Application Number	Project Name	Approved / In progress	Project Start Date	Project End Date	Project description	Project Values/Uses	How is the Common Law Duty of Confidentiality met	Legal Basis - COPI / S.251 / other	Legal Basis - UK GDPR	Identifiable/Pseudonymised/Aggregate gate	Details of associated Data Sharing Agreements	Details of associated DPIAs	CIPHA data sources	NHS Digital Data	Data Transferred from (Organisation)	Data Transferred to (Organisation)	Method of data transfer	Aggregate data will be shared with
DSR001	CHIS Vac and Imms	Project no longer live	01/11/20	01/03/21	patient level, identifiable health care records from the GP systems showing Children's vaccinations received and date		CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased. The direct care element was addressed by implied consent.	COPI Notice for Covid 19	6 (1) (c) 6 (1) (e) 9 (2) (h) 9 (2) (i)	Identifiable	Tier 2 DSA (CIPHA)		GP Vacs and Imms Data		System C (CIPHA)	System C (CHS)		N/A
DSR002	MAST testing	Project no longer live	01/11/20	01/03/22	PCR Trend analysis to understand PCR trend pre and post COVID		CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Pillar 2 Testing Data		System C	Liverpool CCG	Secure FTP or Direct Access (TBC)	Gold Command/C&M System
DSR003	MAST testing evaluation (TBC)	Project no longer live	01/12/20	01/02/22	Geospatial analysis of lateral flow test uptake within Liverpool including: (i) which areas have highlow test percentages overall, (ii) which areas have highlow test uptake during super weekend. Analyses will be conducted for LSOAs and we will link information about residents within LSOAs including deprivation (IMD 2019), internet usage (internet user classification 2018), population counts (2019 mid year population estimate), access to test site (calculated by Green), area classification (ONS 2011). Statistical analysis will include GIS mapping, descriptive statistics and regression based techniques. Results will be used to inform how successful outreach activities have been in reaching particular areas and population groups.	Research paper accepted by Lancet Regional Health	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Pillar 2 Testing Data		System C	Liverpool CCG	Secure FTP or Direct Access (TBC)	Gold Command/C&M System
DSR004	MAST testing evaluation	Project no longer live	01/11/20	01/02/22	Interrupted time series to quantify PCR uptake since LFT introduced. PCR tests results from 1st Oct 2020 to the most recent date, to assess whether there has been an uptake increment from 6th Nov 2020. We will evaluate changes over time and by geographical area in the number of tests undertaken, positive rates, and associations with prevalence values and transmissions in our city. Work in collaboration with DHSC and PHE. Expanded to include assessment of (i) uptake of repeat testing, (ii) uptake of confirmatory PCR's following positive LFT, (iii) testing of school aged children, (iv) distribution and proportion of PCR cycle threshold values (possibly indicating new variant prevalances)	Paper on testing in schools submitted to BMJ. Paper on PCR Ct values aiming to be submitted in next two weeks to Lancet Infectious Diseases.	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Pillar 2 Testing Data, PHE		System C (CIPHA)	UoL	Secure FTP or Direct Access (TBC)	Gold Command/C&M System
DSR005	MAST testing evaluation (QA analysis)	Project no longer live	01/11/20	01/02/22	To evaluate the field sensitivity of Innova lateral flow antigen test (LFAgT) in the Quality Assurance subset of paired LFAgT and PCR analysed samples, analysing first by reported result and then stratified by PCR results. Work with DHSC and PHE. Demographic data of the participants will be also captured.	Research paper accepted by BMJ	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	QA datam Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		QA records linked to MPI, Pillar 2 testing data		System C (CIPHA)	UoL	Secure FTP or Direct Access (TBC)	Gold Command/C&M System
DSR006	MAST testing evaluation	Project no longer live	01/12/20	01/12/20	To evaluate the number of tests by age categories of both LFT and PCR between 6th November and 20th November in Liverpool Residents	Summaries sent to NHS Test and Trace	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Pillar 2 Testing Data		System C (CIPHA)	UoL	Secure FTP or Direct Access (TBC)	NHS Test and Trace / ONS
DSR007	MAST testing evaluation	Project no longer live	01/12/20	01/12/20	To determine the number of Liverpool residents with a positive LFT test with a following PCR test.	Summaries sent to NHS Test and Trace	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Pillar 2 Testing Data		System C (CIPHA)	UoL	Secure FTP or Direct Access (TBC)	NHS Test and Trace
DSR008	New Variant Evaluation	Project no longer live	01/02/21	01/01/22	To determine the prevalence and descriptive features of positive COVID cases with new variants (particularly the Kent variant and possibly others as more data becomes available).	Possible publications/SAGE reports	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Pillar 2 Testing Data and genomic sequencing data (from Al Darby)		System C (CIPHA)	UoL	Secure FTP or Direct Access (TBC)	Gold Command/C&M System
DSR009	Vaccination Efficacy Evaluation	Project no longer live	01/01/21	01/01/22	Our primary aim is to model the relative risk of SARS CoV2 infection per unit change in vaccine coverage by geography-defined clusters in the Liverpool City Region, adjusted for baseline and transmission confounders. We will also assess the direct effect of vaccination in the vaccinated population, linked to data on variant type and dose (whether the 2nd dose of the vaccine was administered). In addition, where possible, data generated per small geographical areas will be used to assess how different vaccination strategies may have an impact on the risk of SARS-CoV-2 symptomatic infection, hospitalisations, icu admissions and outcomes and deaths.	Possible publications/SAGE reports. Kieran Sharkey and team have written a paper on vaccine effectiveness which they are about to submit to BMC Medicine.	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Demographics: age, sex, ethnicity, LSOA, care home residency, multiple occupancy, health and social care worker status. Full vaccination data: dates, and type and batch of vaccination. Occasions when vaccination is declined. Data on influenza vaccination uptake. Test data: PCR and Antigen detection test results, both positive and negative. Some antigen detection test results will require extra tracing prior to linkage with the anonymised data. As a matter of urgency viral genomic data is also required, currently not present in the CIPHA platform. Activity and outcomes data: 111 calls for suspected COVID, primary care consultations related to COVID, ED attendances with reasons, admissions and discharges to hospital, admissions and discharges to ICU, deaths. Clinical Data: Presence of recognised comorbidities and medications contributing to COVID vulnerability, inclusion on the shielded patient and Clinically Vulnerable lists, calculated summary data to include frailty and Johns Hopkins risk stratification, derived from all care sources.		System C (CIPHA)	UoL	Secure FTP or Direct Access (TBC)	Gold Command/C&M System
DSR010	Lateral Flow Testing Transmission evalution	Project no longer live	10/02/21	01/01/22	Generalised linear mixed models using linked testing, and test and trace data to assess 1.Is there any evidence that people with a lateral flow positive infect fewer people than those detected by PCR only (because they were asymptomatic and so transmission chains were broken)? 2.Is there any evidence that people with negative LFT's in the days before a positive PCR infect more people than those without a negative LFT? (i.e., is there any harm to a negative LFT in terms of what might appear to be less strict adherence to the distancing rules) 3.Is there any evidence that people with a series of LFT tests before a positive PCR infect fewer people (since they are caught earlier, and so transmission chains broken)? 4. Is there evidence that vaccinated individuals are less likely to transmit COVID-19, or to catch if from infected contacts.	Possible publications.SAGE/DsPH reports	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Pillar 2 Testing Data. Pseudonymised demographics including age, sex, ethnicity, LSOA, PCR and LFT testings dates and results, Ct values where available. Test and Trace contact data. Pseudonymised Vaccine data.		System C (CIPHA)	UoL	Secure FTP or Direct Access (TBC)	Gold Command/C&M System
DSR011	Exploratory Data Assessment in relation to COVID Vaccine Surveillance	Project no longer live	21/04/21	21/05/21	PHE and MHRA are keen to monitor the occurrence of adverse events following vaccination for COVID. The C&M CIPHA platform contains a breadth of markers that may indicate the occurrence of adverse events. This project aims to explore the quality of available data and any initial queries looking at the background incidence of serious thrombotic events. A similar study is also in progress in the Frimley/Berkshire locality.	A report identifying the incidence of serious thrombotic events in the Cheshire and Merseyside population over the previous 5 years	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	A DSA is not needed, as the request is from Graphnet Health, who support the CIPHA platform.		Coded and dated diagnoses and COVID Vaccination events with date and vaccination type.		System C (CIPHA)	No data transfer required	N/A	The study will examine anonymised data only. The raw data will not leave the CIPHA Azure platform.
DSR012	Liverpool events ERP evaluation	Project no longer live	29/05/21	31/07/21	The aim is to provide evidence on the feasibility and utility of risk mitigations for reopening events and venues in England, in support of the Government's Roadmap for COVID-19 recovery.	Possible publications.DSPH reports	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Pseudonymised	Pillar 2 DSA with DHSC (Honorary contract with Liverpool CCG)		Pillar 2 Testing Data. Pseudonymised demographics including age, sex, ethnicity, LSOA, PCR and LFT testings dates and results, Ct values where available. Test and Trace contact data. Pseudonymised Vaccine data.		System C (CIPHA)	UoL	Secure FTP or Direct Access (TBC)	Gold Command/C&M System
DSR013	Liverpool events LFT positive identification	Project no longer live	02/05/21	02/05/21	To match against ticket purchases for the events research programme and cancel tickets if needed.	N/A	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h) 9 (2) (i)	Identifiable	N/A		Emergency identification of all lateral flow positive people testing in the Cheshire and Mersey CIPHA instance over the period 30th April - 2nd May.		PHE	System C (CIPHA)	NHS Secure email	N/A
DSR014	Covid build back: supporting elective restoration	Project no longer live	01/07/21	01/03/22	COVID has caused a backlog of people waiting for elective care. As part of the National Elective Restoration Programme we want to link the pseudonymised waiting list and outpatient data to the primary care data across C&M to understand inequality for those waiting. With a view to increasing understanding of cohorts waiting and considering how this information can be used to target care.	An analysis of those waiting stratified by varates in the general practice record such as age, sex, deprivation, health status, signs of deterioration.	The data being accessed is pseudonymized and therefore is not owed a duty of confidentiality. Data will only be reported in aggregate / anonymized form.	COPI Notice for Covid 19	6 (1) (e) 9 (2) (h)	Pseudonymised	CIPHA DSA for COVID Intelligence		Acute Waiting List data Outpatients Data GP Data		Pseudonymised data will not leave the Graphnet infrastructure	Pseudonymised data will not leave the Graphnet infrastructure	N/A	The ICS Elective Restoration Team /NHSoI – where required to give assurance -Providers of services where useful and appropriate
DSR030	SMART Release and Return Study	Project no longer live	21/01/22	21/04/22	Essential services face staffing pressures due to the quarantine of key workers after close contact with Omicron cases before they can return to work on a daily contact testing (test-to-release) regimen. Similar pressures arise from the isolation of asymptomatic cases after they have ceased to be infectious. The civic risk from essential service loss may become greater than the direct health risks of Omicron. National policies recently changed to allow early return from 10-day isolation after two consecutive days (5 and 6) of negative lateral flow tests. The findings of this study will reveal the implications of this policy for the NHS in terms of SARS-CoV-2 transmission risks and managing staff shortages. Convenient home testing with lateral flow devices (LFD) will be used, with the added risk mitigation of using two LFDs from two different manufacturers (Orient Gene and Innova) at the same time, and within an hour of leaving for work (if on a daily contact testing regimen). The Orient Gene kit uses a nose-only swab whereas the Innova kit uses a nose and throat swab.		Data will be collected and shared under existing COPI regulations. Consent will be requested from participants for participation in the study. Data for researchers will be de-identified so individual-level data remains secure. CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased	COPI Notice for Covid 19	6 (1) (e) 9(2)(i)	Identifiable Pseudonymised	Use of existing DSA for CIPHA	Use of existing DPIA for CIPHA	CIPHA, Pillar 1 data for LUFT staff who are consented to the study. See attached data flow below in additional information		LUFT	UoL	Secure FTP and password protected files where data needs to be transferred from LUFT to CIPHA.	
DSR038	Pharmacogenetic testing - demand forecasting	Project no longer live	01/02/22	TBC	Provide summary statistics on usage of antidepressants to estimate numbers of patients who may require pharmacogenetic testing. In the future NHS could introduce eligibility criteria based on numbers of antidepressants tried; i.e. if a patient fails after 2 antidepressants, either because of lack of efficacy and/or because of adverse drug reactions, they would be eligible for a pharmacogenomic test before they go onto their 3rd antidepressant. Specifics on drugs and doses not required at this stage.	To understand demand for Pharmacogenetic testing should eligibility criteria be introduced based on the numbers of antidepressants tried. This will allow an estimation of likely throughput of possible genetic testing required for the NHS in relation to antidepressants for the future.	Common Law Duty of Confidentiality is satisfied because the output will be aggregated. Not identifiable information to be shared/ included.		6 (1) (e) 6 (1) (f) 9 (2) (h)	Aggregated	Population health DSA	NA	Medicines		NA	NA	NA	One off piece of work for NHS England board.
DSR039	COVID Vaccination Status in population with Serious Mental Illness (SMI)	Project no longer live	29/02/22	31/03/22	Understanding the vaccination uptake in SMI patients across Cheshire & Merseyside	Intelligence to inform potential patient cohort that would benefit from the vaccination. Better target public health interventions.	CLDC was met by the COPI Regulations. Project was closed prior to 30th June 2022 when the COPI notice ceased		6 (1) (e) 9 (2) (h)	Aggregated	Tier two population health DSA	Population health DPIA	NIMS, Primary Care		CIPHA partners, as stated in the Population Health DSA	Back to organisations across C&M via Power BI dashboard in CIPHA.	CIPHA partners, as stated in the Population Health DSA	Back to organisations across C&M via Power BI dashboard in CIPHA.
DSR048	Leukaemia Diagnosis Pathway Analysis	Project no longer live	23/05/22	26/11/22			The CLDoC doesn't apply as the data is pseudonymised and outputs are aggregated with small number suppression.											