Australian eRequesting Data for Interoperability (AUeReqDI) Release 1 – For Community Comment

We are excited to announce the first release of the Australian eRequesting Data for Interoperability (AUeReqDI) Release 1 (R1) for community comment. The AUeReqDI will be a core foundation for health data interoperability in Australia. It is an outcome of the Sparked FHIR Accelerator, a strategic partnership involving CSIRO, the Australian Government Department of Health and Aged Care, the Australian Digital Health Agency, and HL7 Australia. Sparked has established a clinically led, collaborative approach to designing and building national health data standards.
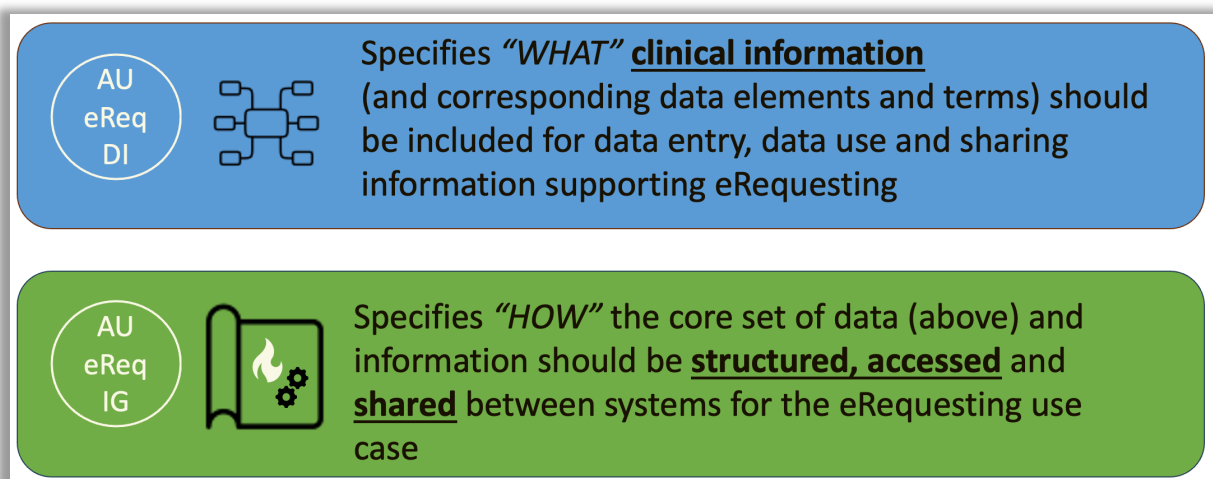
Purpose of the AUeReqDI

The AUeReqDI builds upon and complements the foundational Australian Core Data for Interoperability (AUCDI) and focuses on the specific use case of eRequesting.

The AUeReqDI:
- Supports a broad approach to eRequesting within the Australian health context;
- Describes and defines a set of data groups, each comprising of one or more data elements, as a common language foundation that allows systems to exchange semantically accurate data for eRequests;
- Incorporates and builds upon existing standards and prior work from national and international programs and initiatives including the AUCDI, the Royal College of Pathologists Australasia (RCPA)'s Pathology Information, Terminology and Units Standardisation (PITUS) framework and the Royal Australian New Zealand College of Radiology (RANZCR's) Radiology Referral Set; and
- Is a living artefact that will evolve in future iterations to support additional request use cases – adding breadth by including new clinical data groups and depth by expanding with further detail. Additional request use cases to be considered include eReferrals and Service Requests.

AUeReqDI R1 is focused on electronic pathology and medical imaging requests in primary and community-based care provision.
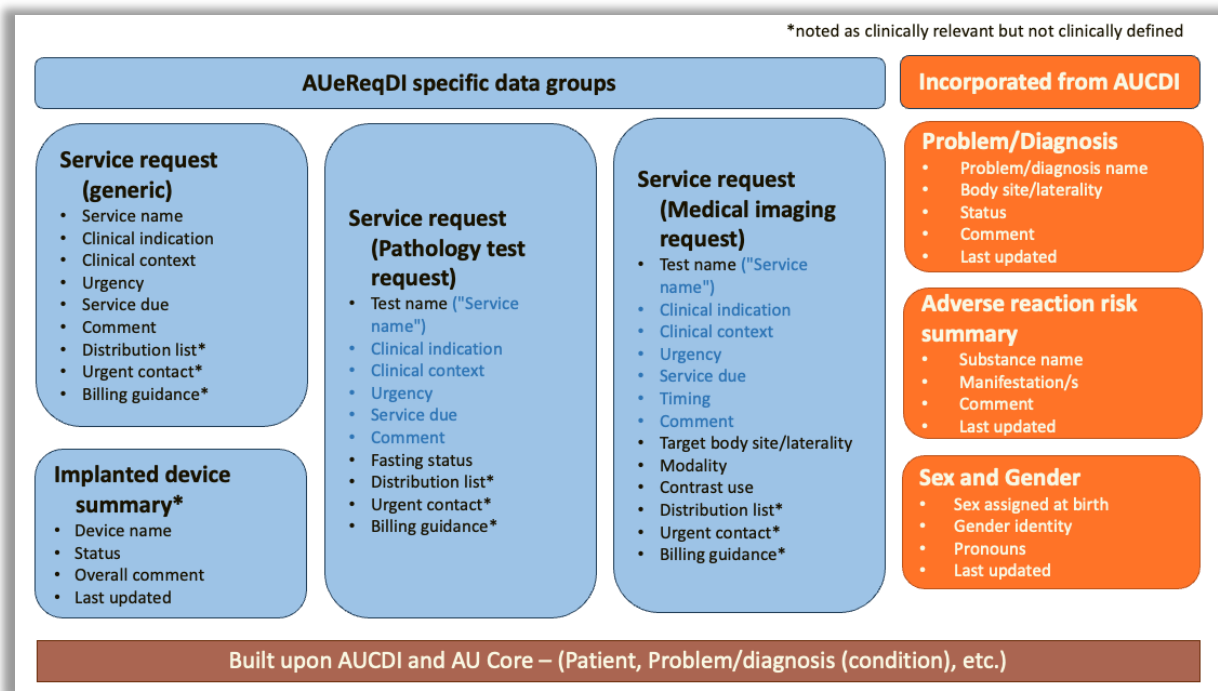
Context and Need for the AUeReqDI

Isolated and incompatible health data systems impact our healthcare system in many ways. Pathology and medical imaging services play a large role in clinical diagnosis. While there are siloed examples of electronic requests (eRequests) in the Australian health ecosystem, a large proportion of requests, particularly for pathology and medical imaging services, are managed through paper forms.

The AUeReqDI leverages existing work to agree on national, shared data structures that will underpin a broad approach to eRequesting within the Australian health context.
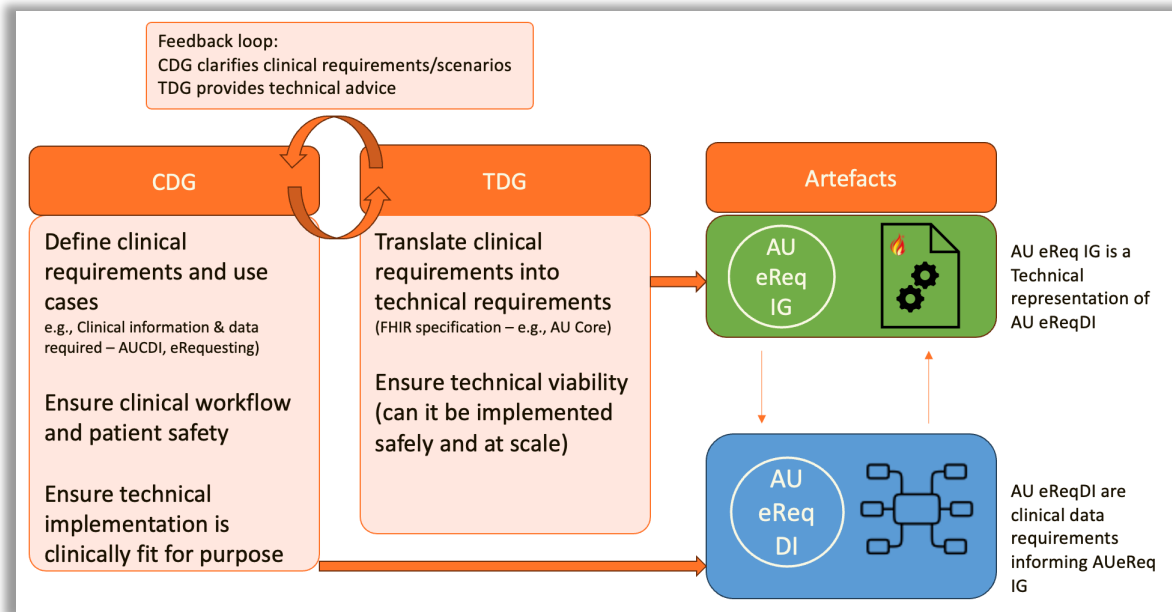
AUeReqDI Scope

The AUeReqDI focuses on data required to support eRequesting. It incorporates data elements from the AUCDI. The AUeReqDI R1 focuses on pathology test and medical imaging requests and is the foundation from which we can further evolve the model to support additional eRequesting use cases, including eReferral.

Scope drivers for AUeReqDI R1 are limited to community pathology test and medical imaging requesting, focusing initially on Community (comprising primary care, specialist care, and allied health) and Hospital outpatient departments to public and private providers, both local and interstate.

*noted as clinically relevant but not clinically defined

AUeReqDI specific data groups

Service request (generic)
- Service name
- Clinical indication
- Clinical context
- Urgency
- Service due
- Comment
- Distribution list*
- Urgent contact*
- Billing guidance*

Implanted device summary*
- Device name
- Status
- Overall comment
- Last updated

Service request (Pathology test request)
- Test name ("Service name")
- Clinical indication
- Clinical context
- Urgency
- Service due
- Comment
- Fasting status
- Distribution list*
- Urgent contact*
- Billing guidance*

Service request (Medical imaging request)
- Test name ("Service name")
- Clinical indication
- Clinical context
- Urgency
- Service due
- Timing
- Comment
- Target body site/laterality
- Modality
- Contrast use
- Distribution list*
- Urgent contact*
- Billing guidance*

Incorporated from AUCDI

Problem/Diagnosis
- Problem/diagnosis name
- Body site/laterality
- Status
- Comment
- Last updated

Adverse reaction risk summary
- Substance name
- Manifestation/s
- Comment
- Last updated

Sex and Gender
- Sex assigned at birth
- Gender identity
- Pronouns
- Last updated

Built upon AUCDI and AU Core – (Patient, Problem/diagnosis (condition), etc.)

Process and Timeframe

The Sparked accelerator has adopted an open and consensus-driven approach, involving stakeholders from various sectors in regular workshops and feedback sessions. The Sparked Clinical Design Group collectively determines the clinical data requirements. The Sparked Technical Design Group will specify how the requirements are implemented safely, accurately, and consistently within clinical systems. **We invite community feedback on the first draft until Friday 14 June 2024**, with the final release scheduled for October 2024.

The diagram shows the relationship between CDG, TDG, and Artefacts:

Feedback loop:
CDG clarifies clinical requirements/scenarios
TDG provides technical advice

CDG
Define clinical requirements and use cases
e.g., Clinical information & data required – AUCDI, eRequesting)

Ensure clinical workflow and patient safety

Ensure technical implementation is clinically fit for purpose

TDG
Translate clinical requirements into technical requirements
(FHIR specification – e.g., AU Core)

Ensure technical viability (can it be implemented safely and at scale)

Artefacts
AU eReq IG — AU eReq IG is a Technical representation of AU eReqDI

AU eReq DI — AU eReqDI are clinical data requirements informing AUeReq IG

How to provide feedback

The Sparked accelerator encourages all interested stakeholders, including healthcare practitioners, patients and consumers, technology and industry partners, and government agencies, to participate in this transformative initiative. Feel free to share this broadly among your colleagues and networks - we welcome feedback on all aspects of the proposed Release 1 data groups, including data content alignment with priorities and other initiatives, issues related to clarity and accuracy, and suggestions for future releases.

To provide feedback on the AUeReqDI, please see our website to review the draft AUeReqDI document and share your feedback via the form.

To get involved, please visit our website to learn more about the program and register to join us in our upcoming workshops and discussions.

We look forward to receiving your feedback and input toward Australia's more connected, efficient, and patient-centred healthcare system.