVS will include demographic data and vaccination data. Data specifications apply for • ESR Data from NHS Digital

³ 'personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person

	 Data capture dataset for Vaccination Providers – CSV file for flu Data capture dataset for Vaccination Providers – data entry specification for COVID-19 Data export dataset from NIVS to NHS Digital Data export dataset from NIVS to NHS Digital – adverse reactions (COVID-19 only) Data export dataset from NIVS to NHS Digital – extended attributes These documents are embedded under Datasets and Access below. The specifications may be updated with amendments reported as an update in this DPIA. We need the fully identifiable demographic data for the following reasons: Ensure the correct patient has the correct vaccination record recorded against them Enable identification of missing demographic data through the Spine to ensure the vaccination record is added back into their primary care clinical record We need all the events data for each vaccination event per patient to inform future call/recall activities – this will include specifically which vaccine type was used (i.e. which variation of flu, or which variation of COVID) given there will be different brands/types of vaccine for both vaccination programmes that may lead to different call/recall business logic.
Please confirm that this is the minimum amount of personal data that is necessary.	Yes
Would it be possible for NHSE to use pseudonymised personal data for any element of the processing?	No. The solution will disseminate identfiable outputs only to NHS Digital.
If Y, please specify the element(s) and describe the pseudonymisation technique(s) that we are proposing to use.	N/A

Scale and constituency(ies)

What is the scale of the processing? i.e. approximately how many people will be the subject of the processing	All health and care staff in England being vaccinated in any setting within England. The number of non-health and care staff patients included for COVID-19 is expedited to be larger and in the region of 2-3 million, but yet to be confirmed. Service will extend to Mass Vaccination Sites for recording of general public vaccinations.
Please describe the constituency(ies).	All health and care staff — the system will be prepopulated with the demographics from the Electronic Staff Record. In-patient and out-patient attendees in hospital settings. General Public

Outcomes

What will be the effects of the processing? i.e. what actions/decisions will result from the processing	Monitoring of vaccination uptake and possible commissioning of additional services. It will also ensure that patients only receive the appropriate vaccinations.
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Joint working controllership relationship and bases for lawful processing

NOT APPLICABLE – NHS England is sole controller

If NHS England and NHS Improvement are not working together for this purpose, then please proceed to next section.

Which controllership scenario(s) below apply(ies)?		Yes/No	Legal basis GDPR Article 6				
			NHS England	TDA	Monitor	NHS Digital	Other
Joint controllers – aligned exercise of specific statutory functions	 The Parties have separate statutory functions as the basis for conducting activities and processing, but the functions are related, and their exercise is to be aligned. For example, processing to support NHS England's functions in respect of the performance assessment of CCGs and giving directions to CCGs NHS Improvement's functions in respect of the oversight and regulation of NHS trusts and Foundation Trusts. 	Yes/No					
2. Joint controllers – general powers and corporate governance arrangements	 The Parties collaboratively process personal data in the exercise of their general powers. For example, processing to support The appointment of joint executive positions on the board and at a senior level Shared HR service Planning for operational management of integrated teams Line management of integrated teams The establishment of a shared secretariat for servicing boards and committees. 	Yes/No					
3. One Party is a Controller, supported by staff employed by any of the other Parties	One Party alone is responsible for determining the purpose and means of Processing to exercise its own functions and consequently it is the sole Controller. An employee of another of the Parties who assists with the Processing under the guidance,	Yes/No					

	direction or supervision of the sole Controller is acting as an agent of the Party which has the function and which is the Controller.				
4. Data sharing – with each organisation as a separate controller	Information is shared between Parties as individual data controllers. Personal data is disclosed by one Party to another for the latter's discrete purposes.	Yes/No			
	The Parties undertake their own functions, but with the support of either or both of the others in a manner which involves the sharing of personal data.				
4a. Disclosing controller	NHS England / TDA / Monitor				
4b. Recipient controller	NHS England / TDA / Monitor				
5. Processor	One or more of the Parties acts as a processor for one or more of the other Parties. The processing Party does not need a legal basis, relying on that of the controller.				
	For example One of the Parties remains as data controller responsible for determining the purpose and means of processing, but the processing of data on itself is undertaken by another Party.				
5a. Controller(s)	NHS England / TDA / Monitor				
5b. Processor	NHS England / TDA / Monitor				

Purpose(s) and legal basis(es) of the processing

Only complete if sole controller, select all that apply.

Lawful Basis	Processing Condition	Applies	Rationale
The processing is necessary for a task that is within our remit as a public authority.	GDPR Article 6(1)(e)	Yes	NHS England's exercise of the Secretary of State's public health functions
Please describe NHS England or NHS Improvement's statutory powers that permit processing of the personal data.			National Health Service Act 2006, c. 41, Part 1, Exercise of Secretary of Secretary of State's public health functions, Section 7A and sections 2, 2A, 2B and 12 of the 2006 Act so as to provide or secure the provision of s.7A services (as described in paragraph 1.3)
			NHS public health functions agreement 2019-20, Public health functions to be exercised by NHS England dated December 2019 describes what is to be included Public Health Functions Agreement 2019-20
			List A1: Services to be provided pursuant to this agreement Immunisation program Seasonal influenza immunisation programme Seasonal influenza immunisation programme for children
			NHS Act 2006 S.2 General Powers The Secretary of State, the Board or a clinical commissioning group may do anything which is calculated to facilitate, or is conducive or incidental to, the discharge of any function conferred on that person by this Act.

Special categories of personal data

Select all the special categories of data that may be processed.

Racial or ethnic origin	Yes
Political opinions	No
Religious or philosophical beliefs	No
Trade union membership	No
Genetic data ⁴	No
Biometric data ⁵	No
Data concerning health ⁶	Yes
Data concerning the sex life or sexual	No
orientation of the data subjects	

If there are no special categories of data processed, please skip the following section and proceed to the 'Common law duty of confidentiality' section.

Where processing special categories of data, indicate the lawful basis for its processing using the table below, selecting all that apply.

⁴ 'genetic data' means personal data relating to the inherited or acquired genetic characteristics of a natural person which give unique information about the physiology or the health of that natural person and which result, in particular, from an analysis of a biological sample from the natural person in question

⁵ 'biometric data' means personal data resulting from specific technical processing relating to the physical, physiological or behavioural characteristics of a natural person, which allow or confirm the unique identification of that natural person, such as facial images or dactyloscopic data

⁶ 'data concerning health' means personal data related to the physical or mental health of a natural person, including the provision of health care services, which reveal information about his or her health status

Lawful Basis	Processing Condition	Applies	Rationale
We will be seeking explicit consent to undertake the processing.	GDPR Article 9(2)(a)	No	
The processing is required in the field of employment, social security or social protection law.	GDPR Article 9(2)(b)	Yes	For flu vaccination only monitoring for the purpose of the Equality Act 2010 – public sector Equality Duty
The processing is necessary in an emergency situation to protect the life or safety of any person where the data subject cannot consent.	GDPR Article 9(2)(c)	No	
The data subject has put the personal data in the public domain.	GDPR Article 9(2)(e)	No	
The processing is necessary for legal claims or to the Courts.	GDPR Article 9(2)(f)	No	
The processing is necessary for reasons of substantial public interest.	GDPR Article 9(2)(g)	No	
The processing is necessary for health or social care purposes.	GDPR Article 9(2)(h)	Yes	Management and monitoring of vaccination of NHS staff for flu, and health and care staff, hospital inpatent and outpatient attendees and the general public for COVID-19. DPA2018 Schedule 1 Part 1 para. 2 Health or social care purposes.
The processing is necessary for public health purposes.	GDPR Article 9(2)(i)	Yes	The NIVS is necessary for the delivery by NHS England of the purposes set out in Regulation 3(1) of the Health Service (control of Patient Information) Regulations 2002. DPA2018 Schedule 1 Part 1 para. 3 public health
The processing is necessary for archiving in the public interest, scientific or historical research purposes or statistical purposes.	GDPR Article 9(2)(j)	No	

Common law duty of confidentiality

Are any of the data subject to a duty of confidentiality (e.g. clinical records, OH details, payroll information)? If so, please specify them.	Yes	No	
Where it is planned to disclose such data, what	Consent	No	Please describe
are the grounds for doing so?	Safeguarding	No	Please describe
	Other overriding public interest	No	Please describe
	Interest Legal duty or permissive power (e.g. s251 support, court order)	Yes	NHS England – power to receive and process confidential patient information NHS England is processing Confidential Patient Information for the purposes of the NIVS under The Health Service (Control of Patient Information) Regulations 2002 – regulation 3(1) and 3(3)(c) Health organisations – power to disclose confidential patient information Under the provisions of the COPI Notice, issued by the Secretary of State for Health and Social Care, NHS organisations are legally required (not just 'requested') to provide confidential patient information about patients and, where relevant (eg the vaccination programme), staff to support the response to the pandemic. This includes the flu and COVID-19 vaccination programme. The COPI notice specifically states that confidential patient information can be shared to support: "understanding about patient access to health services and adult social care services and the need for wider care of patients and vulnerable groups as a direct or indirect result of COVID-19 and the availability and capacity of those services or that care."

		 And can be relied on for reasons, including: It is critical that we reduce ill health and complications from flu and as far as possible avoid outbreaks, particularly when the NHS is already dealing with the coronavirus pandemic. Failure to manage flu, and its impact on the NHS, will reduce the capacity of the health and care system to treat patients infected with COVID-19. It is important to monitor take-up of the flu vaccine by staff and the potential impact staff absence might have on the capacity of health and care organisations to manage COVID-19. Being forewarned about the risks that flu might pose to the health and care system is necessary to support planning for the response to COVID-19. The general COPI notice can be accessed here: https://www.gov.uk/government/publications/coronavirus-covid-19-notification-of-data-controllers-to-share-information/coronavirus-covid-19-notice-under-regulation-34-of-the-health-service-control-of-patient-information-regulations-2002-general
If the processing is of data concerning health or social care, is it for a purpose other than direct care ⁷ ?	_	reporting on the uptake of the vaccination, however, this en using de-identified data.

Consultation

Would it be appropriate to seek the	No
views of data subjects or their	
representatives on the proposed	
processing?	

⁷ direct care: a clinical, social or public health activity concerned with the prevention, investigation and treatment of illness and the alleviation of suffering of individuals. It includes supporting individuals' ability to function and improve their participation in life and society. It includes the assurance of safe and high quality care and treatment through local audit, the management of untoward or adverse incidents, person satisfaction including measurement of outcomes undertaken by one or more registered and regulated health or social care professionals and their team with whom the individual has a legitimate relationship for their care.

If Y, how will this be done?	
If N, why is this the case?	Urgent implementation in the context of the COVD-19 pandemic.
Would it be helpful to seek advice from independent experts (clinicians, security experts, ethicists etc.) where their specialist knowledge would be useful in understanding and managing privacy risks?	Not for the purposes of creating this data capture tool however the ICO will be informed about the processing and given the opportunity to provide advice.
If Y, how will this be done?	
Will any other stakeholder(s) (whether internal or external) need to be consulted about the proposed processing (e.g. NHSE Central team, Public Health England, NHS Digital, the Office for National Statistics)?	PHE are providing support and guidance as well as NHS Digital.
What was/were the outcomes(s) of such consultation?	

Datasets and access - Indicated above and in embedded documents below.

Purpose / process	Required data items	Accessed by (Roles)	Storage location
Upload of vaccination extract to NIVS	See Vaccination Technical specification for Supplier to National Immunisation and Vaccination System (NIVS) Digital delimited extract— embedded below	RBAC role "HCW Vaccinator" enabled for the relevant organisation.	NIVS

ESR Data from NHS Digital



NHS Digital weekly employee cohort.pdf

Data capture dataset for Vaccination Providers - CSV file for flu



Data capture dataset for Vaccination Providers – data entry specification for COVID-19



Data export dataset from NIVS to NHS Digital



Data export dataset from NIVS to NHS Digital – adverse reactions (COVID-19 only)



Data export dataset from NIVS to NHS Digital – extended attributes (COVID-19 only)



RBAC implementation using OKTA



Data processor⁸

Will the processing be wholly or partly	Yes.
performed on our behalf by a data	
processor(s)?	

⁸ 'processor' means a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller

If Y please give details	Microsoft Azure - cloud hosting infrastructure established for Arden and GEM CSU NHS Digital.
Where is the data to be processed by the data processor?	In UK — however from MS Online Service Terms — August 1 2019 Data Transfers Except as described elsewhere in the OST, Customer Data and Personal Data that Microsoft processes on Customer's behalf may be transferred to, and stored and processed in, the United States or any other country in which Microsoft or its Subprocessors operate. Customer appoints Microsoft to perform any such transfer of Customer Data and Personal Data to any such country and to store and process Customer Data and Personal Data to provide the Online Services.

If the processing is not completed by a data processor, please ignore the following questions and proceed to the 'Collection of personal data' section.

What assurance has been/will be sought about the/each processor's compliance with the GDPR?	Microsoft have previously undergone appropriate checks which confirm that the contract in place is GDPR compliant and that they have the appropriate controls in place to secure their infrastructure.
Will the contract use NHS England's standard data processing agreement template?	No
Has a draft or final copy of the data processing agreement been supplied with this DPIA? If No, please explain.	MS Online Service Terms – August 1 2019
Will the contract contain standard clauses to require compliance with the GDPR?	Yes
Will the contract contain clauses to address the secure transfer of the personal data to a successor data processor should this become necessary or upon the expiry of the term?	Delete or return

Collection of personal data

Will personal data be collected from the data subject?	No
Will personal data be obtained from sources other than the subject?	No
Will personal data be collected from a third party(ies)?	Yes
If Y, please identify the third party(ies)?	Immunisation Providers
Is the provision of personal data obligatory or voluntary?	Obligatory
If obligatory, why/how is that the case?	Obligatory under the COPI notice from the Secretary of State – see confidentiality section.
What are the possible consequences for a data subject if there is a failure to provide the requested personal data?	Failure to be invited for vaccination.

Privacy information

Does NHS England and NHS Improvements central privacy notice	No
already describe this processing?	
Will the NHS England and NHS Improvement central privacy notice be updated to describe this processing?	Yes
Will local privacy information be made available to data subjects in addition to the central privacy notice (required where information will be collected directly from data subjects)? If so, please provide a draft of the proposed privacy information.	No – not collected directly from the subject.

Accuracy of personal data

How will we ensure the accuracy of the	The Data Feeds have existing very
personal data (including their	mature data validation and cleansing
rectification or erasure where	scripts, built up through experience
necessary)?	with the data and supported by audits
	by NHS Digital. The data will also be
	checked on submission by NHS Digital

	against the PDS service to ensure data is accurate and up to date.
How will we monitor the quality of the personal data?	Through data validation and data quality reports, automatically generated every time data is refreshed

Subject access and data subjects' rights

How will it be possible to provide a copy of the personal data processed about a particular individual to them (redacted as necessary) should they request access to this information? (If you are purchasing an information management system, you should consider including requirements in the specification about searching and subject access requests.)	Recipients can make a Subject Rights Request in line with NHS England's policy england.dpo@nhs.net
What processes will be put in place to ensure that other data subjects rights can be appropriately applied to the personal data if necessary?	As above

Data sharing (other than between NHSE and NHSI)

Will some or all of the personal data be	Yes
shared with a third party (other than	
NHSE / NHSI and data processors)	

If No, please skip outflows in the next section

If Y, will the personal data be disclosed	No
to a recipient(s) in a country outside the	
EEA or an international organisation?	

Data flows (including transfers between NHSE and NHSI)

Please supply a data flow map or complete the table:

<u>Inflows</u>						
Sender	Content	Pseudony mised?	Mode	Security	Recipient	Frequency
COVID						

1 SBS	Demographic Data Load ESR demographics data for all NHS Staff	No	?	?	NHS Digital	?
3 NHS Digital	Demographic Data (D1) Load ESR demographics data for all NHS Staff	No	MESH	MESH	NIVS	Daily
2a Vaccination service	Vaccinations Record of vaccination outcome	No	Data Entry into Web App	Web access RBAC encrypted transport Access control policy within SLSP	NIVS	Daily
2b Vaccination service	Adverse reactions	No	Direct Entry to Web App	Web access RBAC encrypted transport Access control policy within SLSP	NIVS	Daily
4 NHAIS	Demographic Updates Users call on PDS to upate and trace deomographics	No	API – online interrogation of NHAIS	TBC	NIVS	Daily
4b PDS	Call to Patient Demographic Service through FHIR Api	No	FHIR API Application Restricted	Secure Application Key Authentication changing every 10 minutes	NIVS	Daily
5 NHS Digital	Prior Vaccination Records Application recalls prior vaccination records	No	API – online interrogation of IMS	Secure Web Token Authentication between NIVS and NIMS	NIVS	Daily
Flu						
1 NHS organisation vaccinating staff	Data Upload of completed vaccination events. (see data specification)	No	NIVS App	Web access RBAC encrypted transport Access control policy within SLSP	NIVS	Daily

<u>Outflows</u>						
Sender	Content	Pseudonymised	Mode	Security	Recipient	Freq
COVID						
NIVS	Dissemination: Outputs of completed vaccination events	No	MESH	MESH	NHS Digital	Daily
NIVS	Extended Attributes	N/A	Direct Entry to Web App	MESH	NHS Digital	Daily
NIVS	Dissemination: Output of reported adverse reactsion	No	MESH	NESH	NHS Digital	Daily

FLU						
NIVS	Export of completed vaccinations to NHSD (see specification)	No	MESH	MESH	NHS Digital	Overnight batch
NIVS					NHS Digital	Daily

Risks

What are the identified risks of the processing? Please complete risk register attached.

The risk log is under review.

Incident reporting

What plans are in place in relation to the internal reporting of a personal data breach? (NB Unless the personal data breach is unlikely to result in a risk to the rights and freedoms of the individual(s), it will normally need to be reported to the ICO within 72 hours.)	NHSE / CSU incident reporting procedure
What plans are in place in relation to the notification of data subjects should there be a personal data breach? (NB Where a personal data breach is likely to result in a high risk to the rights and freedoms of the individual(s), they should be notified as soon as reasonably feasible and provided with any recommendations to mitigate potential adverse effects.)	NHSE & CSU incident reporting Procedure

Business continuity planning

How will the personal data be restored	There are several aspects to this
in a timely manner in the event of a	implementation some of which are
physical or technical incident?	either newly developed or new to Azure,
	Disaster Recovery Plans will be
	reviewed and updated as required. The
	Business Continuity plan will need to be
	reviewed for this service. However, for

the backend application the following will be applicable (TBC): Azure PITR (Point In Time Restore) backup functionality on all SQL databases, which allows data to be restored to any point in the last 7 days. Should there be a need to restore a database, an appropriate point in time will be agreed with customer and the database restored to that point. In the event of the need to restore, an appropriate point in time will be agreed with customer then a restore will be produced from that point in time. Resilience and availability levels (BCP/DR) are typically defined within the customer's contract and would be provided using the UK West. Microsoft Azure operates at TIA942 Tier 3 equivalence and the datacentres are engineered to provide 99.999% availability. Azure provides multiple availability zones for customers to deploy resources to ensure availability. Standard Azure networking has built-in DDoS protection.

Records Management

Will corporate records be created and /	Yes
or managed as a result of this	
processing?	
Where will these records be stored?	Within the NIVs database which is part
	of the NHSE MS Azure tenancy

Is there a trained Records and	N/A
Information Management Coordinator	
(RIMC) responsible for these records?	

Retention of personal data

What is/are the retention period(s) for the personal data?	Data will be retained in line with NHS England business requirements and the NHS Records Management Code of Practice.
What is the basis for this retention period? (Please indicate applicable guidance or rationale)	As above
Where personal data are processed outside of NHSE's premises or systems, how will they be securely returned to NHSE for the remainder of the retention period(s) as and when this becomes necessary (e.g. following the closure of the project)?	NHSE will have all data already captured through the application and will be stored in their systems and infrastructure. Under instruction AGEM would delete the database and records and remove all access to the system. We would then provide a data destruction certificate to NHSE.

Direct marketing9

Will any personal data be processed for direct marketing purposes?	No
If Yes, please describe how the proposed direct marketing will take	
place:	

Data portability

Where the processing is based on	N/A
consent or due to a contract, it is carried	
out by automated means and the data	
subject has provided the personal data	
to us, will it be possible to provide them	
or a different controller with the personal	
data in a structured, commonly used	
and machine-readable format?	

⁹ direct marketing is "the communication (by whatever means) of any advertising or marketing material which is directed to particular individuals" - all promotional material falls within this definition, including material promoting the aims of not-for-profit organisations

(NB This does not apply to processing
necessary for the performance of a task
carried out in the public interest or in the
exercise of official authority vested in
the controller – GDPR Article 6(1)(e).)

Automated processing

Will the processing result in a decision being made about the data subject solely on the basis of automated processing ¹⁰ (including profiling ¹¹)?	No
If Yes, is the decision: necessary for entering into, or performance of, a contract between the data subject and a data controller authorised by law based on the data subject's explicit consent?	
Please describe the logic involved in any automated decision-making.	
Please outline the significance and the envisaged consequences of such processing for the data subject.	

ICT

Will we, or the data processor(s), be	No – captured using a system
using a new system to process the	developed initially to capture
personal data?	immunisations done in schools

 $^{^{10}}$ examples include the automatic refusal of an online credit application and e-recruiting practices without any human intervention

¹¹ 'profiling' means any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person, in particular to analyse or predict aspects concerning that natural person's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location or movements

If Yes to the above question around new systems, please ensure that a System Level Security Policy is completed, risk assessed by ICT and attached to this DPIA before proceeding to the sign off stage below.

DPIA Review

Numbering denotes sequence of reviews

1a. Corporate ICT

Required if DPIA considers a new ICT system on NHS England and NHS Improvement's infrastructure or any ICT system on a third party's infrastructure

Summary of IC	CT review to be provided here.
Name	
Role	
Signature	
Date	
1b. Records an	nd Information Management
Required if pro	cessing will create corporate records
Submit to jan.ga	avin@nhs.net or eleanor.ward@nhs.net
Summary of re	cords and information management review to be provided here.
Name	
Role	
Signature	
Date	

2. IG Management

To be completed by senior member of Corporate IG (manager or above) in all cases or a Corporate IG Senior Manager or above where processing involves identifiable data about patients

Submit to relevant Corporate IG manager

This DPIA supplements the NIV's DPIA (IG20200918) which was approved by Emily Lawson on the 25th September 2020 to support the collection of data from wider care settings.

Name	Wendy Harrison	
Role	Deputy Head of Corporate IG/Senior Lead Data Governance	
Signature		
_		
Date	19/10/2020	

3a. Data Protection Officer

Required if processing involves risks that cannot be mitigated, processing outside of the UK or identifiable special categories of data

Submit to england.dpo@nhs.net

Summary of DPO review to be provided here.

Name	Carol Mitchell
Role	Head of Corporate Information Governance
Signature	
Date	24/03/2021

3b. Information Commissioner's Office

Only required where DPO requests ICO review

Submit to dpiaconsultation@ico.org.uk

Summary of ICO review to be provided here.

4. Caldicott Guardian

Only required where processing involves identifiable data about NHS patients Submit to england.medicaldirector2@nhs.net

Summary of Caldicott Guardian review to be provided here.

Name	Proffessor Stephen Powis	
Role	National Medical Director	
Signature	Store Por.	
Date	24/03/2021	

DPIA Approval

Senior Information Risk Owner

Decision of the SIRO:	Approved with conditions	
Questions or concerns raised duri	ng SIRO review	

Any additional conditions applied, beyond those identified in the risk register

	Additional Condition	Review Date
1	Risk register to be updated	Completed
2	PN to be updated	Completed
3	Clarification around COPI regs	Completed
4	Update of use of Ethnicity data	Completed
5	Confirm Microsoft contract is GDPR compliant and processing in UK	03/12/2020

Name	Mark Blakeman
Role	Director of Corporate Operations
Signature	
	MIM.
Date	24/03/2021