Regional Health and Social Care Information Sharing Agreement

Data Protection Impact Assessment – Serology Data and Connected Care

For approval by:

DPO – Data Protection Officer	**(signature required)**
IG Steering Group Chairperson	**(signature required)**
Lead Director responsible for all mitigations	**(signature required)**

Contents

Visit www.regisa.uk

Data Protection Impact Assessment – DPIA0037 Serology Data and Connected Care

DPIA Identifier:	DPIA0037
DPIA Name:	Serology Data and Connected Care
DPIA Effective Date:	1 November 2020
DPIA Review/End Date:	31 March 2021
Direct Care or Other Uses:	Direct Care
Sharing Data Controllership:	Joint with Frimley Health NHS Foundation Trust as lead controller (for both the BSPS pathology system and Connected Care
Information Assets:	Connected Care and the BSPS pathology system
Data Processor(s):	SoftCat - Graphnet - System C – Microsoft - Clinisys
Status:	Draft
Version:	v1.2

This schedule to the Regional Health and Social Care Information Sharing Agreement provides a Data Protection Impact Assessment (DPIA) for the above processing and sharing arrangements.

Rationale for Conducting a Data Protection Impact Assessment

An initial DPIA has been carried out that indicates the requirement for a new DPIA for the joint processing and sharing arrangements associated with the serology data.

Summary of the Joint Processing and Sharing Requirement Purpose

To improve the timeliness and quality of care by enabling information about an individual's serology results to be made available in near real time through the Connected Care solution.

The benefits of this capability include:

1. Improved ability to identify "at risk" individuals and provide appropriate services based on evidence;
2. The information provides improved insight into direct patient care;
3. Timeliness of data. With access to near real-time dashboards there is the potential to rapidly and responsively reconfigure healthcare delivery across the health and social care community;
4. An extension of Connected Care's role as a single trusted repository of data for the whole system;
5. System wide planning and modelling using consistent and commonly understood data sources; and
6. Dashboards and reports can be published in the clinical portal and can be fully embedded operationally within provider source systems.

Legal Basis for the Processing

Unless a patient has objected to sharing and the sharing organisation has accepted the patient's objection or has agreed to a processing restriction the legal basis for sharing and viewing the shared records includes provisions of Section 251B of the Health and Social Care Act 2012 (as amended by the Health and Social Care (Safety and Quality) Act 2015):

2. The sharing organisation must ensure that the information is disclosed to:
   (a) persons working for the sharing organisation
   (b) any other relevant health or adult social care commissioner or provider with whom the sharing organisation communicates about the individual; and
3. So far as the sharing organisation considers that the disclosure is:
   (a) likely to facilitate the provision to the individual of health services or adult social care in England
   (b) in the individual's best interests.

Unless a patient has opted out from sharing and the sharing organisation has accepted the patient's opt-out the legal basis for viewing the shared records is also provided by General Data Protection Regulation:

1. Article 6(1)e
   "processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller"; and
2. Article 9(2)h
   "processing is necessary for the purposes of preventive or occupational medicine, for the assessment of the working capacity of the employee, medical diagnosis, the provision of health or social care or treatment or the management of health or social care systems and services".

Where access to confidential data is legitimate, the common law duties of confidentiality are satisfied because consent to view a patient's record is implied where the patient concerned agrees to be referred to a service or where the patient concerned refers themselves or presents to a service.

Privacy notices covering shared care records are generally published by and are available from the data controllers. Serology data also includes test and result data relating to staff who have taken part in COVID-19 antibody testing. As part of the testing process, staff have been made aware of the processing requirement.

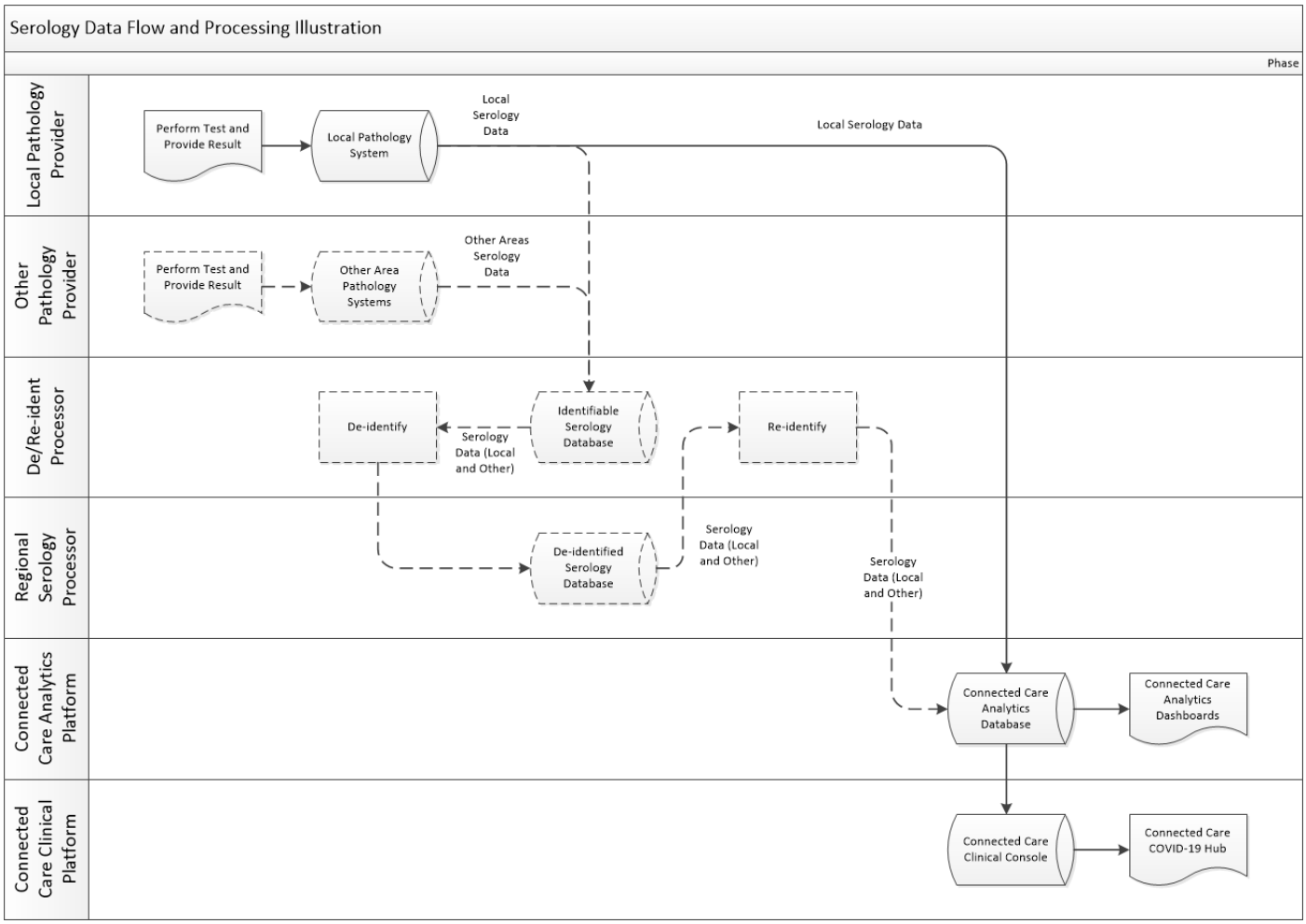
Summary of the Joint Processing and Sharing Requirement Process

The technical platform for the joint processing is the Connected Care Clinical Platform and the Connected Care Analytics Platform, which are tried and proven secure systems that allow secure cross boundary access to patient information held in the shared records.

The processing and sharing requirement is described in terms of:

1. The processing, sharing and analytics process;
2. The processing and sharing privacy arrangements;
3. The scope of the organisations involved in the processing and sharing arrangements; and
4. The scope of the data processed and shared.

The overall process is illustrated in the figure below.



Data flows, stores and processing presented with dotted lines relate to proposed future flows and are not covered by the scope of this DPIA and are included here for context only.

The Processing, Sharing and Analytics Process

For the purposes of this DPIA the processing and sharing process is as follows:

1. For data being extracted from pathology systems into the Connected Care Analytics Database:
    a. The serology data is extracted from the source pathology system for transfer to the Connected Care Analytics Database. This extract applies to data held in the local (Berkshire and Surrey Pathology Service Clinisys ICE) pathology system
    b. Where data has been modified or deleted within the source system these changes and deletions are also reflected within the Connected Care Analytics Database;
2. The serology data loaded into the Connected Care repository is configured for use through the Connected Care CareCentric dashboards and analytics data views (referred to as "Data Marts" here);
3. COVID-19 alerts resulting from the serology data are made available in the COVID-19 alerts panel within the Connected Care Clinical Platform; and
4. The analytics dashboards and data views are accessed through one of four user access profiles in the Connected Care role based access control (RBAC) model for analytics. These are:
    a. Professional – which provides access to Data Mart 1 and permits analysis using identifiable data;
    b. Management – which provides access to Data Mart 2 and permits analysis using pseudonymous data;
    c. Commissioning – which provides access to Data Mart 3 and permits analysis using anonymous data; and
    d. Administrator – which is used to control access and define analyses.

The data analysis process is as set out below:

1. As indicated above, the Connected Care data is loaded into the Azure-based data warehouse and configured for use through the Connected Care Intelligence and analytics data views (referred to as "Data Marts"). These Data Marts are:
    a. Data Mart 1 – Identifiable data for use by clinicians and social care professionals with a legitimate relationship and purpose
    b. Data Mart 2 – Pseudonymised data for use by individuals involved in the management of cohorts of service users, services themselves, pathways, etc
    c. Data Mart 3, – Fully anonymised data for use in activities such as commissioning and research; and
2. From the data within Connected Care, the Data Marts provide unified, local health and social care economy wide data sets for patients and clients such as:
    a. 111 & 999 activity
    b. A&E activity (including majors, minors and MAU)
    c. Inpatient episodes
    d. Inpatient spells (including care and nursing homes and community services)
    e. Outpatient activity (acute and community services)
    f. Medications (including repeat prescribing)
    g. Primary care encounters (face to face and virtual)
    h. Primary care events
    i. Primary care appointments
    j. Problems and diagnoses
    k. Outcomes
    l. Results
    m. Serology data
    n. Social care data.

Where members of staff are also local residents, the full record above is likely to apply where the member of staff has relevant local care record entries.

Where members of staff are not local residents their local care record data is restricted to limited demographics and their COVID-19 Serology data as extracted from the BSPS pathology system and presented in the section *The Scope of the Data Processed and Shared* below.

Research processes are not included within the scope of this DPIA.

Processing and Sharing Privacy Arrangements

The privacy arrangements are considered satisfactory as:

1. Access to view data is managed in accordance with the RBAC (Role Based Access Control) arrangements for Connected Care. These have been subjected to review from a clinical governance and from an information governance perspective and are satisfactory;
2. The data is processed in accordance with points 3 to 5 below;
3. No data is made available for shared processing where a patient has indicated to the patient's practice that the patient objects to their data being processed on a shared basis and where the practice has agreed with the patient's objection and the practice has recorded this election within the patient's record;
4. Where any of the data controller organisations other than the patient's practice are notified by the patient that the patient objects to the patient's data being processed on a shared basis the data controller organisation directs the patient to the patient's practice for the purposes of making this election;
5. Data items are not made available for sharing where the data controller organisation concerned has indicated that the data items concerned are not to be shared;
6. Connected Care includes an audit trail showing which user accessed a data subject's records; and
7. Key security aspects include:
    a. Accredited standards (e.g. ISO27001, Cyber Essentials) achieved by suppliers, covering the physical security of the system infrastructure
    b. multi-factor authentication for user access to the system
    c. role based access profiles to control user permissions
    d. Local Authority are compliance with equivalent PSN security standards.

The Scope of the Data Controller Organisations Involved in the Processing

The data controller organisations include all practice organisations that:

1. Have signed the Regional Health and Social Care Information Sharing Agreement; and
2. Is the patient's registered practice or are providing care on behalf of the patient's registered practice.

The other classes of data controller organisation are those organisations that have signed the Regional Health and Social Care Information Sharing Agreement and that are:

1. Independent sector health care providers (including primary care and GP alliances and networks);
2. Independent sector social care providers (adults and children);
3. Clinical Commissioning Groups;
4. Local authorities;
5. NHS Trusts, including:
    a. Acute service providers
    b. Community service providers
    c. Emergency services
    d. Mental health providers
    e. Specialist service providers; and
6. Voluntary sector providers (commissioned or coordinated by Local Authority and NHS organisations).

The Scope of the Data Processed and Shared

The following categories of data are processed and shared using the Connected Care solution:

1. Patient demographics;
2. Date and time of result;
3. Test requestor;
4. Requesting location;
5. Specialty code / discipline;
6. Abnormal results detected flag;
7. Result components;
8. Consultant commentary; and
9. History of results returned, including trend analysis.

Summary of Consultations

Substantial public communications have been carried out previously in respect of Connected Care and in respect of COVID-19-related processing, both locally and nationally. All providers are required to have appropriate privacy notices and these are audited regularly.

Serology data also includes test and result data relating to staff who have taken part in COVID-19 antibody testing. As part of the testing process, staff have been made aware of the processing requirement.

Risks – identified and assessed (prior to mitigation and controls)

Risk description		**Likelihood**	**Consequence / Impact**	**Risk Rating/ Score After mitigation actions implemented**
1	Breach of confidentiality – unlawful access to record (by staff)	Unlikely	Minor	Low
2	Breach of confidentiality – unlawful access by external party	Unlikely	Minor	Low
3	Loss of data (temporary or permanent), due to technical / security failure	Unlikely	Major	Low
4	Alteration of data due to system process failure or technical security failure	Unlikely	Major	Low
5	Poor quality data impacting on quality of care delivery	Possible	Moderate	Low
6	Unlawful processing or sharing of data	Unlikely	Major	Low
7	Excessive processing of data	Possible	Moderate	Low
8	Individuals are inadequately informed and compromised in exercising their rights	Possible	Moderate	Low
9	Processes to respond to individual rights requests are insufficient (i.e. Subject Access)	Possible	Minor	Low
Likelihood Ratings – Rare (1), Unlikely (2), Possible (3), Likely (4), Almost Certain (5)				
Consequence/ Impact – Insignificant (1), Minor (2), Moderate (3), Major (4), Catastrophic (5)				
Risk Rating – Green = Low, Amber, Medium - Moderate, Red – High, Purple – Extremely High				

Measures to reduce risks

	Risk description	Measures to reduce, or remove risk	Effect on risk	Residual risk	Measure approved? Y/N
1	Breach of confidentiality – unlawful access to record (by staff)	• Single Sign on – launch from patient record in operational system – reduced ability to 'browse' records. • Training for all staff • Employment contracts • Professional registration • Audit trail & disciplinary action - deterrent	Likelihood reduced to 1	Low Score between 3-4	Yes
2	Breach of confidentiality – unlawful access by external party	• Data centre security, including physical access restrictions, network security features, penetration testing, vulnerability scans • End user premises security and system log on security	Likelihood reduced to 1	Low Score between 3-4	Yes
3	Loss of data (temporary or permanent), due to technical security failure	• Data centre security, including physical access restrictions, network security features, penetration testing, vulnerability scans • Data Centre resilience arrangements, backups, fall back plans	Likelihood reduced to 1	Low Score between 3-4	Yes
4	Alteration of data due to system process failure or technical security failure	• Training of controller system and application support staff • Checks during design, testing and commissioning processes • Data centre security, including physical access restrictions, network security features, penetration testing, vulnerability scans	Likelihood reduced to 1	Low Score between 3-4	Yes
5	Poor quality data impacting on quality of care delivery	• Checks during design, testing and commissioning processes • Visibility of data to wider user base • Reporting of queries	Likelihood reduced to 1	Low Score between 3-4	Yes
6	Unlawful sharing of data	• Checks during design, testing and commissioning processes • Governance processes including DPIA • Design and change control board reviewing all developments and ensuring all uses of data are approved and lawful	Likelihood reduced to 1	Low Score between 3-4	Yes
7	Excessive processing of data	• Datasets have been subjected to clinical review and are identified as necessary for the effective delivery of a diagnostics and pathology service across the health and social care community • Role Based Access to reduce access to data in repository to data items identified as needed by user role	Likelihood reduced to 1	Low Score: 3	Yes
8	Individuals are inadequately informed and compromised in exercising their data protection rights	• Qualifying standard requiring participating organisations to meet baseline 'informing' requirements. • Audits on compliance by partners • Common statements shared, common web resources	Likelihood reduced to 1	Low Score: 3	Yes
9	Processes to respond to individual rights requests are insufficient (i.e. Subject Access)	• Processes for items such as subject access have been set out, but requests are infrequent • Organisational requirements to support lawful processing are identified in the Regional Information Sharing Framework and part of the qualifying standard	Likelihood reduced to 1	Low Score: 3	Yes

Data Protection Impact Assessment Signature and Approvals Page

Lead Controller's Data Protection Officer

On behalf of the Lead Controller Organisation I confirm that the Data Protection Impact Assessment and the specific mitigation arrangements and residual risk status described in this schedule are satisfactory and have been agreed.

Data Protection Officer's comments

{{*Comments1_es_:signer1:multiline(4):prefill("DPO's comments or 'none'") }}.

Agreed by **{{*DPOname_es_:signer1 }}(name)**
as Data Protection Officer, for and on behalf of **{{*ORGname1_es_:signer1 }}(organisation)**.

Regional Health and Social Care Information Sharing Agreement Information Governance Steering Group Chairperson

On behalf of the Information Governance Steering Group I confirm that the Data Protection Impact Assessment and the specific mitigation arrangements and residual risk status described in this schedule are agreed.

Chairperson's comments:

{{*Comments2_es_:signer2:multiline(2) prefill("IGSG chair's comments or 'none'") }}.

Agreed by **{{*IGSGname_es_:signer2 }}(name)**
as Chair, for and on behalf of the Regional Health and Social Care Information Sharing Agreement Information Governance Steering Group.

Lead Controller's Lead Director

On behalf of the Lead Controller Organisation I confirm that the Data Protection Impact Assessment and the specific mitigation arrangements and residual risk status described in this schedule are agreed and all measures have been or will be implemented.

Lead Director's comments:

{{*Comments2_es_:signer3:multiline(2) prefill("CIO's or SIRO's comments or 'none'") }}.

Agreed by **{{*CIOname_es_:signer3 }} (name and title)**
as Lead Director, for and on behalf of **{{*ORGname3_es_:signer3 }}(organisation)**.

End of DPIA