About this Project

ARC Future Fellowship: Digital and data literacies for sexual health policy and practice (FT210100085)

Funder: Australian Research Council
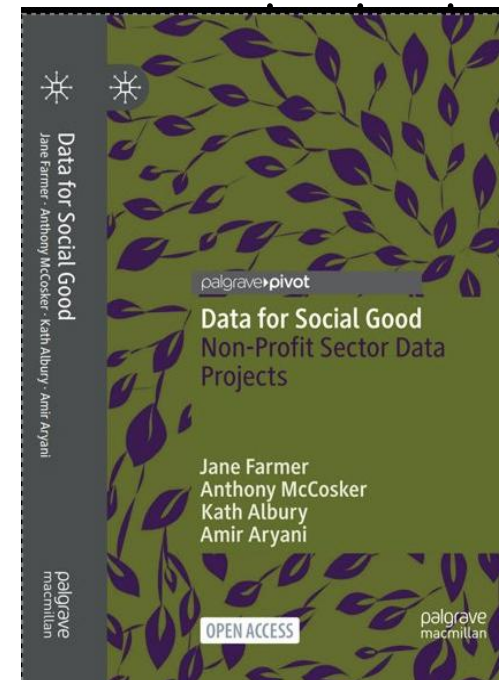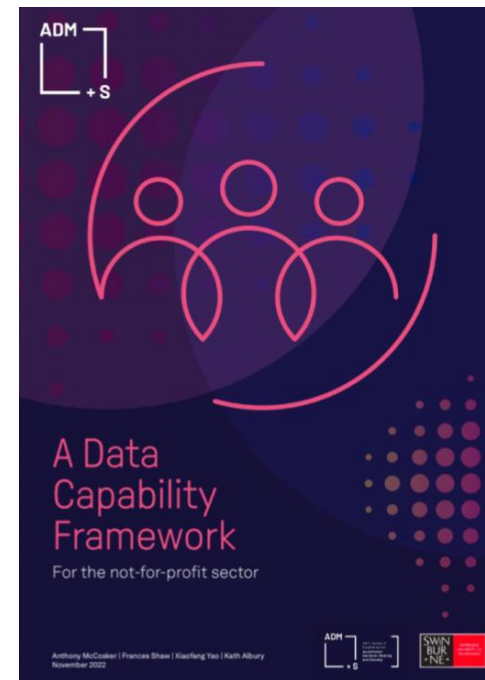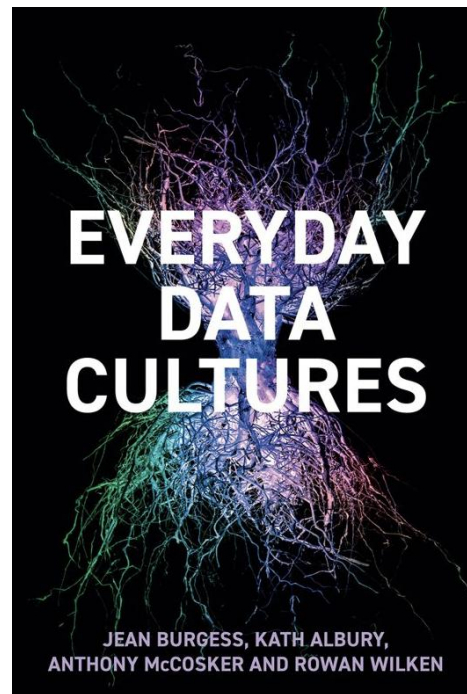
Duration: 2022-2026

Project Team

Professor Kath Albury Future Fellow, Associate Investigator, ARC Centre of Excellence for Automated Decision-Making + Society;

Dr Samantha Mannix Postdoctoral Research Fellow, Affiliate Investigator, ARC Centre of Excellence for Automated Decision-Making + Society;

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EVERYDAY DATA CULTURES

JEAN BURGESS, KATH ALBURY, ANTHONY McCOSKER AND ROWAN WILKEN

ADM +S

A Data Capability Framework

For the not-for-profit sector

Anthony McCosker | Frances Shaw | Xiaofang Yao | Kath Albury
November 2022

Data for Social Good
Jane Farmer · Anthony McCosker · Kath Albury · Amir Aryani

palgrave▸pivot

Data for Social Good
Non-Profit Sector Data Projects

Jane Farmer
Anthony McCosker
Kath Albury
Amir Aryani

OPEN ACCESS

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Why are data capabilities important for HIV/SRH?

- Data-driven technologies are **central** to healthcare, research and social support systems (ie digital intake forms and surveys, automated decision-making tools, client management software) **and** community experiences of connection, wellbeing & learning (ie dating app profiles/search practices/AI companions/chatbots)

- HIV and SRH data are sensitive and can be stigmatising

- Data are generated, circulated and interpreted by clinical and health promotion practitioners, researchers/epidemiological surveillance systems, policy-makers, commercial actors **and** community/health consumers

Iterative stages of DDCSRH Model and Website Development: Stage One

Questions

How are digital and data literacies defined in existing literature?

How are digital and data literacies defined in policy and practice?

What are the best models for workforce resources?

Methods

Narrative literature review

29 key informant interviews
Academics and practitioners

29 key informant interviews
Academics and practitioners

Findings

Literacy implies a deficit and focuses on health consumers.

Capabilities approach (McCosker et al, 2022) more useful/applicable in this context.

Outcomes

Digital and Data Capability Models

Sense-checking ERG

Refine Models
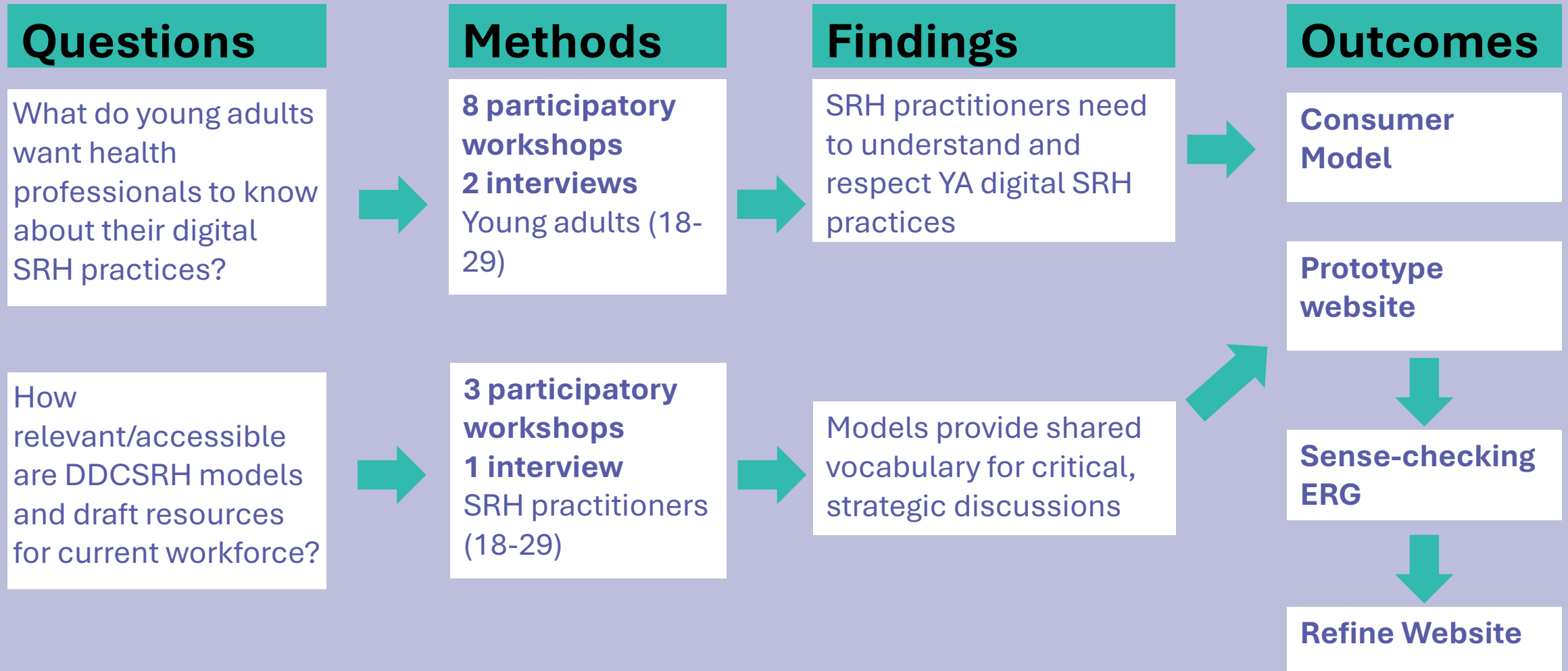
Methods

Literature Review

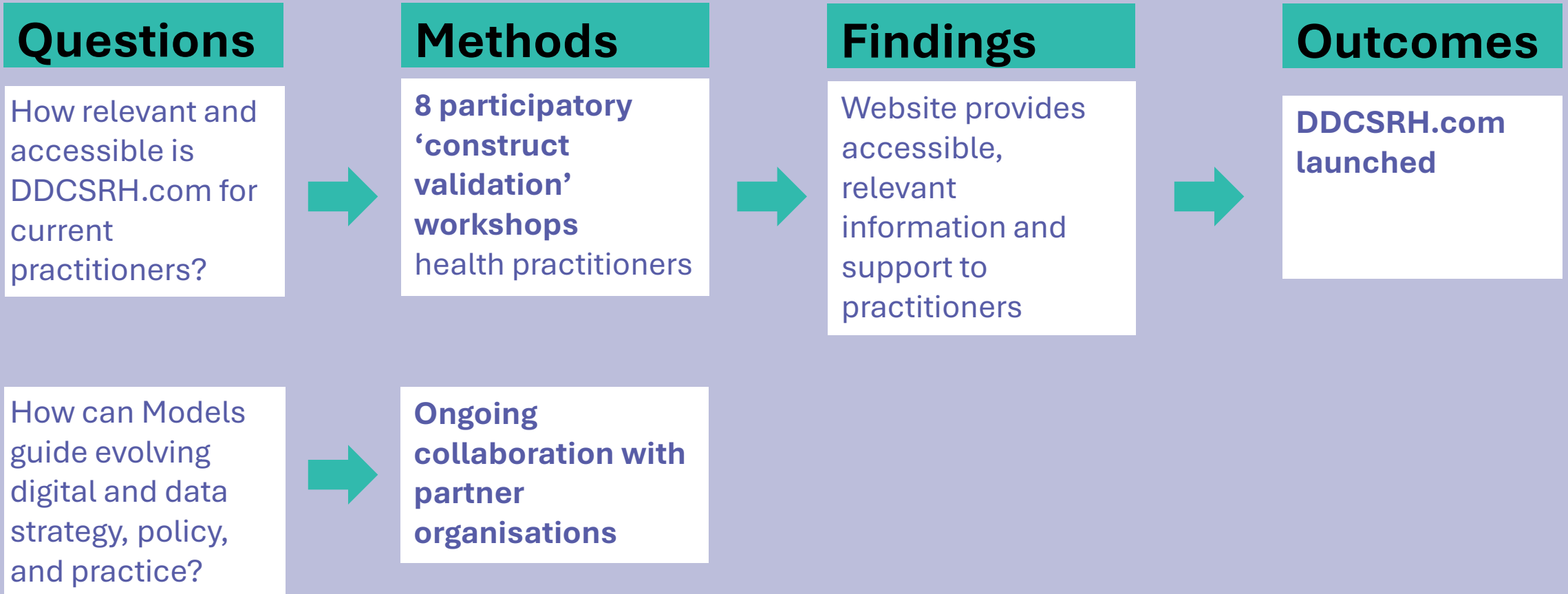| Database search		
"digital literacy" "digital health literacy" "eHealth literacy" "data literacy" AND "sexuality" "sexualities" "sexual health" "intimate relationships" "sexual relationships" "sexually transmitted*" "HIV"	Web of Science Medline, PubMed Cinahl Embase PsychInfo Communications and Mass Media	**= 30 results** (with duplicates and unrelated results removed) **No results using this combination of terms and "data literacy"**

Key Informant interviews

Researchers

Field	#
Public Health	9
Digital Health	1
Sexual Health	6
Digital, Data Studies	4
Gender, Sexuality Studies	4
Youth Studies	1

Sites of practitioner experience

Organisation	#
Local Health	9
Sexual Health	1
Women's Health	6

29 interviews in total

- **Albury, K., & Mannix, S. (2025a). Digital determinants of sexual and reproductive health—Workforce perspectives on digital and data literacies.** *Health Promotion International*, 40(2), https://doi.org/10.1093/heapro/daaf013

- **Albury, K. and Mannix, S., (2025b). From Digital Health Literacy to a Digital and Data Capabilities Approach to Sexual Health.** *Sexuality Research and Social Policy*. https://doi.org/10.1007/s13178-025-01110-x

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Iterative stages of DDCSRH Model and Website Development: Stage Two

Questions

What do young adults want health professionals to know about their digital SRH practices?

How relevant/accessible are DDCSRH models and draft resources for current workforce?

Methods

8 participatory workshops
2 interviews
Young adults (18-29)

3 participatory workshops
1 interview
SRH practitioners (18-29)

Findings

SRH practitioners need to understand and respect YA digital SRH practices

Models provide shared vocabulary for critical, strategic discussions

Outcomes

Consumer Model

Prototype website

Sense-checking ERG

Refine Website

Iterative stages of DDCSRH Model and Website Development: Stage Three/Four

Questions

How relevant and accessible is DDCSRH.com for current practitioners?

Methods

8 participatory 'construct validation' workshops health practitioners

Findings

Website provides accessible, relevant information and support to practitioners

Outcomes

DDCSRH.com launched

How can Models guide evolving digital and data strategy, policy, and practice?

Ongoing collaboration with partner organisations

What are data capabilities?

'the technical and material conditions, the skills, knowledge and proficiencies, and the strategic and ethical oversight driving the creation and use of data for improving knowledge, problem solving and decision-making'

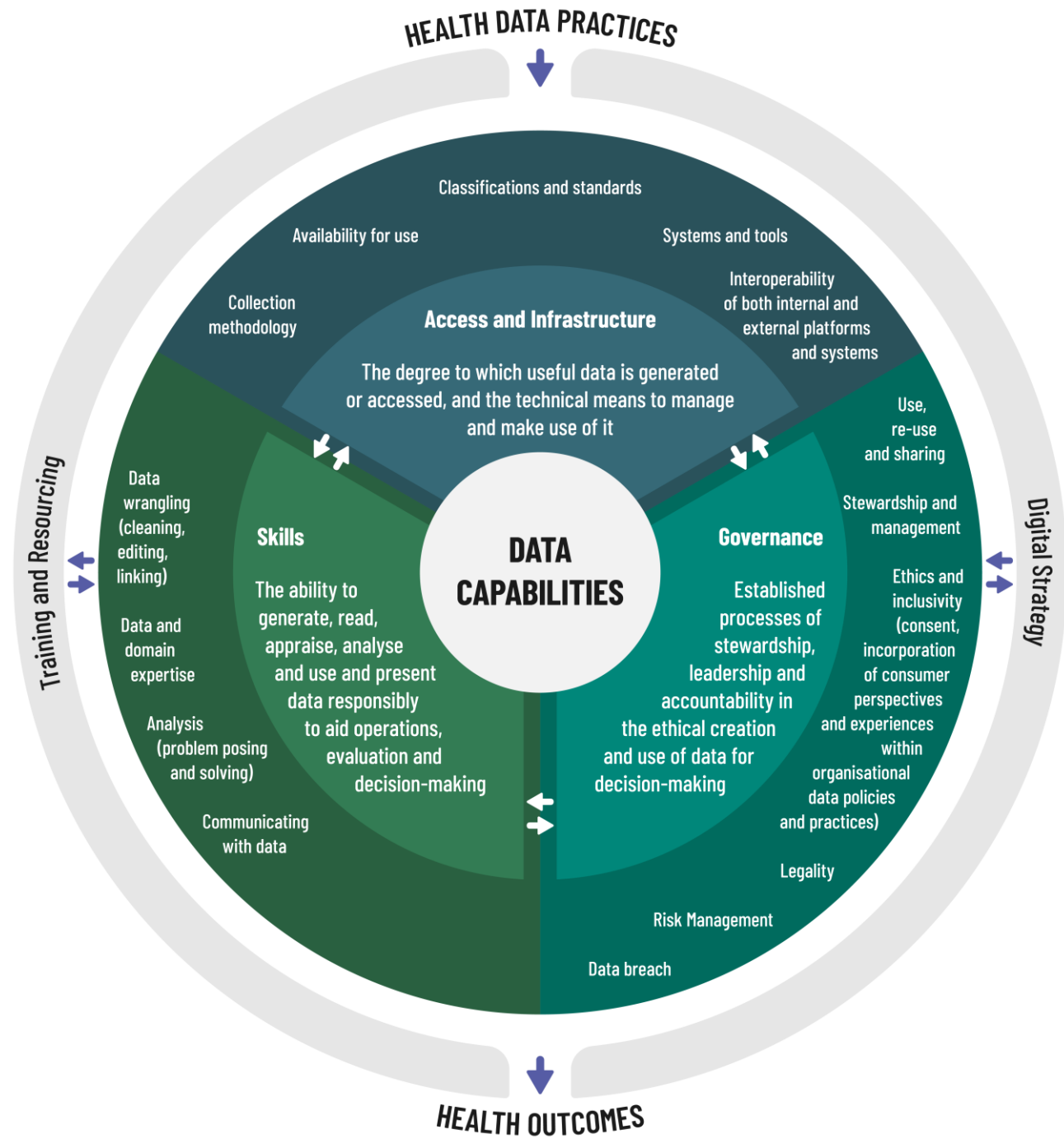McCosker et al, 2022

Access & Infrastructure

Skills

Governance

Data Capability Model

HEALTH DATA PRACTICES

Classifications and standards

Availability for use

Systems and tools

Collection methodology

Interoperability of both internal and external platforms and systems

Access and Infrastructure

The degree to which useful data is generated or accessed, and the technical means to manage and make use of it

Data wrangling (cleaning, editing, linking)

Use, re-use and sharing

Stewardship and management

Skills

The ability to generate, read, appraise, analyse and use and present data responsibly to aid operations, evaluation and decision-making

DATA CAPABILITIES

Governance

Established processes of stewardship, leadership and accountability in the ethical creation and use of data for decision-making

Ethics and inclusivity (consent, incorporation of consumer perspectives and experiences within organisational data policies and practices)

Data and domain expertise

Analysis (problem posing and solving)

Communicating with data

Legality

Risk Management

Data breach

Training and Resourcing

Digital Strategy

HEALTH OUTCOMES

DATA CAPABILITIES FOR SEXUAL HEALTH POLICY AND PRACTICE

Capability	Definition	Sub-capabilities	Core Questions
Access and Infrastructure	The degree to which useful data is generated or accessed, and the technical means to manage and make use of it	• Collection methodology	• What counts as sexual health data, and how is it generated and accessed?
		• Availability for use	• Are datasets siloed and difficult to access? • Can the organisation access and use the data it generates?
		• Classifications and standards	• Is there an organisation-wide strategy for integrated data software systems?
		• Systems and tools	• How well do different platforms (and their methods of data collection and abstraction) work together?
		• Interoperability of both internal and external platforms and systems	• How well do data technologies support organisational purpose?

Capability	Definition	Sub-capabilities	Core Questions
Skills	The ability to generate, read, appraise, analyse and use and present data responsibly to aid operations, evaluation and decision-making	• Data wrangling (cleaning, editing, linking)	• How do organisations and individuals understand and articulate their own data generation practices? • How do organisations and individuals distinguish the difference between organisational data, and externally generated research evidence?
		• Data and domain expertise	• How are informal or 'everyday' data practices recognised by individuals and organisations? • How are roles and responsibility for the use of data allocated within the organisation? • How is data expertise fostered and to what extent is this inclusive?
		• Analysis (problem posing and solving)	• What is the quality of data and the value of data analysis for decision making?
		• Communicating with data	• How is data analysis communicated internally, with funders, clients and the wider community?

Capability	Definition	Sub-capabilities	Core Questions
Governance	Established processes of stewardship, leadership and accountability in the ethical creation and use of data for decision-making	• Use, re-use and sharing	• Who is accountable for datasets, and who has the authority to control access and use them?
		• Stewardship and management	• Who takes responsibility for managing privacy and data security?
		• Ethics and inclusivity (consent, incorporation of consumer perspectives and experiences within organisational data policies and practices)	• What are the guiding ethical principles for ethical decisionmaking around issues such as data sovereignty and stigma? • How are ethical issues identified and addressed?
		• Legality	• How does the organisation make decisions around what data to store and how to store it?
		• Risk Management	• How does lived experience inform decision-making around the collection, use and storage of data? • How are legal requirements and security monitored and implemented?
		• Data breach	• What processes are in place to prevent, monitor and respond to a data breach?