WELCOME TO CRIS

Clinical Records Interactive Search system

1. INTRODUCTION

What is CRIS?
The Clinical Record Interactive Search (CRIS) is a software development which allows interrogation of SLaM's electronic clinical records for research purposes. It combines search technology with processes for deidentifing the records to protect the legal and ethical rights of service users whose data are stored in the system. CRIS allows the user to extract output into database formats (STATA, Excel, etc.) commonly used by researchers for further analysis.

Source Data - the electronic Patient Journey System (ePJS)
SLaM's electronic clinical records system (ePJS) and the equivalent system in the IAPTus services managed by SLaM are the data sources for CRIS. If you are not familiar with these systems, the CRIS team are happy to sit down with potential users to orientate them. SLaM has been 'paper-free' since 2007 so all records are on ePJS in various formats – tick-boxes, dates, drop-down options, free text, document attachments, etc. CRIS allows access to all information on ePJS and/or IAPTus in all formats, apart from the identifiers which have been removed to preserve anonymity.

When ePJS was introduced, some data from earlier systems were imported so there are records dating to earlier than 2007, but earlier information (particularly at times when paper records were still being used) will be more basic.

Carrying out a CRIS project
To use CRIS successfully, all researchers will need to:

-   Meet the necessary security requirements of data access, analysis and publication

-   Understand the source data and how they are likely to be recorded

There are a number of governance requirements which need to be in place before work on CRIS data can begin. This guide is designed to help you through the process of getting started with your project and act as a reference for key information you will need at all stages of the project.

If you would like further information or to arrange a meeting to discuss your project with the team, please contact us at cris.administrator@slam.nhs.uk or visit our website: www.maudsleybrc.nihr.ac.uk/cris

2. CRIS PROJECT APPLICATION PROCEDURE

In order to use CRIS for your research you will need to submit a CRIS project application which is reviewed by the CRIS Oversight Committee for approval.

To submit an application please complete the form at the following link:

www.slam.nhs.uk/research/cris/cris-project-application

(Please note that you cannot save your application once you have started it so you will have to complete it in one go.)

When completing the application form please be aware that the lay summary will appear on the BRC website and therefore you should ensure that you are happy for this to be published.

Once your application has been submitted it is then reviewed by the CRIS Oversight Committee for approval. The committee is patient-led and is responsible for overseeing and monitoring the use of CRIS. Applications to use CRIS are judged according to:

- Underlying value and potential benefits of the project e.g. to inform patient care.
- Appropriate supervision/governance
- Inadvertent risk of deanonymisation e.g. the likelihood of a particularly small cohort. In these cases, additional measures may be put in place to safeguard confidentiality.

Applications are circulated to the committee once a week and the approval process takes approximately 4 weeks. If the Oversight Committee has any questions or requires further clarifications for your project, the process can take longer. For more information on the Oversight Committee, including their Terms of Reference, please see the CRIS Security Model.

Once your project has been approved by the Oversight Committee you will receive an email from the CRIS Administrator confirming this.

3. SLAM CONTRACTS

The data within CRIS belongs to SLaM. In order to access CRIS every person on the project who will be involved in the data collection/ analysis will need a contract with SLaM (substantive or honorary), a research passport (letter of access), or KHP Passport. A contract with SLaM ensures users are contractually obliged to adhere to relevant Trust policies regarding confidentiality and data protection.

If you would like to access CRIS data linked to an external dataset, e.g. Hospital Episode Statistics (HES), Mortality data, etc., then please ensure that you have discussed this with the CRIS Administrator (debbie.cummings@slam.nhs.uk) before applying for a contract as the contract required can differ depending on the linked data you wish to access.
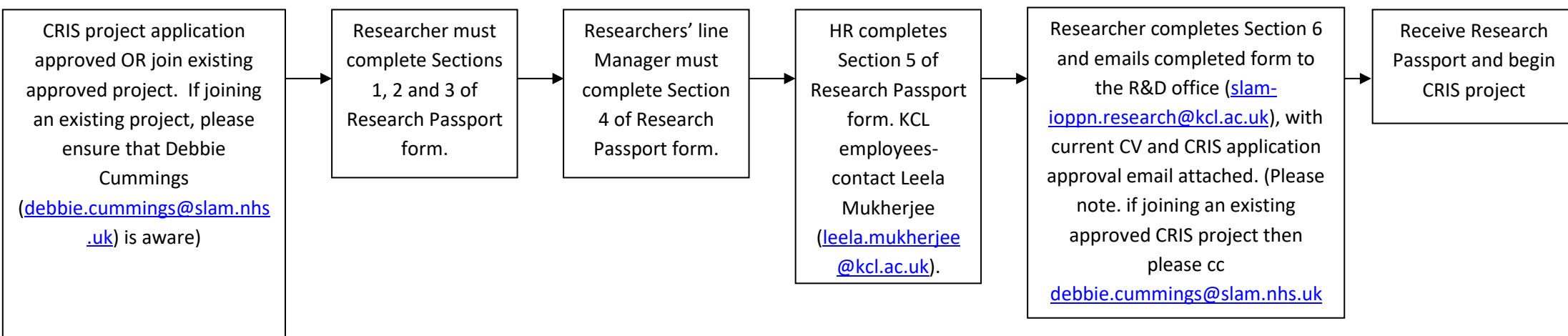
KHP Passport:
For individuals substantively employed in a King's Health Partners (KHP) organisation (i.e. King's College Hospital NHS Foundation Trust, Guy's and St Thomas' NHS Foundation Trust or King's College London university), the simplest and quickest contract to obtain is a KHP Passport – please contact your HR department to obtain one, this will then need to be signed by the person who is managing you whilst you are working in SLaM. Otherwise please see below:
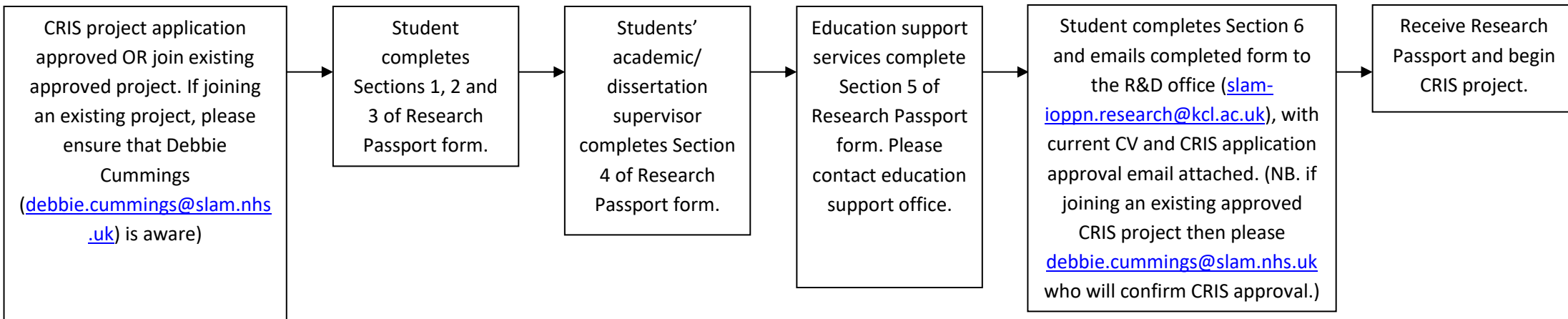
Research Passport (letter of access):
Research Passport's do not require a current DBS check or occupational health clearance and can be obtained by individuals employed by or studying at a UK university who are working on specific approved CRIS projects with **NO** linked data for a specified amount of time.

Researchers and Academics- The Research Passport must be signed off by your university HR department (Leela Mukherjee in KCL HR for those employed by KCL) and issued by the R&D office

| CRIS project application approved OR join existing approved project. If joining an existing project, please ensure that Debbie Cummings (debbie.cummings@slam.nhs.uk) is aware) | → | Researcher must complete Sections 1, 2 and 3 of Research Passport form. | → | Researchers' line Manager must complete Section 4 of Research Passport form. | → | HR completes Section 5 of Research Passport form. KCL employees- contact Leela Mukherjee (leela.mukherjee@kcl.ac.uk). | → | Researcher completes Section 6 and emails completed form to the R&D office (slam-ioppn.research@kcl.ac.uk), with current CV and CRIS application approval email attached. (Please note. if joining an existing approved CRIS project then please cc debbie.cummings@slam.nhs.uk | → | Receive Research Passport and begin CRIS project |

Postgraduate and PhD Students – The Research Passport should be signed off by Education Support Services at your university and issued by the R&D office.

| CRIS project application approved OR join existing approved project. If joining an existing project, please ensure that Debbie Cummings (debbie.cummings@slam.nhs.uk) is aware) | → | Student completes Sections 1, 2 and 3 of Research Passport form. | → | Students' academic/ dissertation supervisor completes Section 4 of Research Passport form. | → | Education support services complete Section 5 of Research Passport form. Please contact education support office. | → | Student completes Section 6 and emails completed form to the R&D office (slam-ioppn.research@kcl.ac.uk), with current CV and CRIS application approval email attached. (NB. if joining an existing approved CRIS project then please debbie.cummings@slam.nhs.uk who will confirm CRIS approval.) | → | Receive Research Passport and begin CRIS project. |

SLaM Honorary Contract:

Individuals who are not eligible for either a KHP passport or a Research Passport can apply for a SLaM Honorary Contract. Please contact Debbie Cummings (debbie.cummings@slam.nhs.uk) for the application pack.

NHS to NHS Contract:

If you work for another NHS organisation you may be eligible for an NHS-to-NHS contract, please contact the medical HR Team at your Trust for more information.

4. WHAT DO I NEED TO ACCESS CRIS?

Data within CRIS are subject to the same governance requirements as the identifiable data within the SLaM medical record (ePJS); therefore, data must remain within the SLaM firewall at all times. In order to access CRIS for your research you will need the following which should be obtained in the order presented:

- **A. A SLaM username and log in**

- **B. Access to the CRIS shared drive**

- **C. An account with CRIS Front End / SQL CRIS –** this is only required if conducting free text work

- **D. Information Governance Training Certificate**

A.   SLAM Username and Log In

In order to obtain a SLaM log in you will need to send the CRIS Administrator (debbie.cummings@slam.nhs.uk) a copy of your contract, i.e. KHP Passport, Research Passport (letter of access), or SLaM Honorary contract. A copy will be sent to SLaM HR, for the purpose of their new profiling system, they will in turn give the SLaM service desk team the permission to issue you with a network account.

Once IT have created the new user account, your SLaM username and log in details will be emailed to your SLaM manager who can then inform you of what these are.

B.   Access to the CRIS Shared Drive

The CRIS shared network drive (called "BRC_CRIS") is where you will store all work related to your CRIS project.

When you begin your project, you can create your own project folder within the shared drive to save your work in. You must make sure that all your CRIS work is saved on the shared drive. This is to ensure that the data remains behind the SLaM firewall and is safe as the drive is backed up by SLaM Digital Services.

To obtain access to this drive please email the CRIS Administrator (debbie.cummings@slam.nhs.uk) with your SLaM username only, (not password).

Once access to this drive has been granted you can map the drive by doing the following:

1. Open File Explorer
2. Right Click on Network
2. Click Map Network Drive
3. In Folder type in \\slam\brc\data\brc_cris
5. Make sure Reconnect at Login is checked and click Finish
6. You will need to map the drive on each new computer that you use

C.   CRIS Front End Account

The CRIS Front End can be used to conduct manual reviewing of free text. To obtain a CRIS front end account you will need to fill in a registration form:
http://eccriswebsvr/Login?ReturnUrl=%2F

In the SLaM Username field, please add your first initial and surname only, DO NOT add @slam.nhs.uk

Once you have completed the registration form, please email the CRIS Administrator (debbie.cummings@slam.nhs.uk) who can authorise your account.

All projects using the CRIS Front End to conduct manual reviewing of free text will be required to have a Free Text Security Review completed. This will be completed with a member of the CRIS Extraction Team, please email the CRIS Extraction Team Lead for more information (amelia.jewell@slam.nhs.uk).

If you have the necessary skills and would like to work on CRIS through the SQL database please email the CRIS Administrator (debbie.cummings@slam.nhs.uk) in order to obtain access.

D.   Information Governance (IG) Training

Before you can access any data and systems you need to undertake IG training and this training needs to be completed annually.

If you are employed by SLaM, this can be done via LEAP at the following link:
https://leap.slam.nhs.uk/course/view.php?id=179

If you are employed by KCL or a KCL student, this can be done via the following link:
https://internal.kcl.ac.uk/about/secretariat/business-assurance/compliance/gdpr/GDPR-training

If you cannot complete either of the above, please contact the CRIS Administrator (debbie.cummings@slam.nhs.uk) who can advise on the SLaM IG training dates which are held by the IG Team via Microsoft Teams. This training lasts just over an hour and takes place every month. No

certificate is issued through this approach, but researchers will be approved to continue their work with SLaM data.

Please provide relevant evidence of completion to the CRIS Administrator - certificates over 1 year old will not be accepted.

Please Note. If you are coming from an existing course or other institution, please bring your own IG training credentials, these will be considered as a potentially appropriate alternative.

5. WHAT DO I DO ONCE MY PROJECT IS APPROVED?

CRIS is a service and the team are available to answer any queries and offer guidance throughout your time using CRIS. As a first step once your project has been approved, please contact Amelia Jewell, Research Informatics and Governance Lead, (amelia.jewell@slam.nhs.uk) who will arrange for you to meet with a member of the Extraction Team to discuss your data specification and extraction.

Project Follow-up Requirements
To ensure our record keeping and audit processes are up to date we require an update on the status of your project annually. Our CRIS Administrator will contact the named researcher on your project application via email. **Please note, that this is a condition of project approval**, failure to respond to these requests may result in your project approval being withdrawn and removal of your access to CRIS.

Hot Desks
When it comes to conducting your data collection and analysis there are 12 hot desks available at the CTI for CRIS users. **You need to book a computer before using**, hot desks can be booked at the following link:
https://outlook.office365.com/owa/calendar/CRISHotDesks@slamonline.onmicrosoft.com/bookings/

Out of Hours Working
The CTI is open from 9am until 5pm, Monday - Friday. To access the CTI, please make sure your Kings ID card has access to the BRC 3rd Floor CTI office or please liaise with the King's security staff on reception or via email: kcl-denmarkhill.security.services@kcl.ac.uk.

Remote Working - Logging on via Windows Virtual Desktop
Please note VPN tokens are no longer issued and you now log on via the Windows Virtual Desktop. Instructions to log on will be sent to you when the Digital Services Service Desk have set up your new SLaM network account. Within the virtual desktop you can now access R and STATA.

Amendments to Existing Projects
If you would like to make an amendment to your existing approved CRIS project please email the CRIS Administrator (debbie.cummings@slam.nhs.uk) describing your amendment. Please be aware that if your amendment is significant it may need to be approved by the CRIS Oversight Committee again.

Adding New Researchers to my Project
CRIS approval is project specific and not person specific so new researchers (staff or students) can be added to the project at any point. The only stipulation is that they must have a contract with SLaM (please see Section 3) and up to date IG Training. If you would like to add somebody to your project, please email the CRIS Administrator (debbie.cummings@slam.nhs.uk) with the individual's details.

6. DATA ANALYSIS TOOLS

SLaM has the following programs available for the analysis of CRIS data, all of which can be accessed via the Windows Virtual Desktop:

- **STATA**

- **R**

For further details or to discuss further software requirements, please contact the CRIS Administrator (debbie.cummings@slam.nhs.uk).

Please note. SPSS is no longer available on the SLaM Windows Virtual Desktop

7. PUBLICATIONS

If any of your CRIS work results in publications, please do let us know as we are always keen to hear about them. We also list CRIS publications on our website:
www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-publications/

Acknowledgments
If publications are produced the following entities need to be acknowledged as part of using CRIS:

'This [paper/study/poster etc] represents independent research [part] funded by the NIHR Maudsley Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London. The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.'

If your publication has used the linkage with Hospital Episode Statistics (HES) and/or ONS Mortality data, please include the below acknowledgement:

We would like to acknowledge NHS England as the provider of the [Hospital Episode Statistics (HES) and/or Mortality data]; those who carried out the original collection and analysis of the data bear no responsibility for their further analysis or interpretation.

Qualitative Studies
If you intend to quote text from CRIS (whether for internal or external publication) in any of your output, you must ensure that this is first checked by the CRIS Oversight Committee. Please email the CRIS Administrator (debbie.cummings@slam.nhs.uk) clearly stating the contents of the text and also the context of where the text will be used (i.e. presentation slide, journal article, or other audit publications).

Data Access Statement
Journals may require a data access statement to be made as part of a submission for publication. If this is requested, please use the following:

Data are owned by a third party, Maudsley Biomedical Research Centre (BRC) Clinical Records Interactive Search (CRIS) tool, which provides access to anonymised data derived from SLaM electronic medical records. These data can only be accessed by permitted individuals from within a secure firewall (i.e. the data cannot be sent elsewhere), in the same manner as the authors. For more information please contact: cris.administrator@slam.nhs.uk.

Ethical Approval
CRIS has ethical approval from the South Central – Oxford C Research Ethics Committee (REC) as a database for secondary research. The REC reference is: **23/SC/0257**.

8. ADDITIONAL INFORMATION

SLaM Digital Services

If you have any IT issues whilst working on your CRIS project, please contact SLaM Digital Services helpdesk on 020 3228 8888.

CRIS Website

The CRIS website can be accessed at the following link: www.maudsleybrc.nihr.ac.uk/cris/

On the website you can find more information about the projects currently being conducted using CRIS, as well as publications that have resulted from CRIS and detailed information on the CRIS Linkages that have been conducted.

Consent for Contact (C4C)

If you are using CRIS for recruitment purposes, then please ensure you have read the C4C guidance notes which are available on the Maudsley BRC website at the following link:
www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/information-for-researchers/

The CRIS Security Model

The CRIS security model is available to read on the Maudsley BRC website at the following link:
www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/information-for-researchers/

Disposal of Data

Once your project has been completed, the CRIS team will store your dataset in a secure SLaM network location for a period of 10 years. During this time your data can still be accessed. Please contact the CRIS Administrator for more information. After 10 years your dataset will be destroyed according to the SLaM data destruction policy.

CRIS Team Address

The address for the CRIS Team is:

Centre for Translational Informatics (CTI)
PO Box 92
Institute of Psychiatry, Psychology & Neuroscience at King's College London
16 DeCrespigny Park
London
SE5 8AF

10. CONTACT DETAILS

Enquiries:
Email: Cris.Administrator@slam.nhs.uk

CRIS Administrator - Debbie Cummings
Email: Debbie.Cummings@slam.nhs.uk

Research Informatics and Governance Lead - Amelia Jewell
Email: Amelia.Jewell@slam.nhs.uk

Natural Language Processing (NLP) Lead - Jyoti Sanyal
Email: Jyoti.Jyoti@slam.nhs.uk

SLaM Digital Services Helpdesk
Phone: 020 3228 8888

For a full list of staff that support CRIS infrastructure, development, and training, please see:
www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-team/