

ERESEARCH NEW ZEALAND 2022

CADRE PLATFORM PROJECT

LOOKING THROUGH THE FIVE SAFES LENS – SENSITIVE DATA
SHARING ARRANGEMENTS AND RESEARCH WORKFLOWS

CADRE - COORDINATED ACCESS FOR DATA, RESEARCH AND ENVIRONMENTS

www.cadre5safes.org.au

CADRE PLATFORM PROJECT

1. Project
 - Aims, partners and outcomes
 - Platform and phases
 - AU & NZ/A social science
 - Five Safes framework (AU & NZ/A)
2. CADRE Five Safes framework
 - Quantitative and qualitative data access
 - Extensions to Five Safes
 - Key Safe intersections & alignments
3. Applying CADRE framework
 - Australian Data Archive
 - Accessing different sensitive datasets



SAFETY FIRST

CADRE PROJECT

Coordinated Access for Data, Research and Environments – A Five Safes Implementation Framework for Sensitive Data. (May 2021-June 2023)

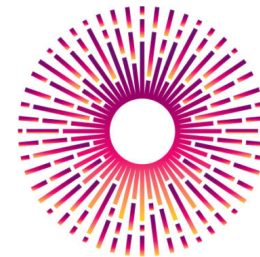
Five Safes Framework:

1. Safe People
2. Safe Data
3. Safe Settings
4. Safe Projects
5. Safe Outputs

Best Practice Guide to Applying Data Sharing Principles, 15 March 2019, Dept Prime Minister and Cabinet, Australian Government.

Core aims are to operationalise the Five Safes framework and establish a shared and distributed sensitive data access management platform for the social sciences and related disciplines.

CADRE PARTNERSHIP



CADRE OUTCOMES

There are five project outcomes:

1. Shared conceptual framework

2. Information exchange protocols

3. Integrated data access management platform

4. Pilot and production platform integrations

5. Training and engagement

CADRE PLATFORM

A system to	By means of	In order to
<p>Increase the speed at which social sciences and related disciplines get access to sensitive data</p> <p>Decrease the risk, time and costs associated with providing access to data (for data holders) and accessing data (for researchers)</p>	<p>The development of a shared and distributed sensitive data management platform using the Five Safes framework and common accreditation and information exchange protocols</p>	<p>Enable data owners and users to address the core concerns around governance, creation, management and sharing of sensitive data for research</p> <p>Share and move sensitive data safely between higher education, national research and government facilities and services</p>

CADRE PHASES

There are three project phases
Moving from phase 1 to 2 in 2022

1. Conceptualisation – framework and protocols

2. Development – platform and four integration pilots

3. Operations – move into production and more pilots

CADRE PLATFORM – STAGE 1

Dashboard and alerts	Information architecture	Scholarly graph
Assistance around the provision of sensitive data (decision-support system)	Improving information and interoperability between platform and connected systems e.g., Augment API (Research Graph)	Visibility and traceability of outputs (footprint) – using public scholarly information (PIDs)



AU & NZ/A SOCIAL SCIENCE RESEARCH NETWORKS

Trans-Tasman peer network connections:

A/Prof Barry Milne (COMPASS) UAUCK (IAB)

Statistics New Zealand (Five Safes)

UQ ISSR (Centre Social Data Analytics) & AUT

Indigenous data sovereignty (IDN & TMR)

Longitudinal studies: Elections & Values

FIVE SAFES FRAMEWORK – ONDC (AU)

The Data Sharing Principles provide a common operating model within the public service to help with consistent and shared practices for data management.

Safe people – the user has the appropriate authority to access the data.

Safe projects – data is shared for an appropriate purpose that delivers a public benefit.

Safe settings – the environment in which the data is shared minimises the risk of unauthorised use or disclosure.

Safe data – appropriate and proportionate protections are applied to the data.

Safe output - the output from the data sharing arrangement is appropriately safeguarded before any further sharing or release.

FIVE SAFES FRAMEWORK – STATS NZ

Data is only provided if all the 'five safes' conditions are met.

Safe people – researchers are vetted and must commit to use data safely before they can access the data.

Safe projects – to gain access to integrated data, researchers must have project they can demonstrate is in the public interest.

Safe settings – a range of privacy and security arrangements keep data safe.

Safe data – identity is protected. Data has had identifying information removed, and researchers only get access to the data they need.

Safe output – all information is checked to ensure it does not contain any identifying results.

December 2, 2021

Report Open Access

CADRE Five Safes Framework - Conceptualisation and Operationalisation of the Five Safes Framework

 Steven McEachern

The CADRE Five Safes framework is an output of the CADRE ([Coordinated Access for Researchers, Data and Environments](#)) Platform project. The CADRE framework includes the conceptual underpinnings and the guardrails for sensitive data access management and the range of information associated with the Five Safes principles that can be operationalised in a decision-support system.

- In the **Introduction and Context** sections the CADRE Platform project and the social science research data management practices associated with sensitive quantitative and qualitative data are outlined.
- In the **Conceptualisation** section a full exploration is undertaken of: the uptake of Five Safes framework in Australia; the concepts from the Five Safes framework i.e., projects, people, data, settings and outputs; additional concepts i.e., organisations and groups; and key intersections and alignments of these concepts.
- In the **Operationalisation** section the information requirements associated with managing sensitive data access requests and provisioning research environment services for sensitive data analysis are evaluated and initial information and data models are proposed for the CADRE information exchange.
- In the **Appendices** the user requirements from project partners helping to develop the CADRE Platform are summarised and sensitive data categorisations are collated.

Preview

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174

views

135

downloads

[See more details...](#)

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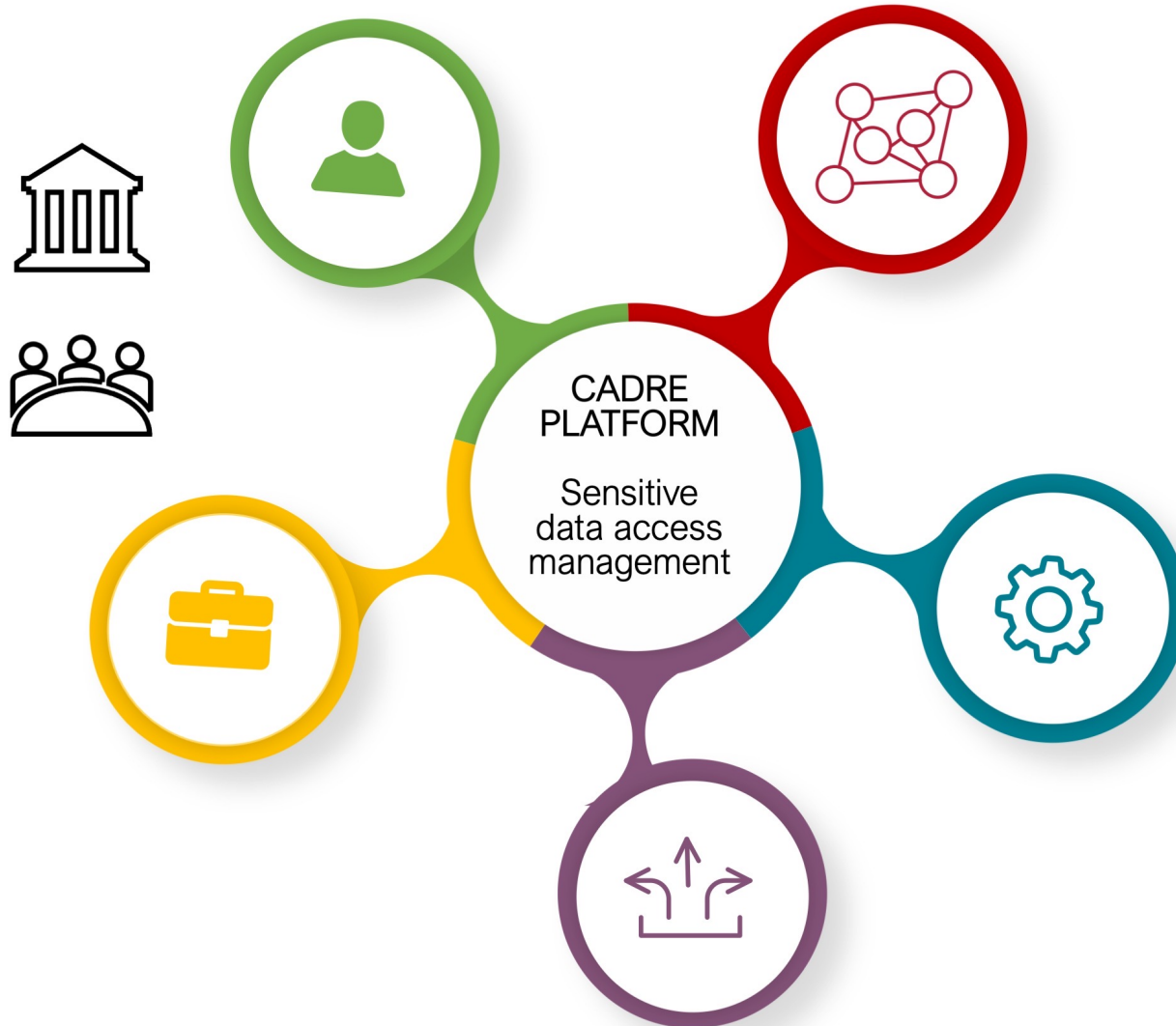
CADRE FIVE SAFES FRAMEWORK



CADRE FIVE SAFES FRAMEWORK

Extension

CADRE interpretation:
Safe organisations
Safe groups



Safe people

CADRE interpretation:
Are the identities of researchers and their track record verifiable?



Safe organisations

CADRE interpretation:
Is the identity of the organisation, the researchers affiliation and their track record verifiable?

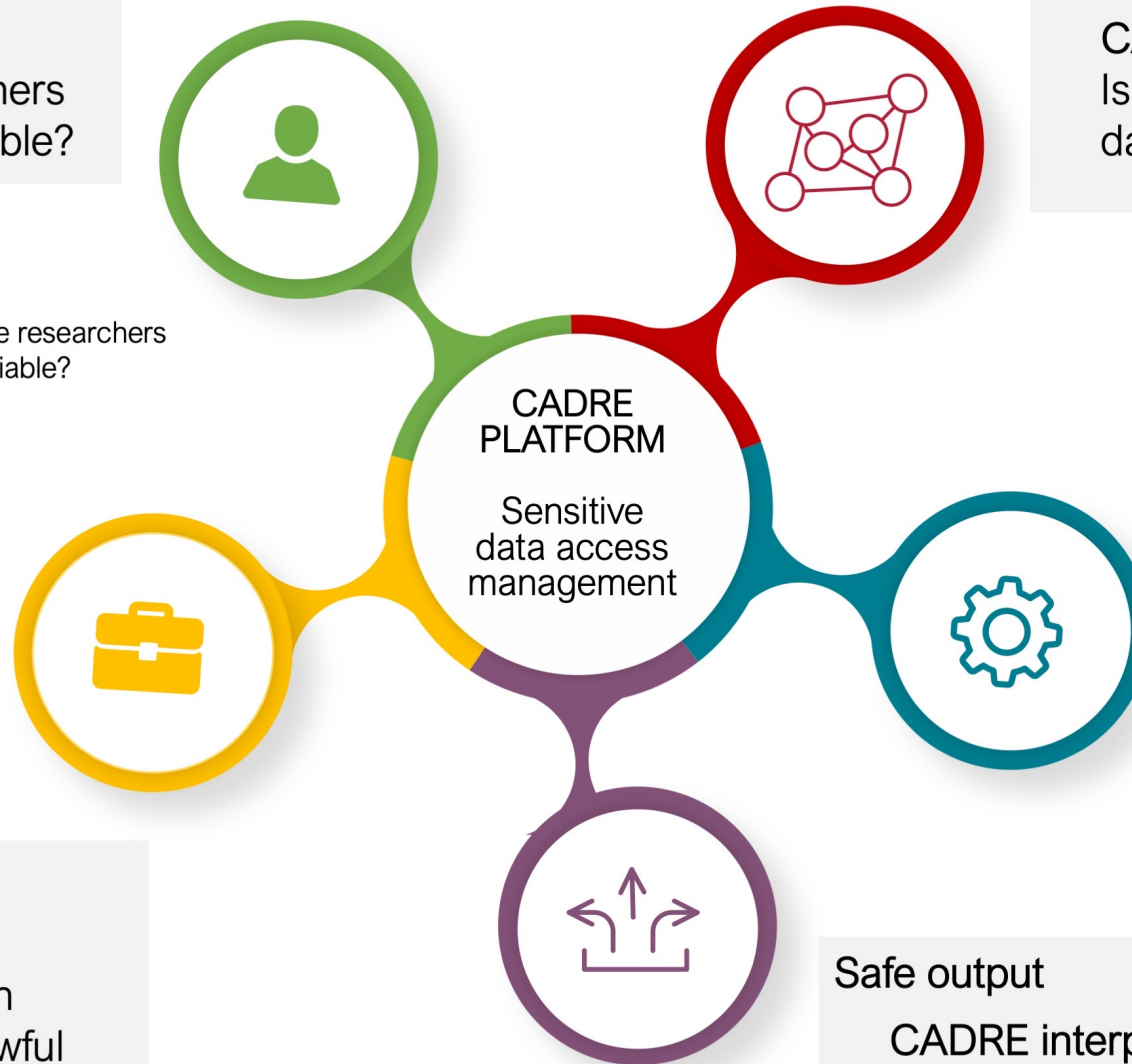


Safe groups

CADRE interpretation:
Is the identity of the group and the researchers membership verifiable?

Safe projects

CADRE interpretation:
Will the data be used for an appropriate, ethical and lawful purpose that delivers a public benefit?



Safe data

CADRE interpretation:
Is there a disclosure risk in the data itself?

Safe settings

CADRE interpretation:
Will the data be used in an appropriately safe and secure environment?

Safe output

CADRE interpretation:
Is the output verified as suitable for release?

CADRE FIVE SAFES FRAMEWORK

Key Intersections

CADRE interpretation:

People and projects

Projects and data

Data and settings

Settings and outputs

People and settings

People and outputs



CADRE FIVE SAFES FRAMEWORK

Key Alignments:

CADRE interpretation:

People and projects
Data, settings and outputs
People, data, settings and outputs

Links and overlaps between projects and groups



APPLYING THE FRAMEWORK



APPLYING THE FRAMEWORK

The safety assessment requires that all of the “Safes” are considered and the interactions between them.

Tension lies between the need for a case-by-case assessment and the capacity to streamline common use cases.



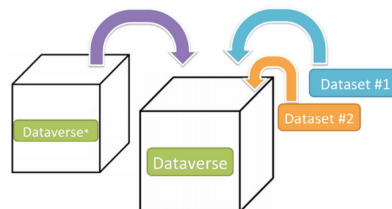


Accessing Data

The ADA Dataverse Collection...

The ADA collection is managed through the Dataverse platform developed by the Institute for Quantitative Social Science at Harvard University. Dataverse is the overarching archive, and is then organised into multiple sub-dataverses (Figure 1).

Schematic Diagram of a **Dataverse** in Dataverse 4.0

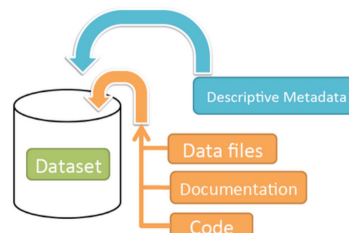


Container for your **Datasets** and/or **Dataverses***

* Dataverses can now contain other Dataverses (this replaces Collections & Subnetworks)

Each dataverse contains datasets, other documentation and associated metadata (Figure 2).

Schematic Diagram of a **Dataset** in Dataverse 4.0



Container for your data, documentation, and code.



APPLYING THE FRAMEWORK

EXAMPLE DATASETS

Variations in:

- Safety checks needed
- Information exchanged
- Legal instruments

1. Survey of the Bangladeshi People (Asia Foundation)

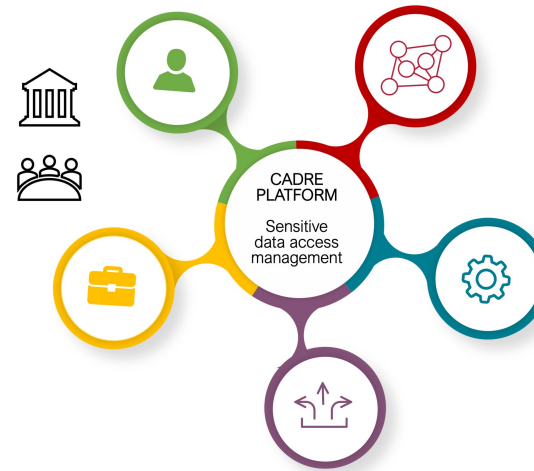
2. National Drug Strategy Household Survey (AIHW)

3. Ten to Men – Longitudinal Study on Male Health (AIFS)

SURVEY OF BANGLADESHI PEOPLE

Safety process:

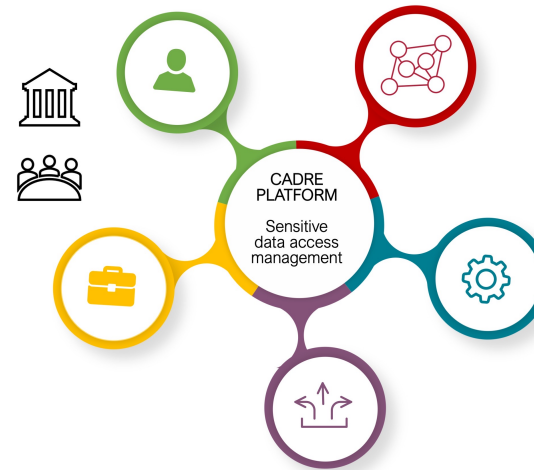
- ADA T&C
- Validating the person
- Project description



NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY

Safety process:

- ADA T&C
- Validating the person
- Project description
- Access agreement



Australian Government

**Australian Institute of
Health and Welfare**

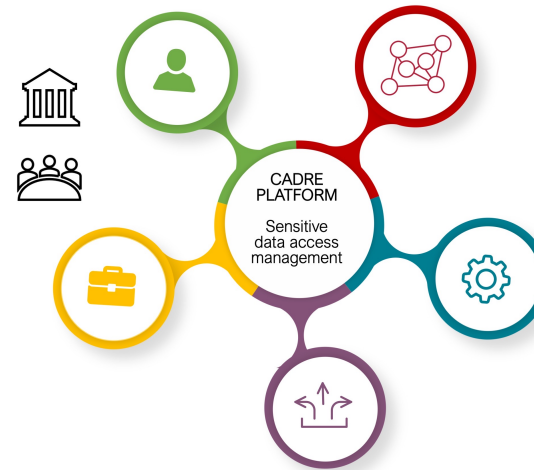
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TEN TO MEN – LONGITUDINAL STUDY ON MALE HEALTH

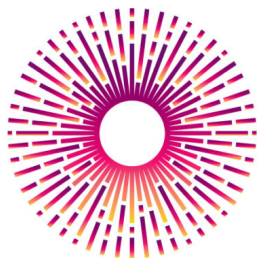
Safety process:

- ADA T&C
- Validating the person
- Project description
- Detailed guidelines
- Access agreement



Australian Government

Australian Institute of
Family Studies



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CADRE FIVE SAFES FRAMEWORK - FEEDBACK

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Australian Research Data Commons

