

DATA FLOW: DATA LINKAGE

Existing data

Databases held by NCISH at the University of Manchester (UoM): Databases held by the Office for Health Improvement and Disparities (England) (OHID), Digital Health & Care Wales (DHCW) and Public Health Scotland (PHS)

(1) NCISH general population suicide database (mortality data previously supplied by national data providers in England, Wales & Scotland) (deaths registered 1st October 2021 to 30th September 2022 (E&W) deaths registered 1st April 2022 to 30th September 2022 (Scot)).

Data Controllers: Office for National Statistics (ONS) Identifiable; Sensitive (processed under PIAG-4-08(d)/2003)

(2) NCISH database of suicide deaths in people in recent contact with mental health services (deaths registered 1st October 2021 to 30th September 2022).

(Joint) Data Controllers:

Healthcare Quality Improvement Partnership (HQIP)/NHS England Pseudonymised; sensitive (processed under PIAG-4-08(d)/2003)

(A) National Drug Treatment Monitoring System (NDTMS) (database of all people who have had contact with alcohol and drug services in England).

Data Controller: Office for Health Improvement and Disparities

Identifiable; confidential patient information

(B) Welsh National Database for Substance Misuse (WNDSM) (database of all people who have had contact with alcohol & drug services in Wales)

Data Controller: Digital Health & Care Wales Identifiable; confidential patient information

(C) the Drug and Alcohol Information System (DAIsy). (database of all people who have had contact with alcohol & drug services in Scotland). Data Controller: Public Health Scotland

Identifiable; confidential

patient information

NCISH provide extract from the general population suicide database (1) and send to OHID/DHCW/PHS via secure portal. Extract is limited to: unique NCISH ID number, last name, initial, sex, date of birth, date of death, outward postcode, NHS number/CHI number(Scotland)

Identifiable; confidential patient information

OHID/DHCW/PHS link general population suicide database (1) to NDTMS (A)/WNDSM (B)/DAIsy (C) using provided identifiers to identify individuals who died by suicide/undetermined death. Identifiable; confidential patient information

OHID/DHCW/PHS create new dataset from the NDTMS (A)/WNDSM (B)/DAIsy (C), to send to NCISH via secure portal. This will contain data on demographics and clinical characteristics from alcohol and drug service data NDTMS (A)/WNDSM (B)/DAIsy (C): This data uses a unique NCISH identifier. No identifiers are included. **Pseudonymised patient information**

individuals can opt-out of entry onto A/B/C

Unlinked mortality data Securely deleted.

OHID/DHCW match (age & sex) case data (people who die by suicide within 12 months of contact with alcohol and drug services) with controls (people who have had contact with alcohol and drug services and have not died by suicide or other causes within 12 months of the matched cases date of death). Dataset from the NDTMS (A)/WNDSM (B), to send to NCISH via secure portal. This will contain data on demographics and clinical characteristics from alcohol and drug service data NDTMS (A)/WNDSM (B): This data uses a unique NCISH identifier. No identifiers are included.

> Pseudonymised patient information; sensitive individuals can opt-out of entry onto A/B

NOTES FOR ARROW COLOURS;

Green = identifiable (but processed already under PIAG-4-08(d) or not confidential patient information)

Purple = identifiable, confidential patient information (requires S251 approval)

Data linkage

Data Controller: OHID/NWIS/PHS

/HQIP/NHSE

Data Processor: OHID/NWIS/PHS/UoM

Data Analysis Data Controller: OHID/NWIS/PHS /HQIP/NHSE

Data Processor: UoM/NCISH

Blue = Pseudonymised Red = Anonymised and Aggregated

Linked data sent by secure portal

Case and control data. The case data uses a unique NCISH identifier. All identifiers removed. The control data is fully anonymised non-identifiable.

> Control data: Pseudonymised patient information; sensitive Case data: Pseudonymised patient information

OHID/DHCW/PHS data (A), (B), (C) linked to NCISH data (1) and (2), and entered on a study database against a unique study identifier: database does not contain identifying information.

Pseudonymised; sensitive

NCISH link data extract from OHID/DHCW/PHS data (A), (B), (C) to

NCISH develop statistical tables and outputs using STATA 16 **Anonymised and Aggregated**

Peer-reviewed academic articles **Anonymised and Aggregated**

the NCISH patient suicide database (2) using unique identifier; database does not contain identifying information. Pseudonymised; sensitive

basis for processing sensitive data is for scientific research, Article 9 (j) of the Data Protection Act (2018). GDPR Article 6 (e) Public Task GDPR Article 9 (i) Public

Unless otherwise specified, the legal Health with a legal basis in law.

Project report and related materials (e.g. infographics) on NCISH website **Anonymised and Aggregated**

DATA FLOW: COLLECTION OF CLINICAL INFORMATION

Existing data

Databases held by NCISH at the University of Manchester (UoM):

Databases held by the Office for Health Improvement and Disparities (England) (OHID) and Digital Health & Care Wales (DHCW)

(1) NCISH general population suicide database (mortality data previously supplied by national data providers in England, Wales) (deaths registered 1st October 2021 to 30th September 2022).

Data Controllers: Office for National Statistics (ONS) Identifiable; Sensitive (processed under PIAG-4-08(d)/2003)

(2) NCISH database of suicide deaths in people in recent contact with mental health services (deaths registered 1st October 2021 to 30th September 2022).

(Joint) Data Controllers: Healthcare Quality Improvement Partnership

(HQIP)/NHS England

Pseudonymised; sensitive

(processed under PIAG-4-08(d)/2003) (A) National Drug Treatment
Monitoring System (NDTMS)
(database of all people who
have had contact with alcohol
and drug services in England).

Data Controller: Office for
Health Improvement and
Disparities
Identifiable; confidential
patient information

(B) Welsh National Database for Substance Misuse (WNDSM) (database of all people who have had contact with alcohol & drug services in Wales) Data Controller: Digital Health & Care Wales Identifiable; confidential patient information

NCISH send general population suicide data (1) via secure portal to OHID/DHCW to link to NDTMS (A)/WNDSM (B) using provided identifiers to identify individuals who died by suicide/undetermined death. This data uses a unique NCISH identifier. All identifiers removed before sending via secure portal to NCISH.

Pseudonymised; sensitive patient information



NCISH request Serious Incident Reports/Incident Reviews (where applicable) from alcohol and drug service providers: These are sent via secure nhs.net email.

Pseudonymised; sensitive patient information



NCISH extract information related to pre-identified variables on data extraction pro-forma, from: Serious Incident Reports/Incident Reviews.

Pseudonymised; sensitive patient information



Information from pro-forma entered on an 'alcohol and drug study' database against unique patient identifier: database does not contain identifying information

Pseudonymised; sensitive patient information



NCISH develop statistical tables and outputs using STATA 16
Anonymised and Aggregated



Peer-reviewed academic articles

Anonymised and Aggregated



Project report and related materials (e.g. infographics) on NCISH website

Anonymised and Aggregated

NOTES FOR ARROW COLOURS:

Green = identifiable (but processed already under PIAG-4-08(d) or not confidential patient information)

Purple = identifiable, confidential patient information (requires S251 approval)

Blue = Pseudonymised

Red = Anonymised and Aggregated

Data processing: NCISH

Data Controller: OHID/DHCW/HQIP/NHSE
Data Processor: NCISH/UoM

Data extraction

Data Controller: OHID/DHCW/HQIP/NHSE Data Processor: NCISH/UoM

Data Analysis

Data Controller: OHID/DHCW/HQIP/NHSE Data Processor: NCISH/UoM

Unless otherwise specified, the legal basis for processing sensitive data is for scientific research, Article 9 (j) of the Data Protection Act (2018). GDPR Article 6 (e) Public Task GDPR Article 9 (i) Public Health with a legal basis in law.