Minutes of the meeting of the Sub Committee of the Confidentiality Advisory Group

DECEMBER 2018

1. NEW AMENDMENTS

Name	Capacity
Dr Patrick Coyle	Vice Chair
Miss Kathryn Murray	Senior Confidentiality Advisor

Application title: **Liver transplantation as treatment for patients with hepatocellular carcinoma; a study using existing electronic data.**

CAG reference: **17/CAG/0025**

IRAS project ID: **218152**

REC reference: **17/LO/0231**

Purpose of Application

This application from the LSHTM set out the purpose of improving the role that liver transplantation could play as a treatment for patients with Hepatocellular carcinoma (HCC), a cancer of the liver. Survival rates were poor and liver transplantation was increasingly used as a treatment, leading to a shortage of livers. This in turn had led to an increase in the use of liver donors after cardiac death as well as brainstem death donors. The researcher aimed to explore the incidence and mortality of HCC, assess the validity of linked national databases as a data source for HCC research, identify the impact of sociodemographic and clinical factors on treatment selection and survival of patients, and identify the outcomes of liver transplantation for patients who received a cardiac death liver donor.

The applicant requested linkage with three national databases: the National Cancer Registration and Analysis (NCRAS) database, the Hospital Episode Statistics (HES) linked to ONS database and the UK Liver Transplant (UKLT) database in order to evaluate the outcome of transplantation in HCC patients.

A recommendation for class 4, 5 and 6 support was requested to cover access to the linkage of patient identifiable information obtained from more than one source, for auditing, monitoring and analysing patient care and treatment and to allow access to an authorised user for one or more of the above purposes.

Confidential Patient Information Requested

Access was requested to data items listed on the application, including full date of death.

The patient's NHS number, gender, date of birth and postcode would be provided by the applicant to NHS Digital who would perform linkage with HES/ONS datasets and manage linkage with NHSBT and NCRAS datasets (data sent from NHSD and returned to NHSD).

Amendment request

The amendment seeks to extend the scope of data collected from the data sources named in the application as follows:

- UK Liver Transplant, NHS Blood and Transplant (NHSBT) – to include 2017 and 2018,
- National Cancer Registration and Analysis Service, Public Health England (NCRAS) – to include 2016 and 2017,
- Hospitals Episodes Database, NSH Digital (HES) – to include 2017 and 2018.

The amendment also seeks an extension to the duration of support under the Regulations to December 2021 to facilitate the additional analysis.

Confidentiality Advisory Group advice

The amendment requested was considered by Chair's Action. It was recognised that the inclusion of the wider timeframes of data would make the results more relevant to current practice and improve detail which was within the public interest. The extended duration of support under the Regulations was required to enable a sufficient duration for study analysis to be undertaken. No queries were raised in connection with the amendment.

Confidentiality Advisory Group conclusion

In line with the considerations above, the CAG agreed that the minimum criteria under the Regulations appeared to have been met for this amendment, and therefore advised recommending support to the Health Research Authority.

Specific conditions of support

1. Confirmation of suitable security arrangements via IG Toolkit submission (**Confirmed - The Royal College of Surgeons of England and NHS Digital have a satisfactory reviewed grade on V14.1, 2017/18**).
2. Confirmation of a favourable opinion from a Research Ethics Committee (**Confirmed**).

Name	Capacity
Dr Malcolm Booth	CAG Member
Dr Patrick Coyle	Vice Chair
Dr Harvey Marcovitch	CAG Member
Miss Kathryn Murray	Senior Confidentiality Advisor

Application title: **Pregnancy Outcome Prediction Study: Transgenerational and Adult Review**

CAG reference: **18/CAG/0024**

IRAS project ID: **228733**

REC reference: **18/EE/0036**

Purpose of Application

This application from the University of Cambridge set out the purpose of medical research to follow-up the families who had previously participated in the fully-consented POPS (the Pregnancy Outcome Prediction Study). The historic study recruited 4,212 women who delivered their first baby in Cambridge between 2008 and 2012. During their pregnancies, women attended for research scans, donated their blood and placentas for research, and allowed researchers access to the medical data surrounding their delivery. Over the last two years, the applicants have published the results of this study that have influenced health policy and pregnancy care.

The applicants currently hold for every mother who participated in POPS a very highly detailed record of the pregnancy and the baby's growth in the womb. The extensive information which is currently held in relation to POPS pregnancies provides a unique opportunity to understand how health in the womb influences later health outcomes.

The POPS pregnancy records will be linked with the HES dataset at NHS DIgital to find out more about the current health status of the POPS mothers and children, and their risks of experiencing disease. This will enable exploration of how pregnancy data can be used to predict the risk of adverse health outcomes (for example high blood pressure, obesity, diabetes or learning difficulties) in both mothers and children later in life. This is a prospective study which will perform annual data linkage for both the mother and child until the child turns 18.

A recommendation for class 1, 4 and 6 support was requested to cover activities as described in the application form.

Confidential Patient Information Requested

Cohort

The study will utilise the historical POPS cohort of 4212 mothers who gave birth to their first child in the Rosie Hospital between 2008 and 2012. The POPStar cohort comprises both mothers and their children, 8,424 individuals in total in the cohort, who did not withdraw from the study. The sample size is expected to decrease slightly after the study exclusion criteria had been applied.

The following items of confidential patient information will be required for both the mother and child for the purposes as set out below:

- Name – linkage and validation
- NHS number – linkage (NHS Digital only) and validation,
- Date of birth – linkage and validation,
- POPS ID – linkage and validation,
- POPStar ID – for linkage with historic data.

Amendment Request

The amendment request was submitted which sought to remove data linkage with the Department for Education from the study scope.

Confidentiality Advisory Group advice

A Sub-Committee of the CAG considered the applicant's response to the request for further information detailed in the provisionally supported outcome in correspondence. The subsequent amendment request was also considered alongside this response.

1. **Clarify the cohort size, confirming the numbers of mothers and babies (accounting for multiple births) to be included in this study.**

The applicant confirmed that the number of mothers and children in the study would be the same (4212, minus any opt-outs). This is because POPS was limited to mothers who delivered singleton babies, and one important exclusion criterion is that the vital status of both mother and child is alive at the start of the POPStar study. Any opt-outs that are actioned during POPStar will apply to both the mother and child.

The Sub-Committee received the clarification and raised no further queries in this area.

2. **Confirm whether the children will be followed up to age 16 or age 18.**

The applicant confirmed that the study would run until the final POPS child turned 16 years. Each child would leave the cohort as they turn 16. The final POPS child was born in February 2013; therefore the close of data collection will be February 2029.

The Sub-Committee received the clarification and raised no further queries in this area.

3. **Patient Notifications and Dissent – it is requested that the following actions are undertaken to facilitate a targeted patient notification approach:**
   a. **When vital status is checked via the NHS Spine, updated address details are extracted for the mothers,**
   b. **Direct contact should be made at this address, providing a copy of the information leaflet, to enable any patient dissent to be raised,**
   c. **If this is not deemed to be feasible, provide response detailing a strong rationale to explain why this cannot be done.**

The applicant provided a copy of the leaflet which would be sent to the most recent known address for the mother, derived from the NHS Spine. Wider study documents were revised to take account of this new document and were provided for review.

The Sub-Committee received the response and supporting documentation and raised no issues in this area.

Additional Points

The applicant acknowledged the condition attached to the provisional recommendation if support, noting that the current application was restricted to linkage with HES data only. The applicant recognised that study amendments would be required to add other data sources controlled by NHS Digital if necessary. The study protocol and supporting documentation was revised to reflect this.

Amendment Request

The amendment request had been submitted to request the removal of linkage with the Department for Education from the scope of the project at this stage. The applicants had experienced significant delays to the project whilst pending confirmation of satisfactory security assurance arrangements from NHS Digital with respect of the data processing which was being carried out by the Department for Education. A decision was made to remove this element from the project until such time as the required assurance could be provided, to enable the wider elements of the proposed data linkage to be carried out by NHS Digital to proceed. The CAG was sympathetic to the delay experienced by the applicant and was content to provide a recommendation of support to the revised project scope.

Confidentiality Advisory Group advice conclusion

The CAG agreed that the minimum criteria under the Regulations appeared to have been met and that there was a public interest in projects of this nature being conducted, and therefore advised recommending support to the Health Research Authority, subject to compliance with the specific and standard conditions of support as set out below.

Specific conditions of support (Final)

1. Support is extended to the linkage with the HES database within NHS Digital only. Any requirements to link the cohort with the wider datasets held by NHS Digital should be submitted as an amendment to the application.
2. Favourable opinion from a Research Ethics Committee. **(Confirmed).**
3. Confirmation from the IGT Team at NHS Digital of suitable security arrangements via Information Governance Toolkit (IGT) submission. **(Confirmed: NHS Digital – has a published satisfactory reviewed grade on Version 14.1, 2017/1).**

Name	Capacity
Dr Tony Calland MBE	Vice Chair
Miss Kathryn Murray	Senior Confidentiality Advisor

Application title: **Trajectories of diabetes related health measures (from linked lab data) and subsequent health and educational outcomes**

CAG reference: **18/CAG/0002**

IRAS project ID: **230333**

REC reference: **17/WA/0410**

Purpose of Application

This application from Cardiff University set out the purpose of medical research aiming to better understand the effects of diabetes on educational outcomes. It was acknowledged that education may also have an impact on an individual's diabetes management. The applicants have an interest in how other factors influence the relationships between health and education, these include characteristics of the child (e.g. gender), their families (e.g. single parent families), and the health services they use (e.g. type of diabetes clinic). The project aims to use linked health and education records to quantify the associations between differences in levels of HbA1c (an indicator of longer-term blood glucose levels) and educational outcomes.

The application involves the disclosure of confidential patient information from both the National Diabetes Audit (Adults – England) and National Diabetes Audit (Adults – Wales) (held by NHS Digital) and the National Paediatrics Diabetes Audit (held by the Royal College of Paediatrics and Child Health) to NHS Wales Informatics Services (NWIS). Data will also be released from the Higher Education Statistics Agency (HESA) dataset to NWIS; however, this is out of the CAG's remit as it is not confidential patient information. Corresponding clinical data will be released direct to the Secure Anonymised Information Linkage databank (SAIL), which will then be linked with psedonymised demographic data.

The applicants clarified that HESA are providing all of the additional education data – for students in England and Wales at University plus school education data for students from English schools. The school education data for pupils from Wales is already provided by Welsh Government routinely into SAIL where is it is available in psuedonymised format for linkage to the new datasets.

The legal basis for the collection of National Diabetes Audit (England) is by Directions, National Diabetes Audit (Wales) the legal basis is "section 251" (Reference: 17/CAG/0124) and for the National Paediatric Diabetes Audit the legal basis is "section 251" (Reference: ECC 2-03(c)/2012).

A recommendation for class 1, 4 and 6 support was requested to cover activities as described in the application.

Confidential Patient Information Requested

Cohort

All birth cohorts between 1983 and 2013 within England and Wales, for whom diabetes audit data (NPDA and NDA) from 2003 to 2018 and education data from 2003 to 2018 will be requested. It is anticipated that there will be 17,195 patients included within the project.

The following items of confidential patient information are required for the purposes defined:

- NHS number – used to create anonymised linkage field,
- Date of birth – used to create anonymised linkage field, validation and translated for analysis (week of birth),
- Gender – validation and analysis,
- Postcode – validation and translated to LSOA for analysis.

Wider clinical information will be provided from the diabetes audits for inclusion in the analysis dataset.

Amendment request

The amendment requests the inclusion of an additional data item, Patient Name, from the data released by the National Diabetes Audits, in order to facilitate linkage with the wider data sources in the study.

Confidentiality Advisory Group advice

The amendment requested was considered by the Chair's Action. It was recognised that project proposed linkage with educational data. As educational data did not include NHS Number, the applicant had stated that the quality of data linkage would be increased if patient name was included within the dataset disclosed from the national diabetes audits.

In reviewing the request, the CAG agreed that the amendment appeared reasonable and agreed that the additional item of confidential patient information would improve linkage with wider datasets. The applicant had also updated the patient notification materials as part of the amendment submission, which reflected the inclusion of this additional data item.

Confidentiality Advisory Group conclusion

In line with the considerations above, the CAG agreed that the minimum criteria under the Regulations appeared to have been met for this amendment, and therefore advised recommending support to the Health Research Authority.

Specific conditions of support

1. Favourable opinion from a Research Ethics Committee (**Confirmed – 06/11/2018**).
2. Security Assurance Arrangements – **NWIS have provided a CPIP (Caldicott: Principles into Practice) report showing a 94% satisfactory assessment rate)**.

Name	Capacity
Dr Tony Calland MBE	Vice Chair
Miss Kathryn Murray	Senior Confidentiality Advisor

Application title: **A case-control study to investigate transmission routes for sporadic STEC infections in England**

CAG reference: **17/CAG/0164**

IRAS project ID: **207271**

Purpose of application

This research application from the University of East Anglia set out the purpose of identifying the most common sources of Shiga-toxin E. coli (STEC) infections in order to reduce their incidence. STEC infections are a public health concern due to the low infectious dose required for infection and the severity of the infection and associated complications. There were no recent case-control studies; an updated study was required to reflect improved detection methods and surveillance and identify current sources of infection. Recent analysis of STEC infections from Public Health England identified that while the number of infections per year remained relatively steady, those that can be attributed to food sources were falling. There was a need to identify the other transmission pathways so that preventative measures could be introduced so that the overall numbers decreased.

STEC became a notifiable illness in 2009, enabling PHE to access information on potential causes/exposures on a vast majority of identified cases. As part of national surveillance, cases will already have been identified from having provided stool samples that demonstrate the presence of STEC bacteria, and have completed a questionnaire about foods consumed and activities undertaken in the week prior to infection. Controls would be identified via NHS Digital from a database of individuals in England registered with a GP, who could be matched with cases as listed above.

Support is requested to allow the disclosure of this information from NHS Digital to PHE to allow PHE to contact the identified control group and ask them to complete the questionnaire. The questionnaire will not contain identifiable data, therefore will be returned directly to the University of East Anglia from the participant.

Support is also requested for staff at PHE to identify cases from the database held by PHE, match them to controls and provide a pseudonymised dataset to UEA for the purpose of the study. PHE would retain the 'key' matching data to controls.

A recommendation for Class 1, 2, 3 and 6 support was requested for the purpose of extracting and anonymising the information, to obtain and use information about present or past geographical location, to select and contact patients to seek their consent and to allow access to an authorised user for the above purposes.

Confidential patient information requested

Access was requested to:

1. Data from PHE in relation to patients on the national surveillance database held by PHE, comprising identified cases with a STEC-positive fecal sample and a copy of their enhanced surveillance questionnaire available on the PHE database.

2. Data from NHS Digital in relation to: randomly chosen patients (or parents where the patients were are children), fulfilling age frequency matching to cases, from a database by NHS Digital of individuals in England registered with a GP.

3. Data transferred to PHE from NHS Digital would include the following details for the purpose of matching controls to identified cases and sending invitation letters and questionnaires:

- Name,
- Date of birth,
- Full address including postcode.

The following details would be accessed from the surveillance database at PHE:

- Name,
- Address,
- Gender,
- Ethnicity,
- Status of STEC infection,
- Lab sample number and results of lab analysis.

Amendment request

The amendment request sought support for an extension to the study recruitment period for case and control patients through to 31 March 2020. Revisions had also been made to the patient-facing documentation, following patient and public engagement activities, which had been submitted for review.

Confidentiality Advisory Group advice

The CAG acknowledged that funding for the study had been extended which had brought about the request to extend the recruitment period. The ongoing public interest in the study was recognised and it was noted that the extended recruitment period would increase the data available for analysis.

The revised patient-facing materials were received and it was acknowledged that this documentation had already been considered by the REC and a favourable ethical opinion provided. The documentation had been revised with input from patients and the public, following the engagement activity which carried out as a condition of support for the application. The documentation was received and no issues were raised.

Confidentiality Advisory Group conclusion

In line with the considerations above, the CAG agreed that the minimum criteria under the Regulations appeared to have been met for this amendment, and therefore advised recommending support to the Health Research Authority.

Specific conditions of support

1. Confirmation of suitable security arrangements via IG Toolkit submission (**Confirmed – Public Health England has a published satisfactory reviewed grade on Version 14.1, 2017/18**).

2. Confirmation of a favourable opinion from a Research Ethics Committee (**Confirmed – 01 November 2018**).

Name	Capacity
Dr Tony Calland MBE	Vice Chair
Miss Kathryn Murray	Senior Confidentiality Advisor

Study title: **AgeX**

CAG reference: **ECC 1-04(b)/2010**

Amendment Request

The amendment requested the following changes:

1. Public Health England has amended the process for circulation of breast screening invitations – these will not be sent based on date of birth, rather than date of birth, which had resulted in a change to the eligibility criteria. This has required changes to the study protocol and supporting patient-facing documentation to align with the screening invitation process.

2. Linkage of the AgeX trial database with the Million Women Quality of Life Study. The linkage would be facilitated using NHS Number and date of birth only. All linkage would be performed on site at the Cancer Epidemiology Unit, University of Oxford.

Confidentiality Advisory Group advice

The CAG recognised that the initial request had been brought about due to changes in the way Public Health England defined age in the generation of breast screening invitations. The amendments requested by the applicant would bring the study in line with the changes made at the broader screening services level. No issues were raised in this area.

In relation to the supplementary data linkage with the Million Women study, the applicant had confirmed that, for women who were found to overlap in the two studies, a new unique ID would be generated. It was confirmed that all items of confidential patient information used for linkage would be deleted from the resulting dataset. The resulting analysis dataset would be fully anonymised and findings could not be linked back to identify individuals in either of the studies. The applicant clarified that the linked anonymised analysis dataset would include information from AgeX on the date randomised, whether randomised to be invited for screening or not, and age at randomisation; and information from the Million Women Study will include quality of life and related measures, as well as health and lifestyle potential confounding factors. The CAG was assured that there was ongoing public interest in the proposed additional linkage.

Confidentiality Advisory Group conclusion

In line with the considerations above, the CAG agreed that the minimum criteria under the Regulations appeared to have been met for this amendment, and therefore advised recommending support to the Health Research Authority.

Specific conditions of support

1. Favourable opinion from a Research Ethics Committee (**Confirmed**).

2. Confirmation from the IGT Team at NHS Digital of suitable security arrangements via Information Governance Toolkit (IGT) submission (**Confirmed – Cancer Epidemiology Unit published satisfactory reviewed grade on V14.1, 2017/18**).