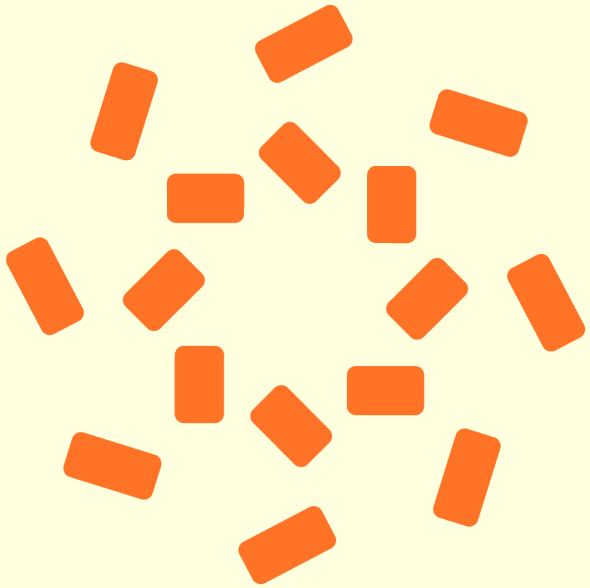

# Sparked

HL7® FHIR®

# Clinical Design Group

Wednesday 16th April 2025

Please note that this meeting is being recorded and posted online

# Acknowledgement of Country

We acknowledge the Traditional Custodians of the land on which we all gather today.

We pay our respect to elders past, present, and emerging and extend our respect to all Aboriginal and/or Torres Strait Islander people, acknowledging the First Peoples as the first scientists, educators and healers.



Please note that this meeting is being recorded and posted online

# Agenda

- TDG update – AU Core, AU Patient Summary, AU eReq (20 min)
- AUCDI R2 overall update (content, feedback + backlog update)
- Aged Care report
- PS and RFE/ER
- CCM
- Upcoming
  - May Symposium
  - July



Please note that this meeting is being recorded and posted online

# Objectives

- Updating the CDG on the AUCDI Release 2, AU Patient Summary, AU Core, AU Patient Summary and AUeRequesting
- Understand and recap requirements for Patient Summary and Encounter Record
- Understand and recap requirements for Shared Care Plans and Chronic Condition Management



Please note that this meeting is being recorded and posted online

# Technical Design Groups Update

# AU Core and AU Patient Summary

Landon Reilly

AU Core Co-chair/Best Practice Software

# AUCDI R2 AU Patient Summary / AU Core IG Update

# FCP activities - membership

## AU Core TDG

6 co-chairs

400+ members

200+ organisations

## Membership

40.6% vendors

25.7% government

24.3% health professionals

4.4% universities

1.6% unknown

0.4% consumers

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2.1% Sparked

60% of AU Core TDG common w CDG

74% of AU Core TDG common w AU eRequesting TDG

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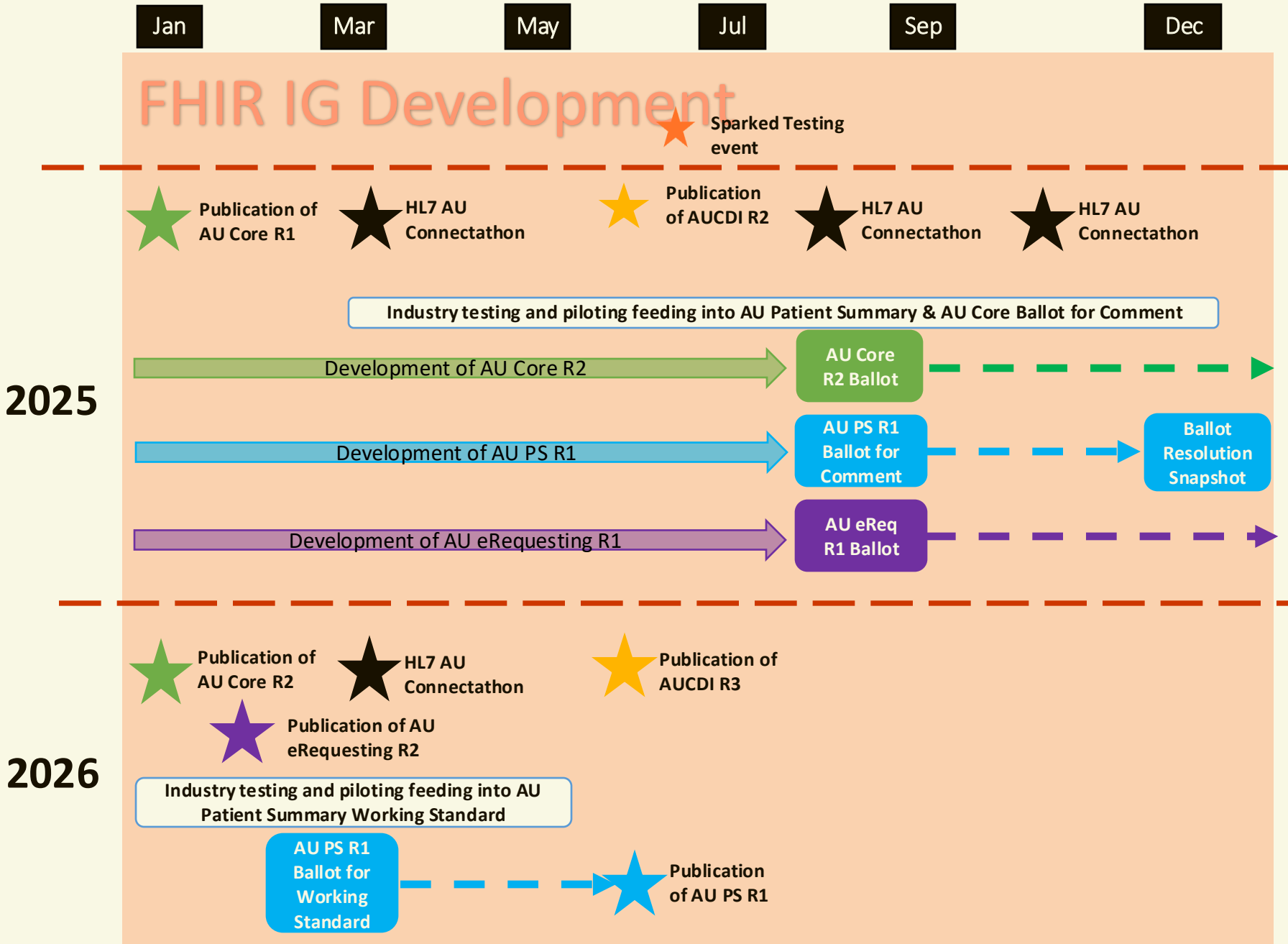
# AU Core R2 Target Release Timeline

- Incremental enhancement of AU Core and support for downstream projects
- R2 Ballot for Working Standard in the August/September 2025 cycle
- Continued updates on a yearly / 15-monthly cycle from then on

# AU PS R1 Target Release Timeline

- R1 Ballot for Comment in the August/September 2025 cycle
- R1 Ballot for Working Standard in the February/March 2026 cycle,
- R1 Published June 2026



# AU  Core TDG IG Update

# AU Core R2 at a glance

## R1 CapabilityStatements

- AU Core Responder
- AU Core Requester

## R1 ActorDefinitions

- AU Core Responder
- AU Core Requester

## R1 Resource Profiles

- Heart Rate
- Smoking Status
- Practitioner
- Respiration Rate
- Immunization
- Condition
- Body Weight
- Blood Pressure
- PractitionerRole
- Body Temperature
- Body Height
- Location
- Diagnostic Result Observations
- Pathology Result Observations
- Procedure
- MedicationRequest
- Encounter
- Organization
- AllergyIntolerance
- Patient
- Medication
- Waist Circumference

## R2 Resource Profiles

- MedicationStatement

AUCDI Coverage: AUCDI Medication Use Statement

AU Core R2 (AU Patient Summary R1 | AU eRequesting R1)

- RelatedPerson
- HealthCareService

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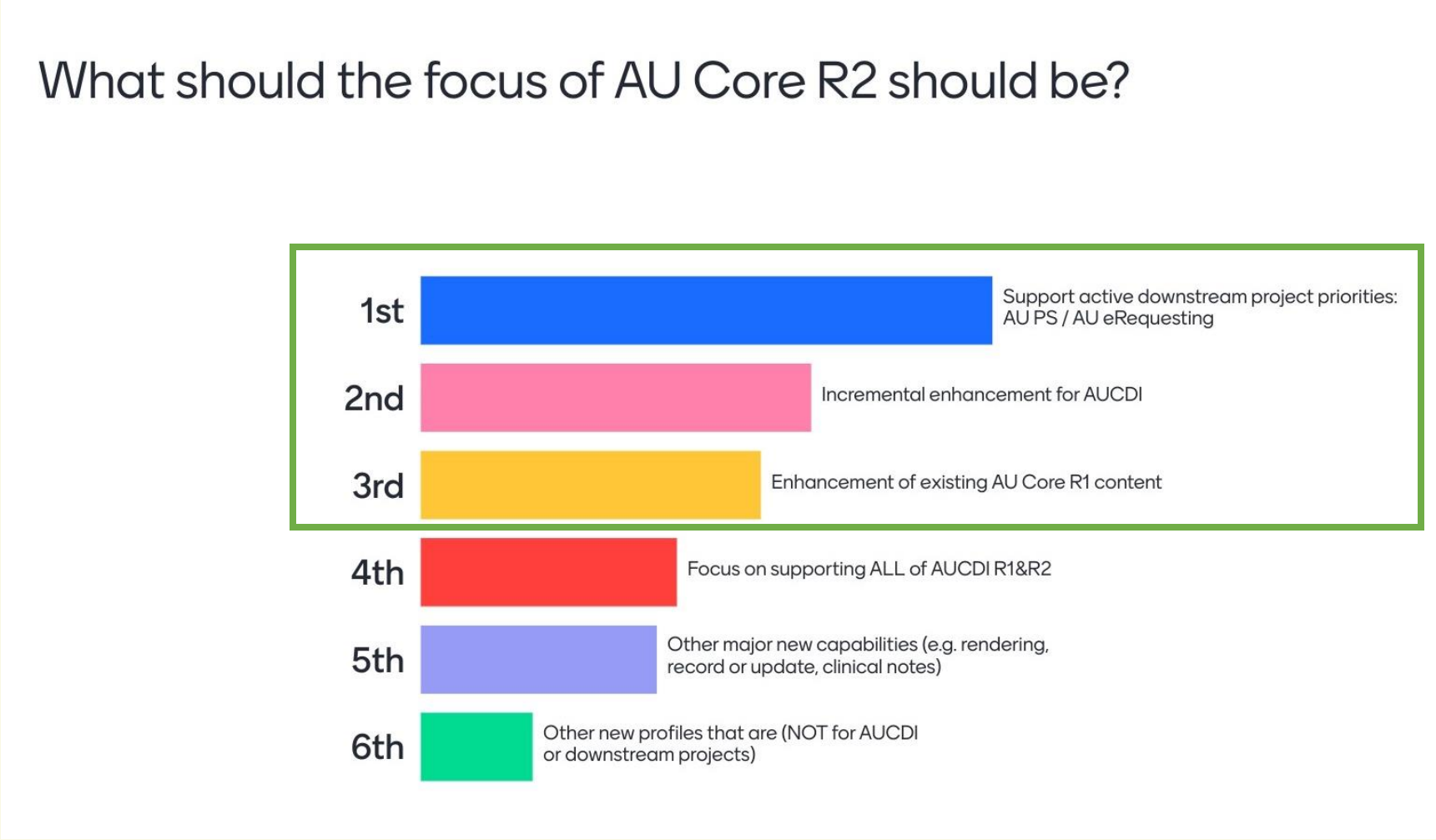
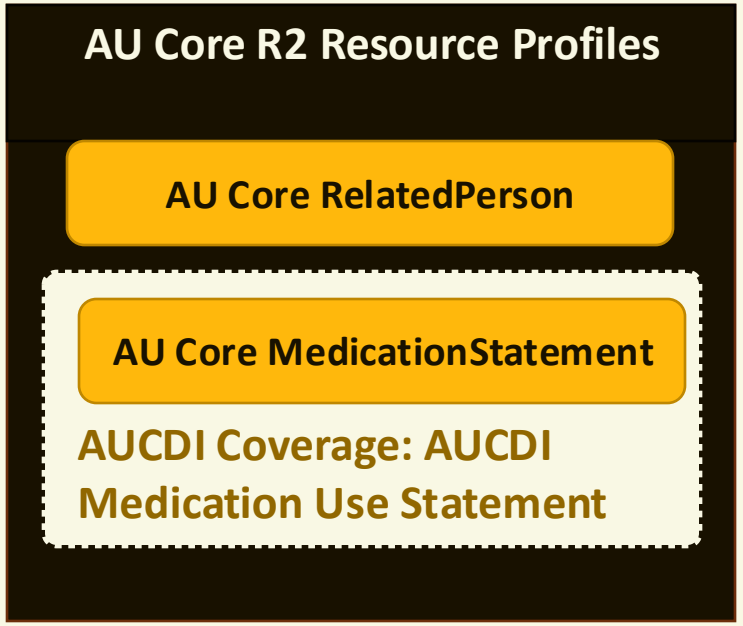
# Quick Recap: Focus for AU Core R2

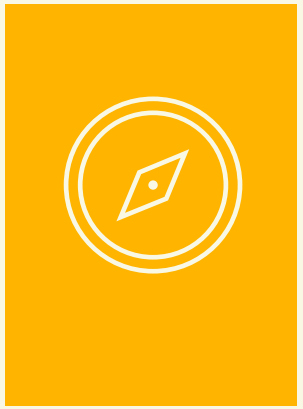
1. Support AU PS & AU eRequesting priorities
2. Incremental enhancement of AUCDI coverage
3. Enhancement of existing AU Core R1 content



# Quick Recap: AU Core R2 Scoping workshop outcomes

- New profiles:
  - AU Core RelatedPerson – supporting AU Patient Summary
  - AU Core MedicationStatement – supporting AU Patient Summary
- AUCDI coverage enhancement
  - Medication Use Statement
- Enhancement of existing content
  - To come through proposals / spec feedback
- Overall, AU Core Backlog validated – broad range of items are of interest
  - https://confluence.hl7.org/display/HAFWG/AU+Core+Backlog
  - https://confluence.hl7.org/display/HAFWG/AU+Core+Parking+Lot+of+Discussion+Topics+and+Ideas





FHIR Implementation Guides

- **AU Core**
- AU eRequesting
- AU Patient Summary

# Achievements – AU Core
# Achievements Feb–Mar 2025

- ✓ **AU Core RelatedPerson** (6 Feb 2025)
  - Must Support, constraints, interactions
- ✓ **AU Core MedicationStatement** (6 Mar 2025)
  - Must Support, AUCDI mapping, interactions
- ✓ **Dosage Must Support** (18 Mar 2025)
  - Must Support (dosage text)

# HL7 AU Connectathon AU Core (19–20 March 2025)

Connectathon, testing, and reference implementations

- Vendor testing for AU Core and AU Patient Summary.

- Allow implementers new to get started with AU Core.
- 12 Participating organisation
- Tested AU Core R2:
  - **MedicationStatement**
  - **RelatedPerson**
- Both resources reached **AFMM 2 maturity**.

- Extranet
- Intersystems
- Best Practice
- Orion Health
- MediRecords
- Intervise
- Interfuze
- Oracle
- NSW Health
- Tech Intro
- Beda
- Sonic

# 28 Test Results from 5 new products submitted from March Connectathon

17 **AU Core Responders**

7 **AU Core Requesters**

5 **Profile Only**

DISPENSE WORKS

ORION HEALTH

KRE8 I.T.

MediRecords

ALCIDION

LENIA ai Redefine Care

HealthLink — Part of Clanwilliam

Best Practice An evolution in medical software

techintro

beda software

Australian Government Australian Digital Health Agency

Health

InterSystems Creative data technology

CSIRO

HALO CONNECT

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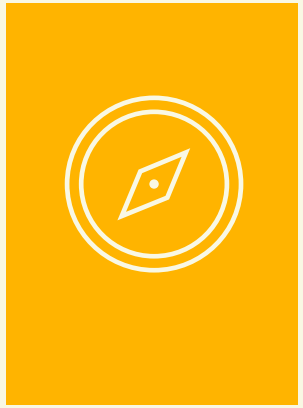
**AU Core Testing Confluence Page**

# HealthcareService Proposal



FHIR Implementation Guides

---

- **AU Core**
- AU eRequesting
- AU Patient Summary

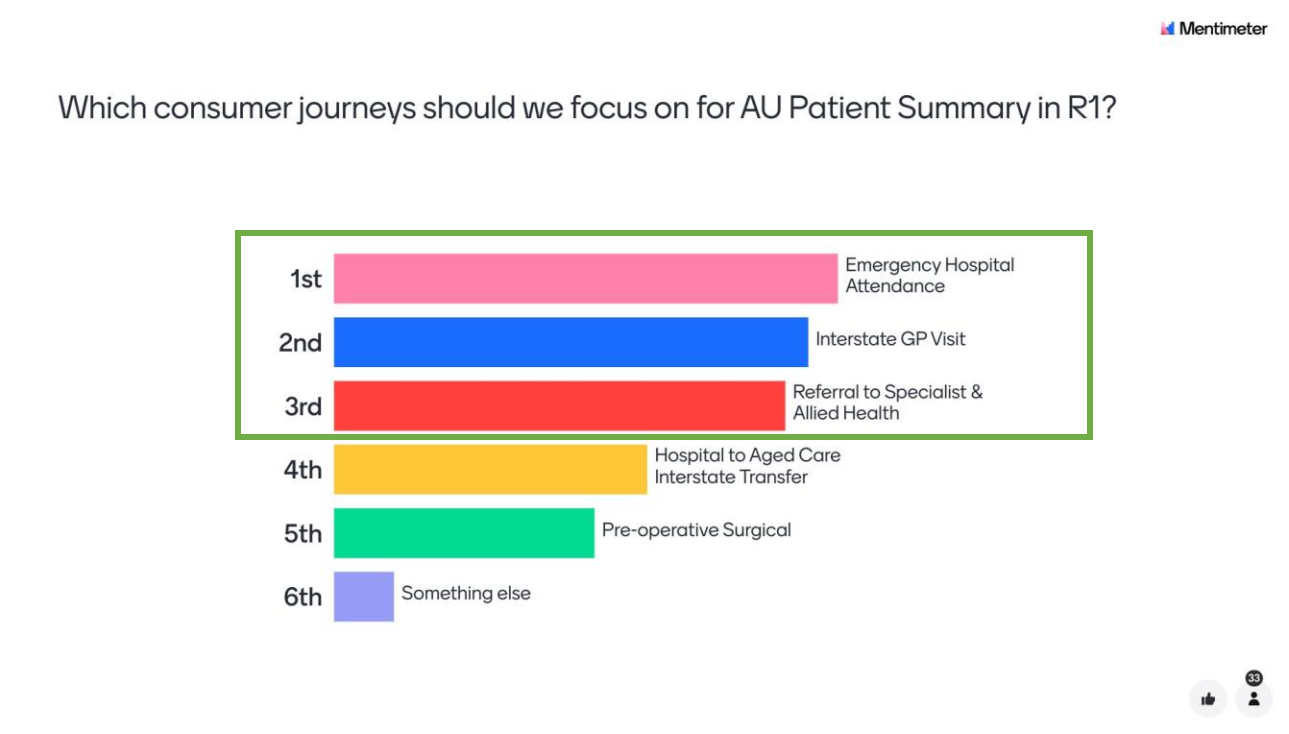
- Proposed inclusion in AU Core R2
- Starting proposal for consultation includes:
  - AU generic requirements
  - Should remain **use-case agnostic**

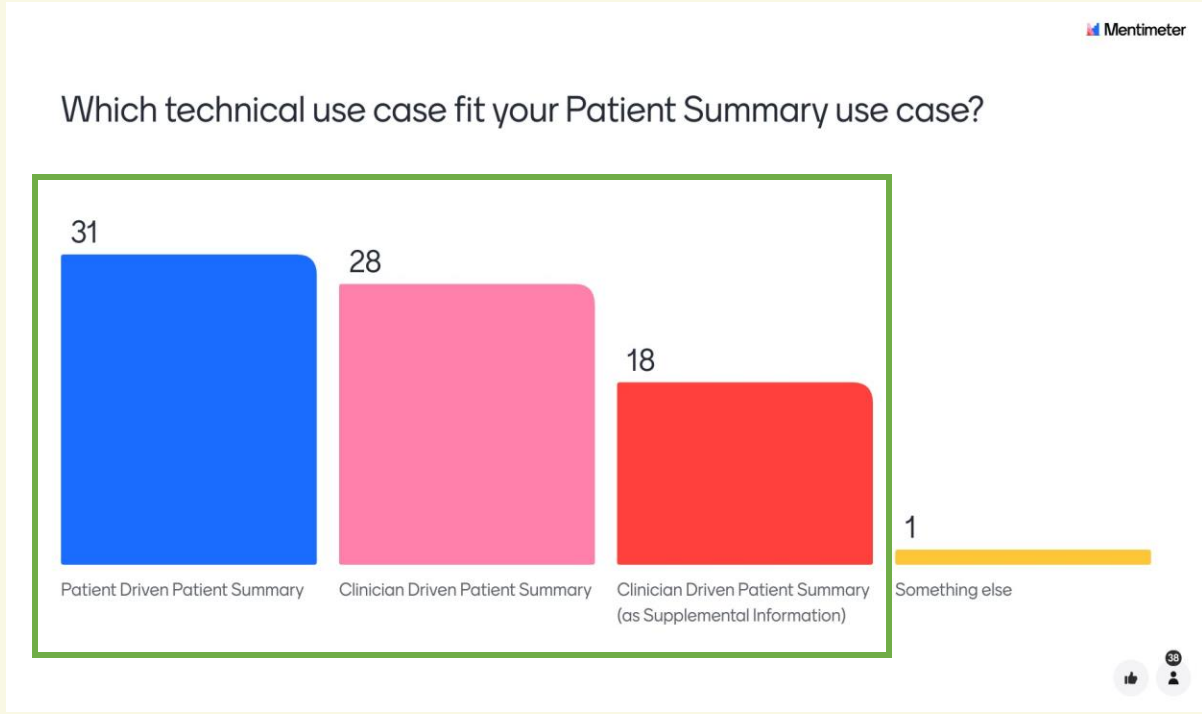

17 Apr 2025

# AU Patient Summary IG Update

# Quick Recap: AU PS R1 FHIR

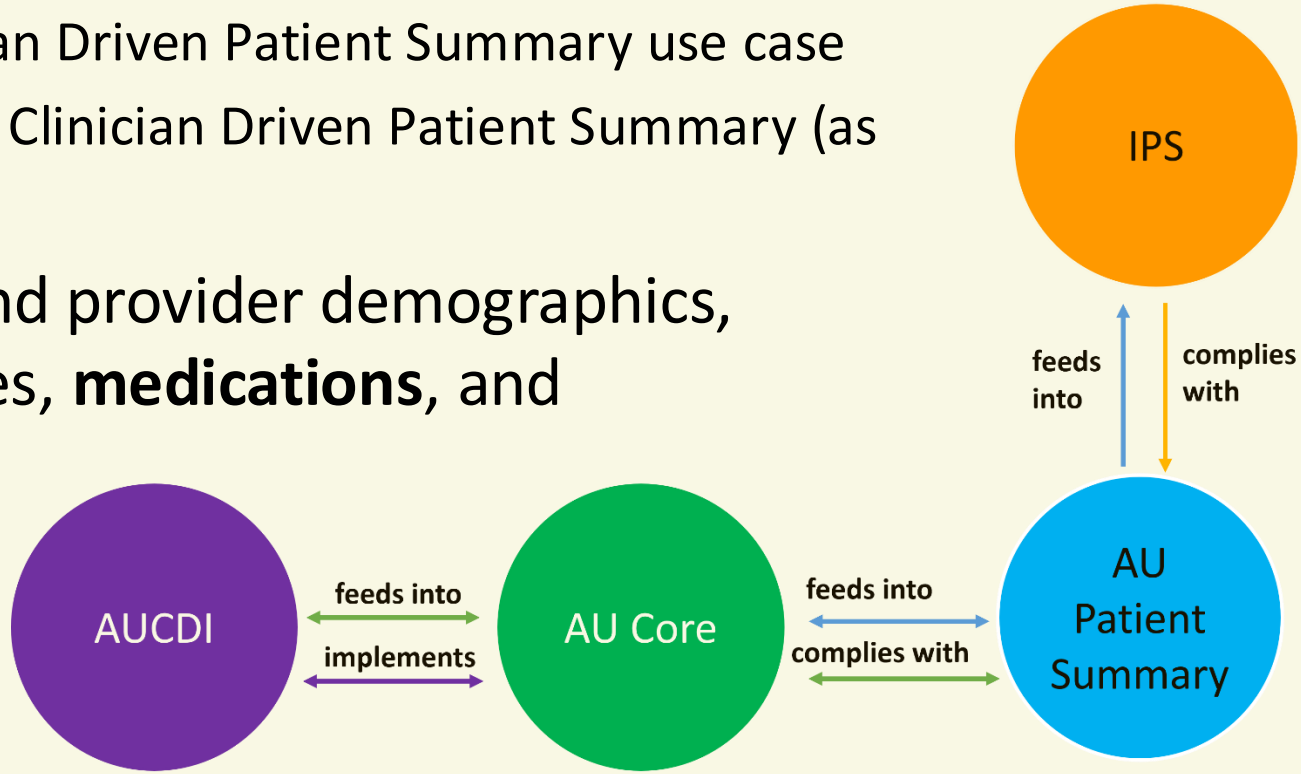
| Outcome | Meeting |
|---|---|
| AU Patient Summary to be compliant with IPS and AU Core | 15 November 2024 |
| Target dependencies for AU PS R1: FHIR R4, IPS 2.0.0, AU Core R2, AU Base R5 | 29 November 2024 |
| Consumer journeys & technical use cases we should focus on in AU PS R1 | 29 November 2024 |



# AU Patient Summary FHIR IG R1 Focus

- Working through what it means to generate (author) and view patient summaries in an Australian healthcare context in the following cases:
  - Interstate GP Visit – Patient Driven use case
  - Emergency Hospital Admission – Clinician Driven Patient Summary use case
  - Referral to Specialist and Allied Health - Clinician Driven Patient Summary (as Supplemental Information) use case
- Working through localising patient and provider demographics, document context, problems, allergies, **medications**, and immunisations (vaccination).




AU Patient Summary FHIR IG: Computable form of consensus for patient summaries in Australia

# AUCDI Release 2 – Patient Summary

**Problem/Diagnosis**
- Problem/diagnosis name
- Body site/laterality
- Date/time of onset
- Date/time of resolution
- Status
- Comment
- Last updated

**Adverse reaction risk summary**
- Substance name
- Date/time of onset of first reaction
- Manifestation/s
- Severity of reaction
- Comment
- Last updated

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

**Pregnancy assertion**
- Pregnancy assertion
- Justification
- Date of assertion

**Procedure completed**
- Procedure name
- Body site/laterality
- Clinical indication
- Date performed
- Comment

**Medication use statement**
- Medication name
- Form
- Strength
- Route of administration
- Dose amount and timing
- Clinical indication
- Comment
- Date of assertion

**Last Menstrual Period assertion**
- Date of onset
- Certainty
- Date of assertion

**Estimated date of delivery summary**
- EDD by cycle
- EDD by ultrasound
  - Date of ultrasound
  - Gestation by scan
- Last update

**Vaccination administered event**
- Vaccine name
- Sequence number
- Date of Administration
- Comment

AU PS

**Focus of R1 – localisation (understanding of AU requirements)**

**R2 ??**

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# AU PS R1 Scope –> Ballot for Comment Scope

## R1 CapabilityStatements

TBD

## R1 ActorDefinitions

TBD

## R1 Operations

- TBD

Formal definition of RESTful – unlikely to be in scope of R1. Expectation of guidance of some accepted approaches.

## R1 Resource Profiles

Bundle | Composition | Patient

PractitionerRole | Practitioner | Organization

RelatedPerson

Condition | AllergyIntolerance | Medication

MedicationRequest | MedicationStatement

Immunization

Encounter | Procedure

Required HL7 AU Pages for Profiles

Resources incl by reference in AU Core Profiles

## Other Content

Conformance requirements | AU Variance Statement

Security and Privacy | AFMM Status

Mapping to AUCDI

Relationship to AU Core & IPS

Required HL7 AU FHIR IG pages (Home | Support | etc.)

Sex and Gender Page | Guidance

Use case | Comparison

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# HL7 AU Connectathon Patient Summary (19–20 March 2025)

Connectathon, testing, and reference implementations

- Vendor testing for AU Core and AU Patient Summary.

- Start generating, retrieving and viewing AU Patient Summary documents based on the draft AU Patient Summary IG
- Access via **Smart Health Links**, **QR codes**, or standard FHIR operations
- **Key Discussions:**
  - Sharing with **My Health Record (MHR)**
  - Exploring secure, exchange methods

| Producer | Consumer |
|---|---|
| Beda Software | Beda Software |
| Best Practice Software | Intervise |
| Health Intersections | |
| MediRecords | |
| **Orion Health (NZ)** | |
| Tech Intro | |

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# Coverage of AU Patient Summary requirements

**Covered**: >= 3 systems tested 100%  Must Support & Mandatory elements / conformance requirements

**Covered**: >= 3 systems tested >80% but <100% Must Support & Mandatory elements / conformance requirements

**Additional coverage desired**: <80% Must Support or Mandatory elements / conformance requirements

- Organization
- Patient
- RelatedPerson
- Practitioner
- PractitionerRole

- Bundle
- Composition

- Condition
- AllergyIntollerance
- MedicationRequest
- MedicationStatement
- Medication
- Encounter
- Immunization
- Procedure

- $summary
- $docref
- Bundle interactions
- Composition interactions
- DocumentReference interactions

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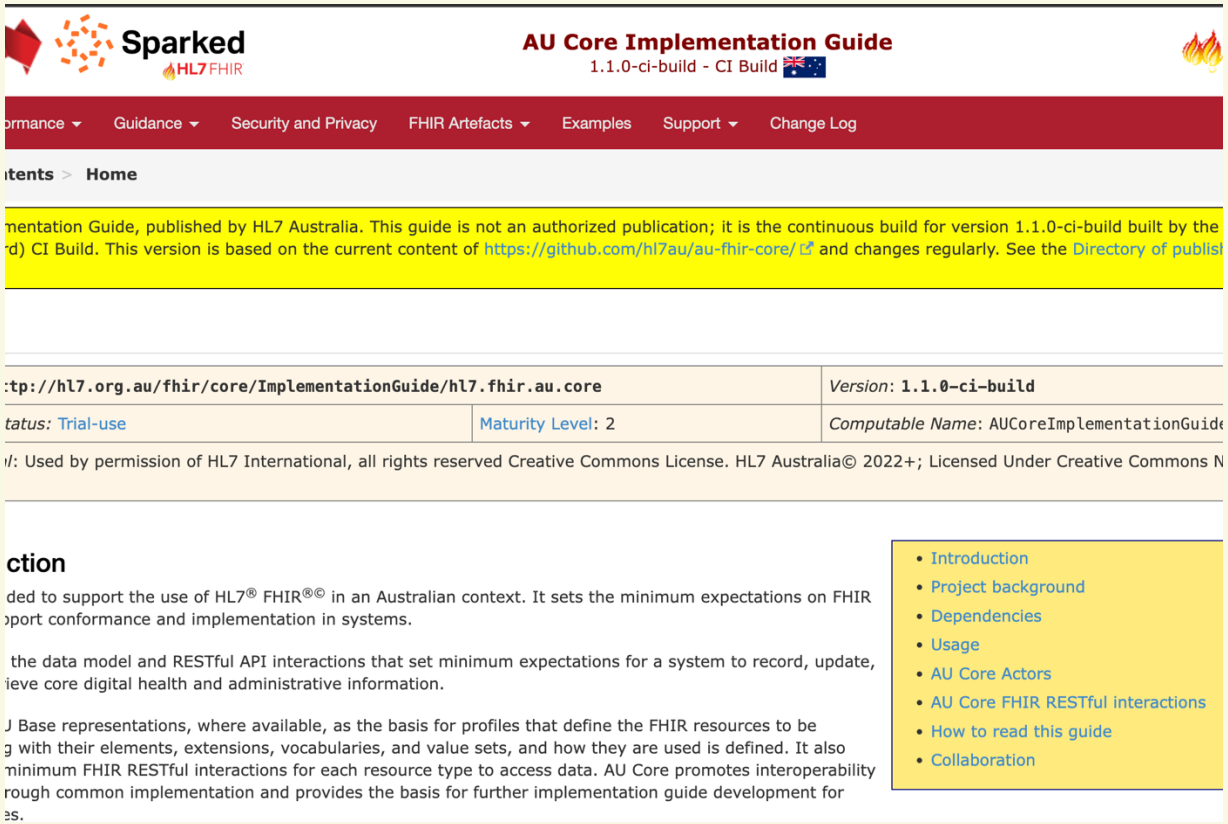
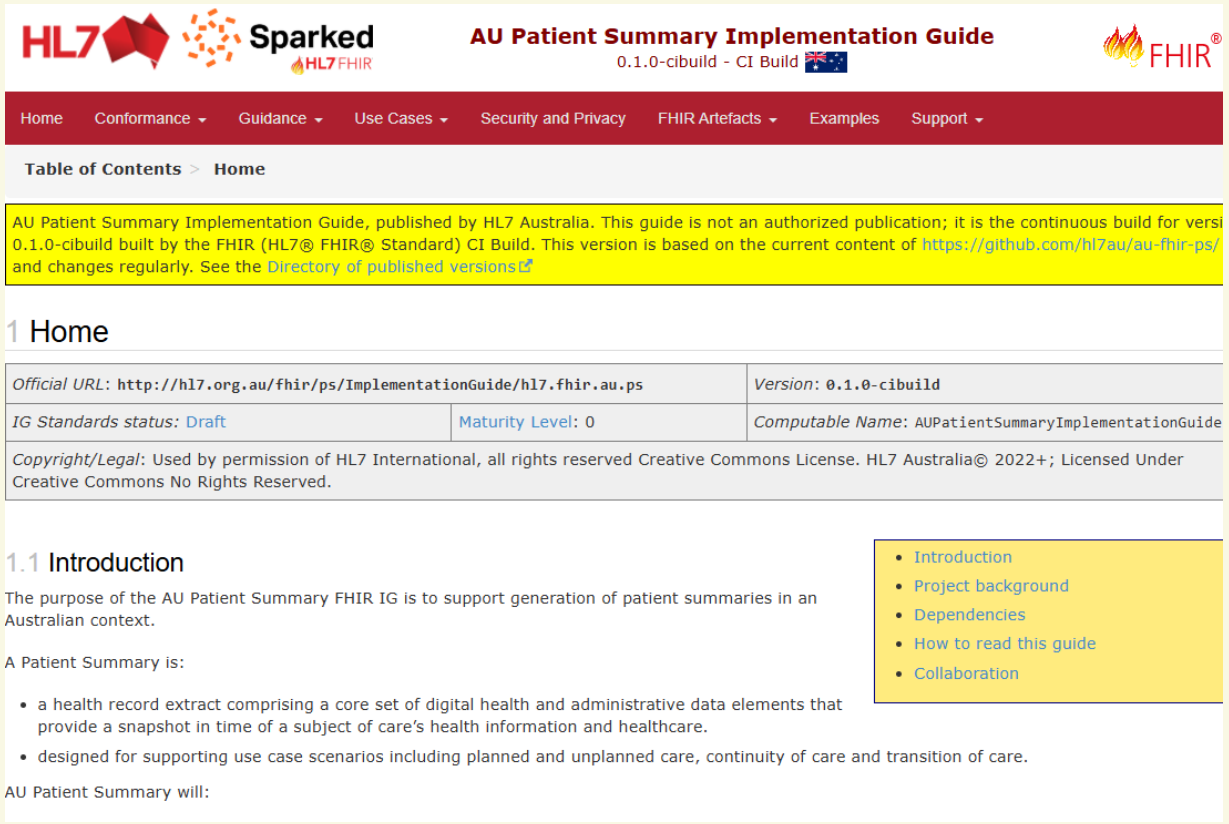
# AU Patient Summary FHIR IG and AU Core R2 – drafts now live and open for review!

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# AU eReq

Michael Wilson

AU eReq Co-chair/Sparked

# AU eRequesting Implementation Guide

0.3.0-ci-build - CI Build

Home | Conformance | Guidance | Use Cases | FHIR Artefacts | Examples | Support | Change Log

Table of Contents > Home

AU eRequesting Implementation Guide, published by HL7 Australia. This guide is not an authorized publication; it is the continuous build for version 0.3.0-ci-build built by the FHIR (HL7® FHIR® Standard) CI Build. This version is based on the current content of https://github.com/hl7au/au-fhir-erequesting/ and changes regularly. See the Directory of published versions

## 1 Home

| | | |
|---|---|---|
| *Official URL*: **http://hl7.org.au/fhir/ereq/ImplementationGuide/hl7.fhir.au.ereq** | | *Version*: **0.3.0-ci-build** |
| *IG Standards status:* Draft | Maturity Level: 0 | *Computable Name*: AUeRequestingImplementationGuide |
| *Copyright/Legal*: Used by permission of HL7 International, all rights reserved Creative Commons License. HL7 Australia© 2024+; Licensed Under Creative Commons No Rights Reserved. | | |

### 1.1 Introduction

AU eRequesting is provided to support the use of HL7® FHIR®© for diagnostic requesting in an Australian context. It sets the minimum expectations on FHIR resources to support conformance and implementation in systems.

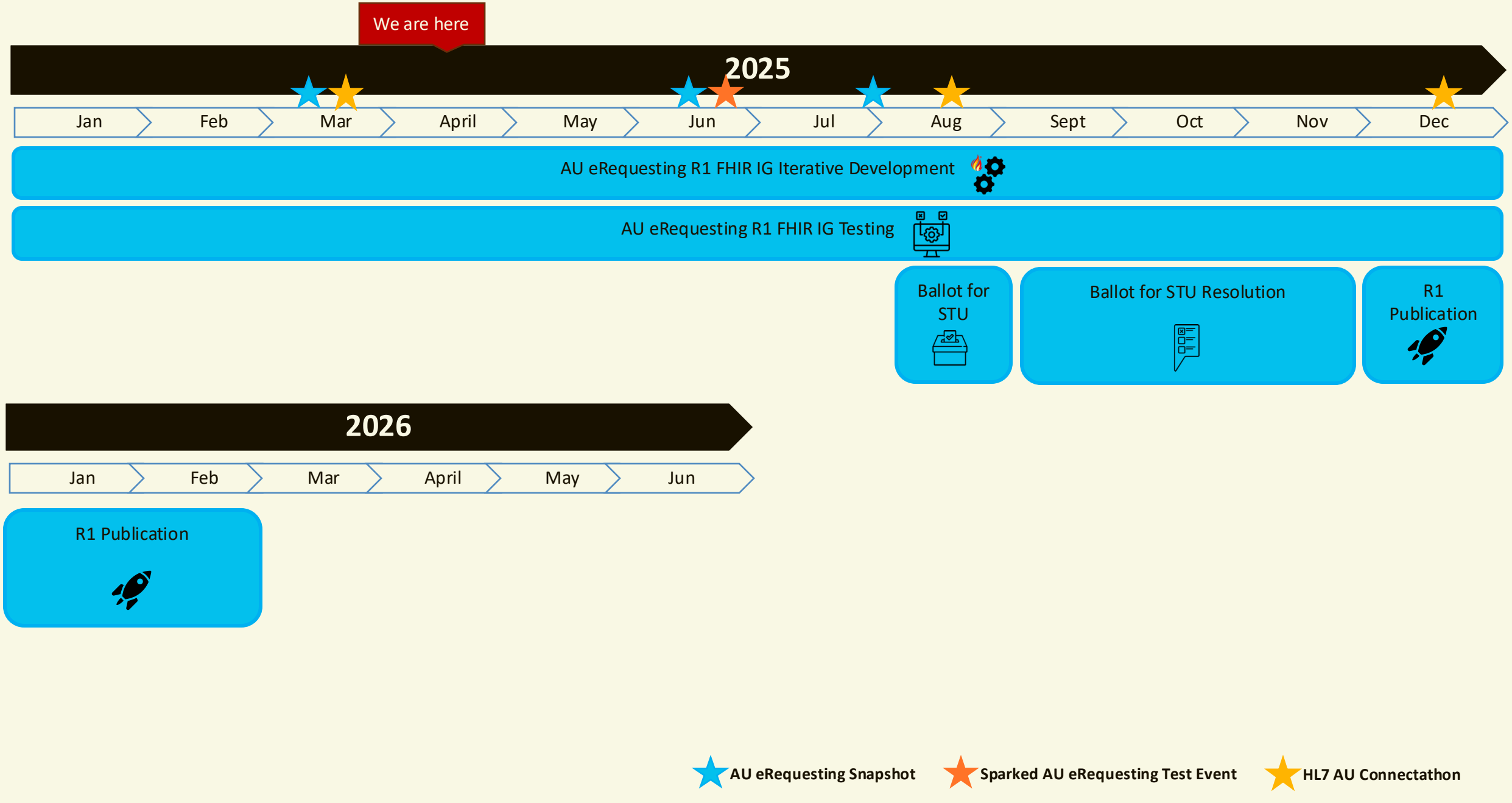
AU eRequesting defines the data model and RESTful API interactions that set minimum expectations for placing and accessing electronic requests.

The focus of AU eRequesting Release 1 (R1) is support of pathology and medical imaging requests in community-based care provision, with consideration for future use beyond this scope.



https://build.fhir.org/ig/hl7au/au-fhir-erequesting/

# AU eRequesting R1 FHIR Implementation Guide Timeline



# AU eRequesting Current R1 Features

| Feature | AU eRequesting FHIR IG Implementation |
|---|---|
| Medical Imaging Diagnostic Request | AU eRequesting Imaging Request |
| Pathology Diagnostic Request | AU eRequesting Pathology Request |
| Report Distribution List | AU eRequesting Communication Request CopyTo |
| Urgent Contact | CommunicationRequest Feature Proposals |
| Patient Contact | CommunicationRequest Feature Proposals |
| Fasting Status | AU eRequesting Diagnostic Request fastingPrecondition |
| Pregnancy Status | AU eRequesting Diagnostic Request supportingInfo:pregnancyStatus<br>Observation Pregnancy - Status (IPS) |
| Service Timing | AU eRequesting Diagnostic Request occurrence[x] |
| Payment Options | AU eRequesting Diagnostic Request insurance<br>AU eRequesting Coverage |
| Rule 3 Exemption | AU eRequesting Diagnostic Request quantity[x]<br>AU eRequesting Diagnostic Request occurrence[x] |
| MHR Consent Withdrawal | AU eRequesting MHR Consent Withdrawal |
| Fulfilment Tracking | AU eRequesting Task Diagnostic Request |
| Request Grouping | AU eRequesting Diagnostic Request requisition (PGN)<br>AU eRequesting Task Group<br>AU eRequesting Diagnostic Request displaySequence |

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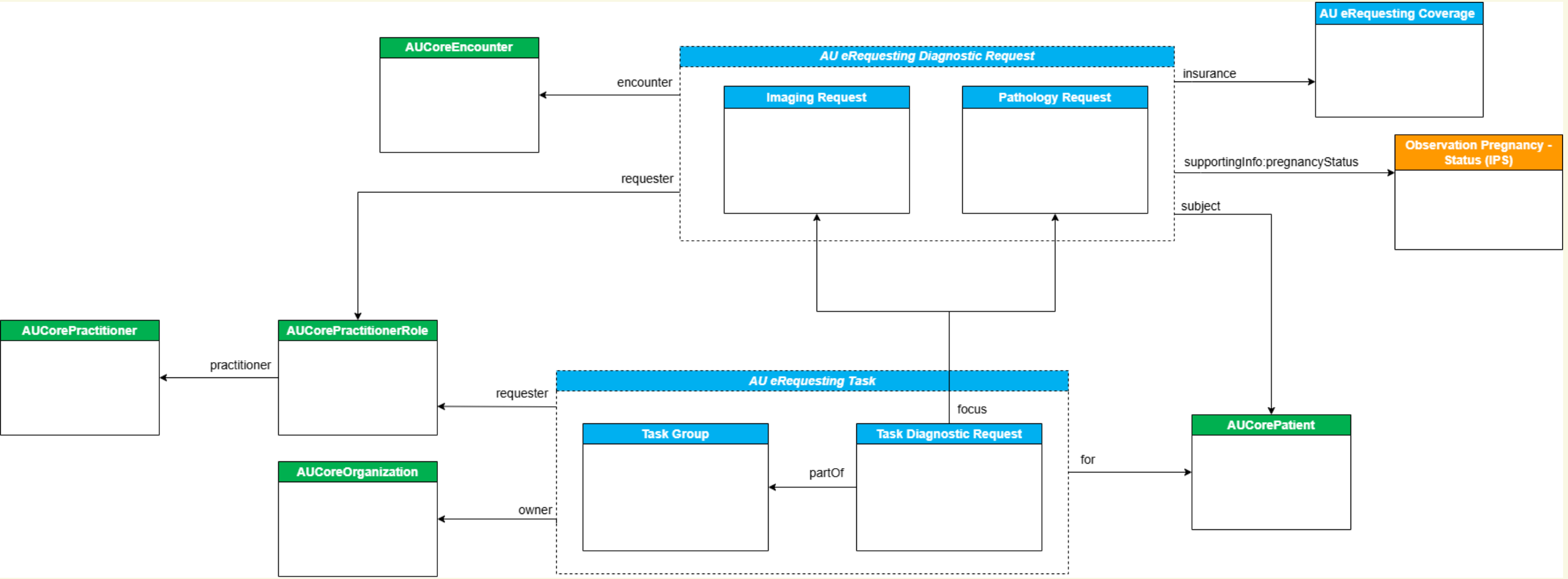
# AU eRequesting FHIR Profiles

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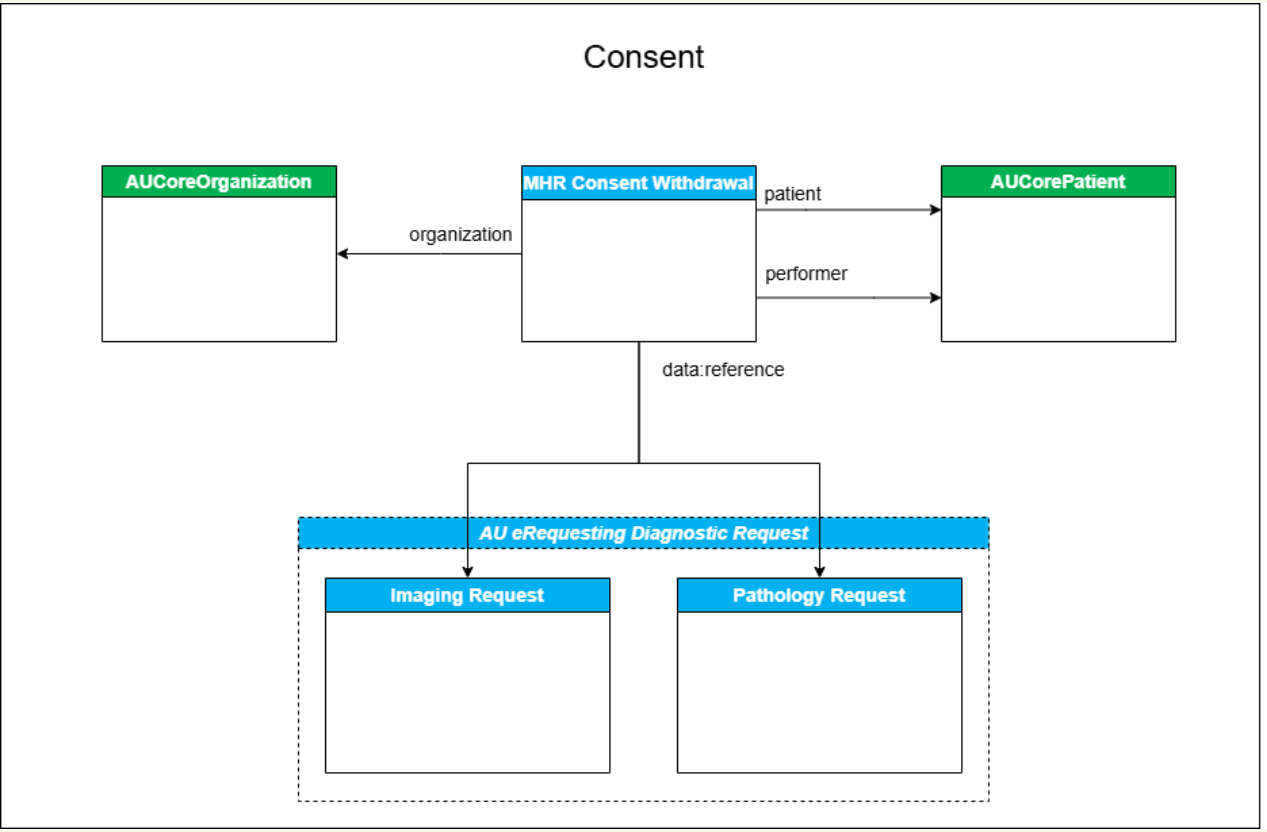
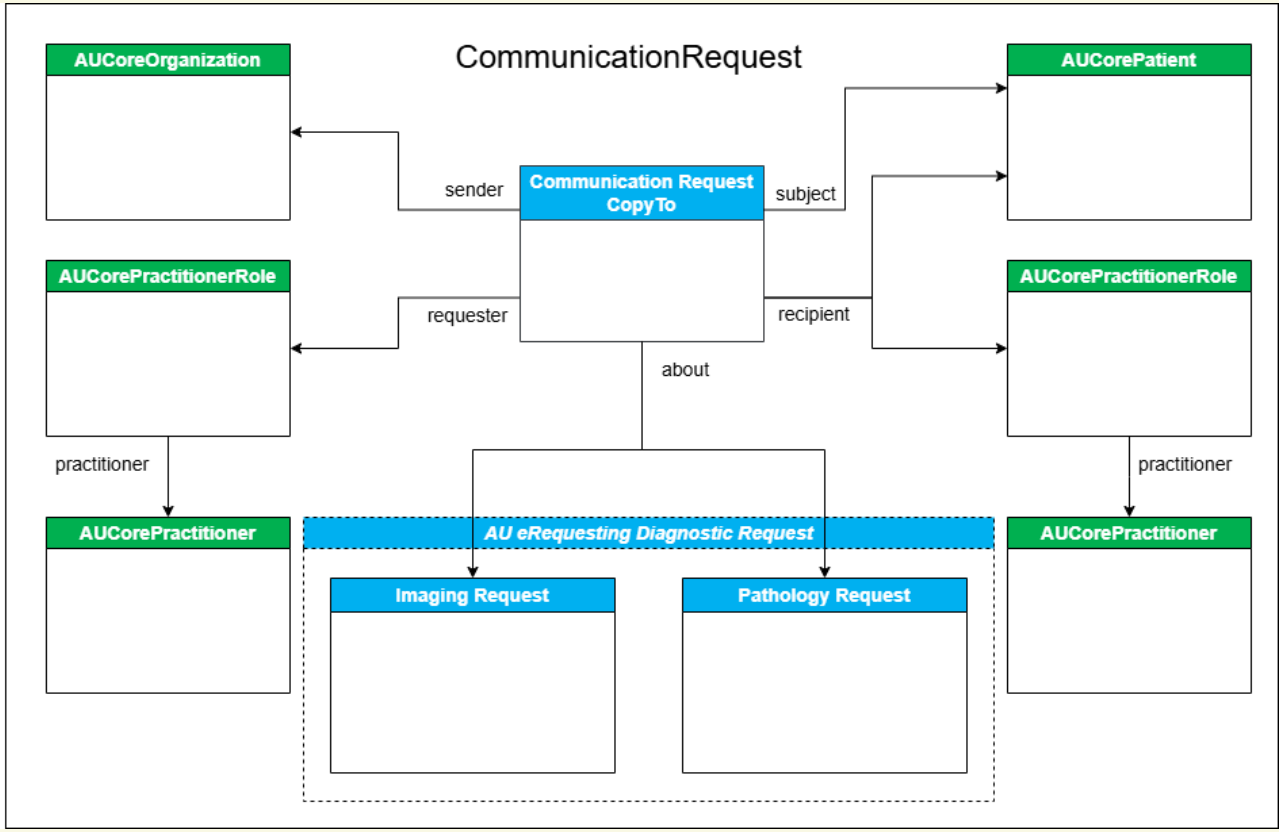
# AU eRequesting FHIR Profiles

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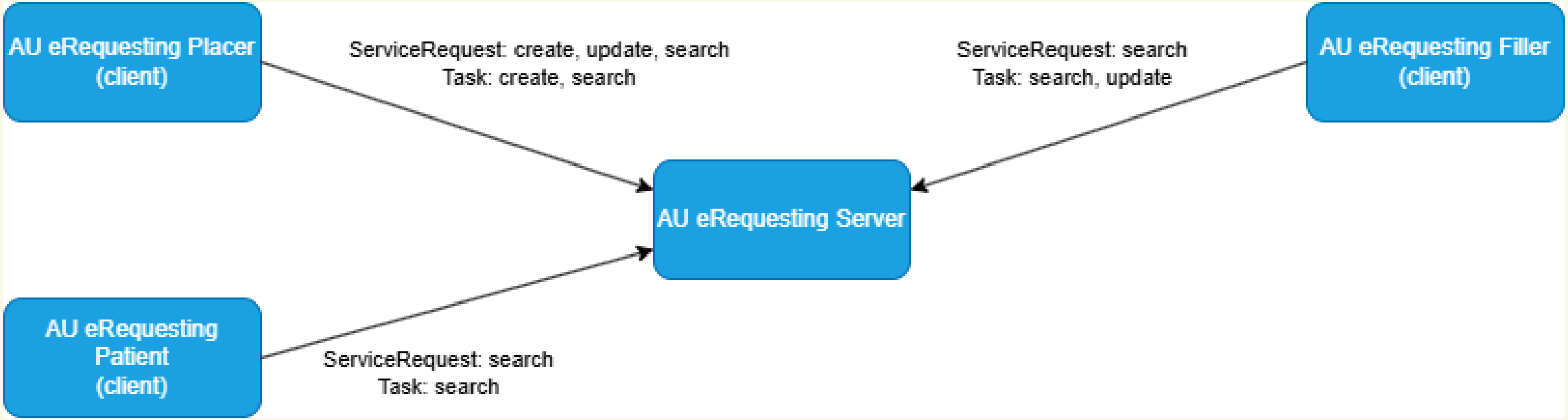
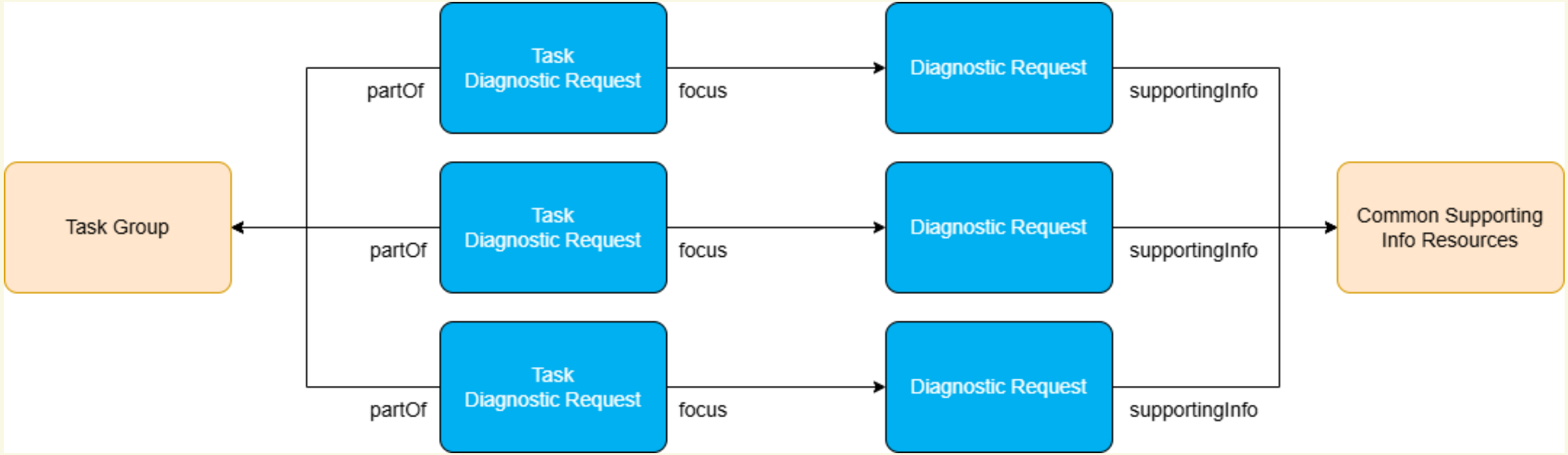
# AU eRequesting IG Actors

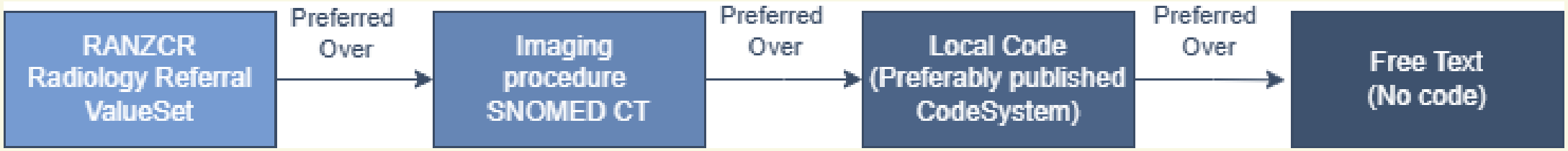


# AU eRequesting IG Group Features

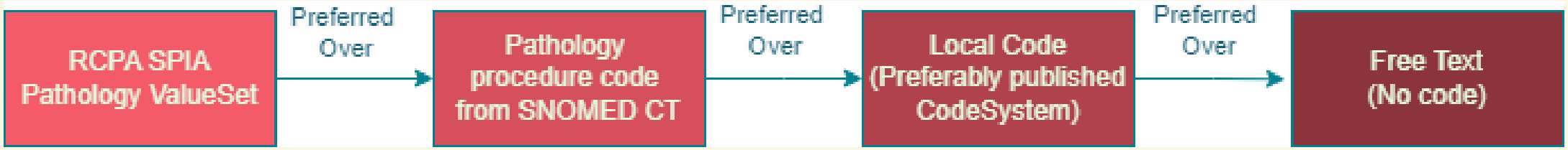


# Diagnostic Request Coding Guidance

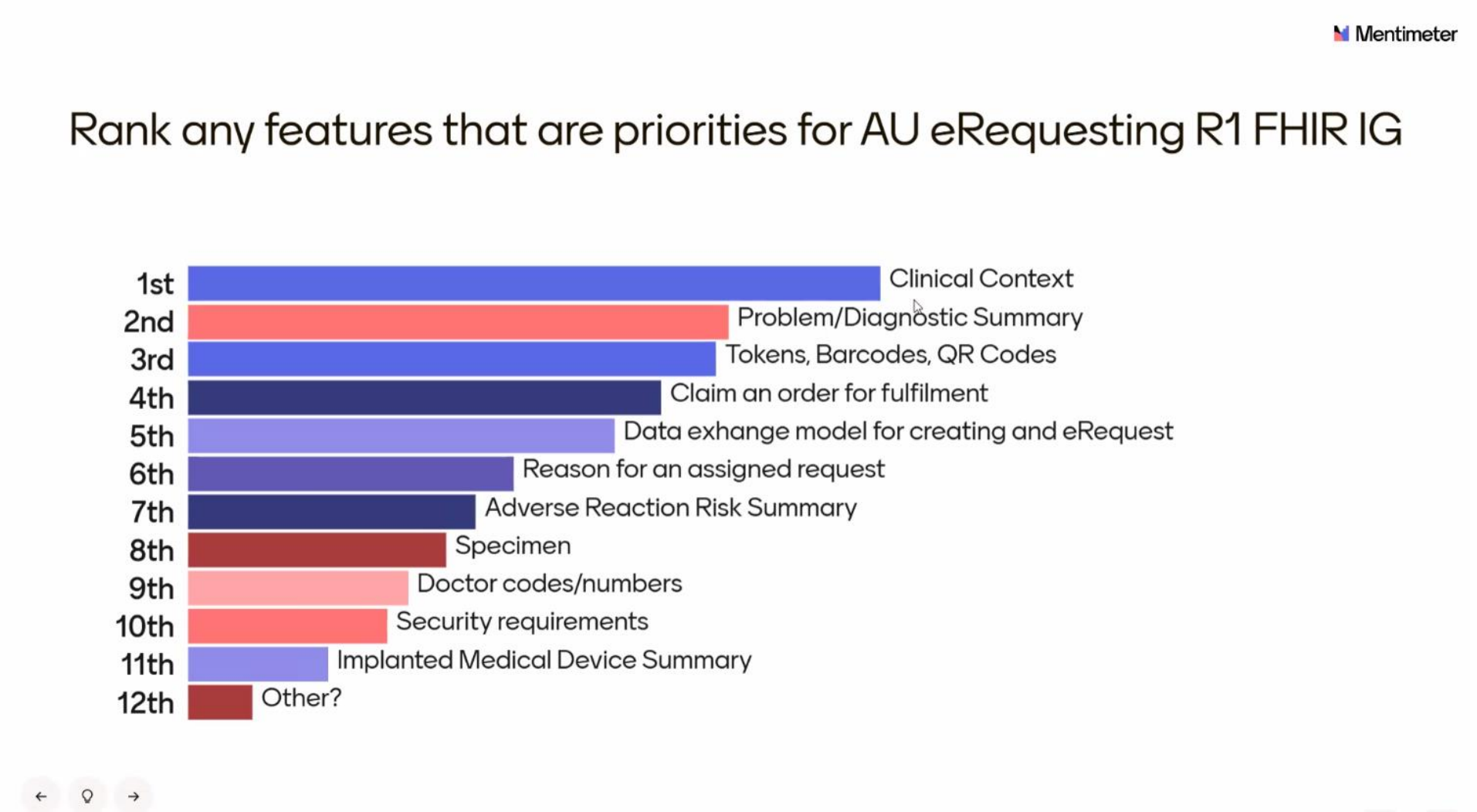
## Imaging Request Coding Guidance




## Pathology Request Coding Guidance



# Next Priorities Identified by TDG

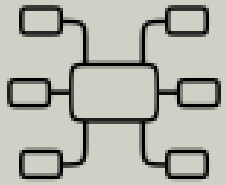


# AUCDI R2 Update

# What is AU Core and Australian Core Data set for Interoperability (AUCDI)?

CDG is here

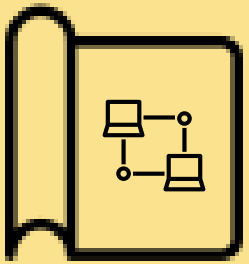
AU CDI



Specifies *"WHAT"* **clinical information** (and corresponding data elements and terms) should be included for data entry, data use and sharing information supporting patient care

TDG is here

AU Core



Specifies *"HOW"* the core set of data (above) and information should be **structured, accessed** and **shared** between systems

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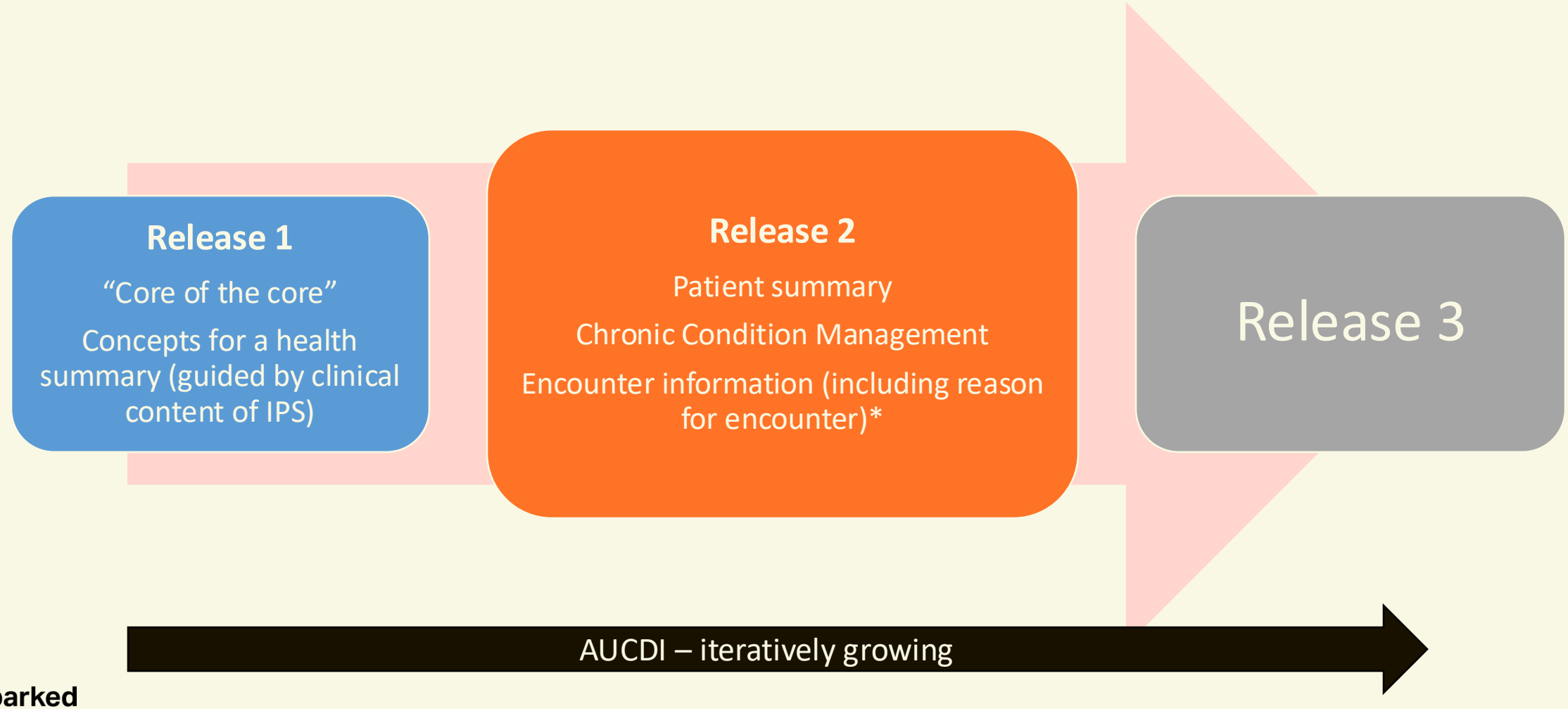
# AUCDI Release 2

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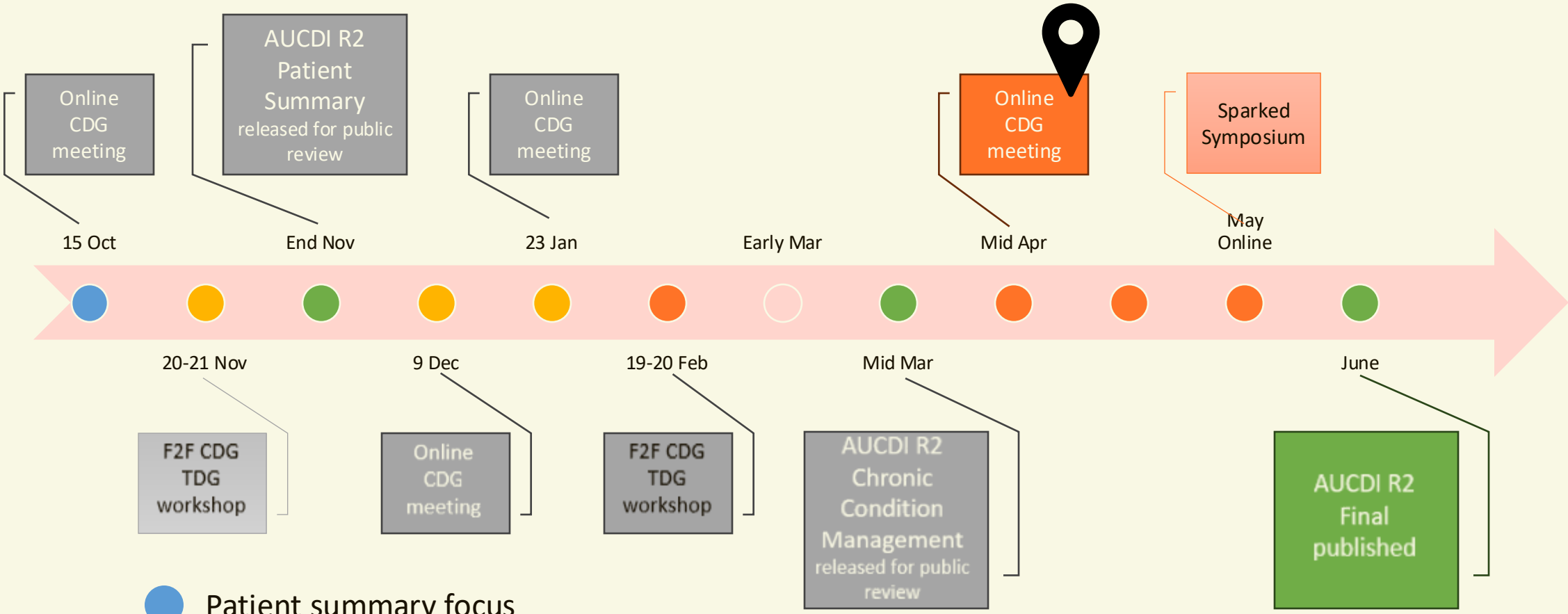
*CDG scoping and requirement gathering for future releases

# AUCDI R2 schedule

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# AUCDI Release 2 Patient Summary Component

**Feedback period**

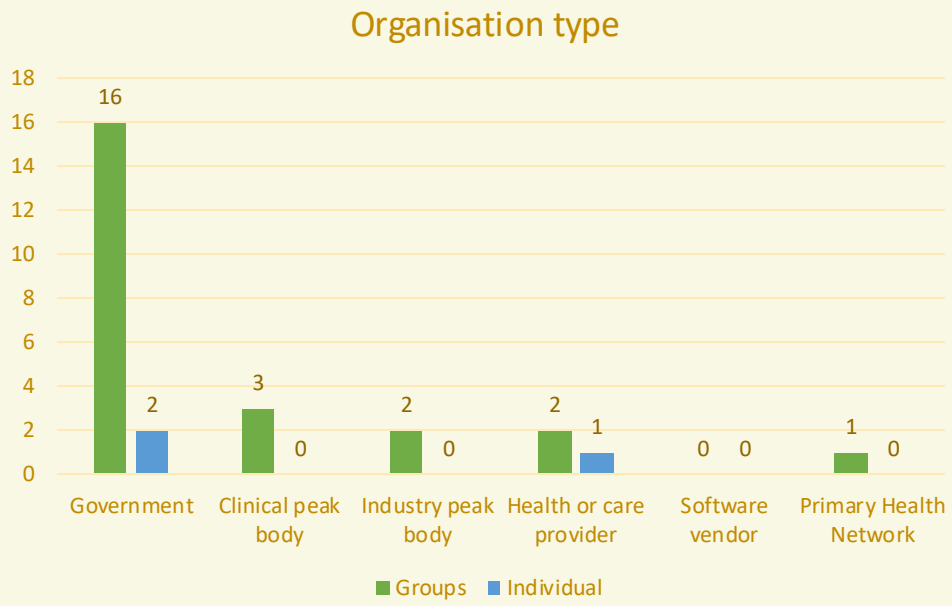
6 weeks

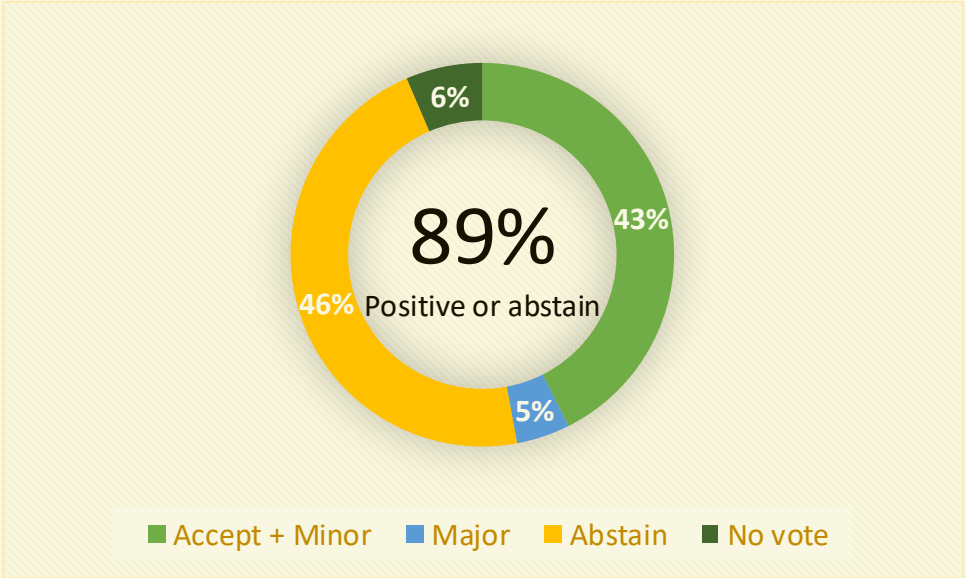
**Number of respondents**

31

**Number of feedback items**

116




**Total Expert Hours for development**

2728

- August Online Expert Hours: 130.5 hours
- September F2F Expert Hours: 808 hours
- October Online Expert Hours: 127.5 hours
- November F2F Expert Hours: 696 hours
- December Online Expert Hours: 82.5 hours
- January Online Expert Hours: 61.5 hours
- February in-person expert hours: 824 hours

**Data items updated**

7

- Document updated for clarity
- Wording of data elements improved
- Grammatical errors/typos addressed

**New items on backlog**

36

- **3 New Data Groups**:
  - Health risk assessment, Disability status &
  - Women's health
- **33 New Data elements**

**AUCDI R2 (includes R1 Updates, PS, CCM & Reason for Encounter)**

June 2025

Sparked HL7 FHIR

# Patient Summary Community Feedback

- Overall: positive feedback
- Requests for additional Data Groups
  - Activities of Daily Living (ADLs) Feeding, Bathing, Mobility
  - Instrumental Activities of Daily Living (iADLs) House cleaning, managing finances, managing medications, communication
  - *Plan of care
  - *Care team members

- Questions about implementation
  - Vendor Progress
  - Terminologies
  - Value Sets

# AUCDI Release 2 – Patient Summary

**Problem/Diagnosis**
- Problem/diagnosis name
- Body site/laterality
- Date/time of onset
- Date/time of resolution
- Status
- Comment
- Last updated

**Adverse reaction risk summary**
- Substance name
- Date/time of onset of first reaction
- Manifestation/s
- Severity of reaction
- Comment
- Last updated

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

**Pregnancy assertion**
- Pregnancy assertion
- Justification
- Date of assertion

**Procedure completed**
- Procedure name
- Body site/laterality
- Clinical indication
- Date performed
- Comment

**Medication use statement**
- Medication name
- Form
- Strength
- Route of administration
- Dose amount and timing
- Clinical indication
- Comment
- Date of assertion

**Last Menstrual Period assertion**
- Date of onset
- Certainty
- Date of assertion

**Estimated date of delivery summary**
- EDD by cycle
- EDD by ultrasound
  - Date of ultrasound
  - Gestation by scan
- Last update

**Vaccination administered event**
- Vaccine name
- Sequence number
- Date of Administration
- Comment

Draft for community comment released in November 2024

Draft for community comment completed

Finalising updates and feedback responses

New content for AUCDI Release 2 are noted in black text

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https://sparked.csiro.au/index.php/sparked-au-patient-summary-clinical-focus-group/

# Patient Summary Clinical Focus Group update

- 5 Patient Summary Consumer Journey maps developed
  - Interstate GP Visit
  - Emergency Hospital Attendance
  - Referral to Specialist & Allied Health
  - Hospital to Aged Care Interstate Transfer
  - Pre-operative Surgical Journey
- Unbound by system limitations
- Illustrate the interactions and use of a patient summary during a consumer's healthcare journey
- Are being used by the AU Patient Summary FHIR IG project

# AUCDI Release 2 Chronic Condition Management Component (in progress)

**Feedback period**

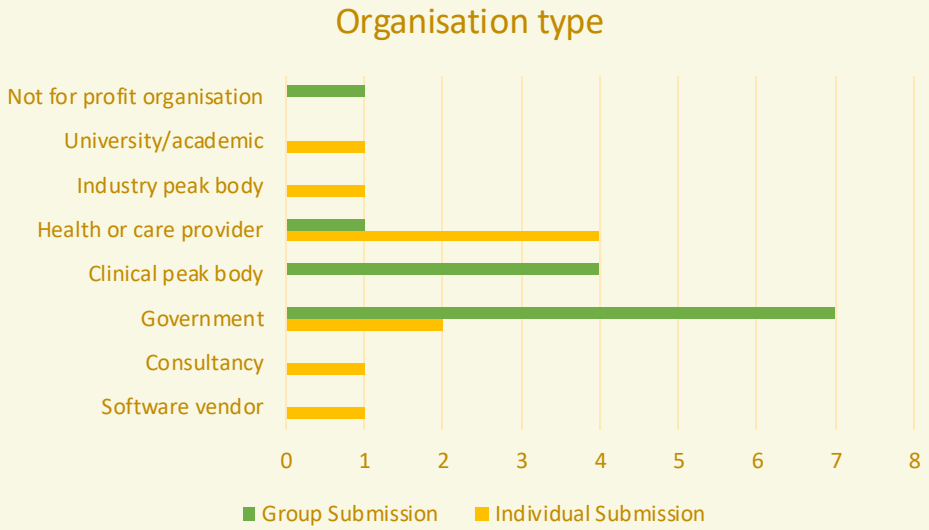
6 weeks

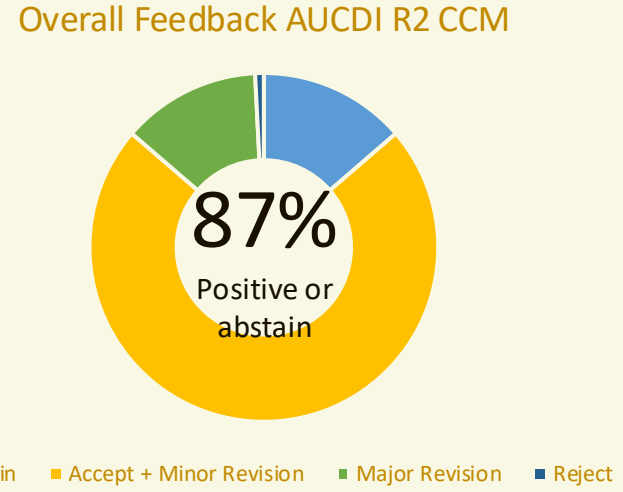
**Number of respondents**

23

**Number of feedback items**

300+




**Expert Hours for development**

2199

- August Online Expert Hours: 130.5 hours
- September F2F Expert Hours: 404 hours
- November F2F Expert Hours: 696 hours
- December Online Expert Hours: 82.5 hours
- January Online Expert Hours: 61.5 hours
- February in-person expert hours: 824 hours

**Updated Data Items (In Progress)**

40+ Updates

- Tobacco smoking summary
- Alcohol consumption summary
- Substance use summary
- Goal
- Health Issue

**New items added to backlog (In progress)**

**2** new data groups
**3** updates to data groups (added elements)

- **Goal:** two added data elements
- **Readiness for change**: two added data elements
- **Health issue**: two added data elements
- **Smokeless tobacco** – new data group
- **Recommendation** – new data group

**AUCDI R2 (includes R1 Updates, PS, CCM & Reason for Encounter)**

June 2025

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# Chronic Condition Management Community Feedback (Update)

- Overall: positive feedback

- Requests for additional Data elements
  - Readiness for change
  - Goals
  - Health Issue
- Requests for additional Data Groups
  - Smokeless tobacco
  - Recommendation

# AUCDI Release 2 – Chronic Condition Management

**Health Issue**
- Issue name
- Description
- Date of onset
- Last updated

**Goals**
- Goal name
- Description
- Clinical indication
- Initiator role
- Initiator
- Start date
- Proposed end date
- Actual end date
- Outcome
- Comment
- Last updated

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

**Substance use summary**
- Substance name
- Overall status
- Overall comment
- Last update

**Tobacco smoking summary**
- Overall Status
- Last updated
- Type
  - Status
  - Typical use
  - Comment
- Overall quit date
- Overall years of smoking
- Overall pack years
- Overall comment

**Alcohol consumption summary**
- Overall status
- Overall comment
- Last update

**Procedure completed**
- Procedure name
- Description
- Body site/laterality
- Clinical indication
- Date performed
- Comment

**Health education**
- Education topic
- Description
- Date/time provided

**Medical equipment supply**
- Equipment type
- Description
- Date/time provided

**Psychosocial therapy**
- Therapy type
- Description
- Date/time provided

**Physical assistance**
- Assistance type
- Description
- Date/time provided

**Education summary**
- Overview
- Highest level completed
- Last updated

**Financial summary**
- Overview
- Financial stability status
- Last updated

**Food and nutrition summary**
- Overview
- Food security status
- Last updated

**Housing summary**
- Overview
- Housing stability status
- Last updated

**Living arrangement summary**
- Overview
- Last updated

**Occupation summary**
- Overview
- Employment status
- Last updated

**Physical activity summary**
- Overview
- Last updated

Proposed scope AUCDI R2 CCM

Draft for community comment completed
Finalising updates and feedback responses

New content for AUCDI Release 2 are noted in black text
Service request brought across from AUeReqDI R1

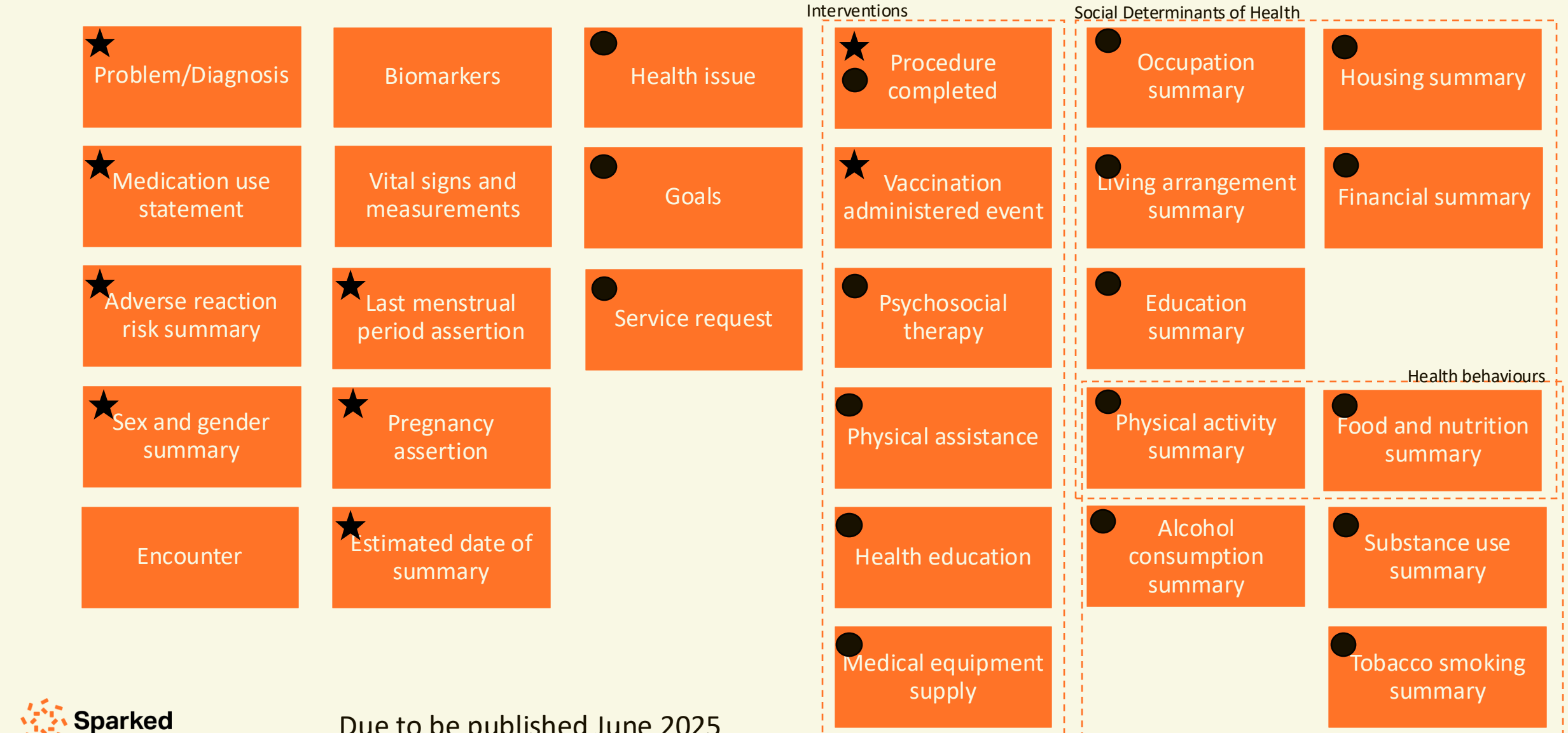
# Chronic Condition Management Clinical Focus Group update

- Has had first meeting
- Starting on Journey maps
  - Unbound by system limitations
- All outputs will be put up on the Sparked website

# Scope of AUCDI Release 2

★ Patient summary

● Chronic condition management (proposed)




Due to be published June 2025

*Each Biomarker, Vital sign and Measurement has a date of measurement or date of observation

# Scope of AUCDI Release 2 (part 1/2)

**Problem/Diagnosis**
- Problem/diagnosis name
- Body site/laterality
- Date/time of onset
- Date/time of resolution
- Status
- Comment
- Last updated

**Adverse reaction risk summary**
- Substance name
- Date/time of onset of first reaction
- Manifestation/s
- Severity of reaction
- Comment
- Last updated

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

**Medication use statement**
- Medication name
- Form
- Strength
- Route of administration
- Dose amount and timing
- Clinical indication
- Comment
- Date of assertion

**Vital signs***
- Blood pressure
  - Systolic
  - Diastolic
- Pulse
  - Rate
- Body temperature
- Respiration
  - Rate

**Measurements***
- Height/length
- Body weight
- Waist circumference

**Procedure completed**
- Procedure name
- Description
- Body site/laterality
- Clinical indication
- Date performed
- Comment

**Psychosocial therapy**
- Therapy type
- Description
- Date/time provided

**Physical assistance**
- Assistance type
- Description
- Date/time provided

**Biomarkers***
- HDL
- LDL
- Total Cholesterol
- Triglycerides
- HbA1c
- eGFR
- uACR

**Vaccination administered event**
- Vaccine name
- Sequence number
- Date of Administration
- Comment

**Health education**
- Education topic
- Description
- Date/time provided

**Medical equipment supply**
- Equipment type
- Description
- Date/time provided

**Encounter – clinical context**
- Reason for encounter
- Modality

**Pregnancy assertion**
- Pregnancy assertion
- Justification
- Date of assertion

**Last Menstrual Period assertion**
- Date of onset
- Certainty
- Date of assertion

**Estimated date of delivery summary**
- EDD by cycle
- EDD by ultrasound
  - Date of ultrasound
  - Gestation by scan
- Last update

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# Scope of AUCDI Release 2 (part 2/2)

**Goals**
- Goal name
- Description
- Clinical indication
- Initiator role
- Initiator
- Start date
- Proposed end date
- Actual end date
- Outcome
- Comment
- Last updated

**Health Issue**
- Issue name
- Description
- Date of onset
- Last updated

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

**Alcohol consumption summary**
- Overall status
- Overall comment
- Last update

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- Substance name
- Overall status
- Overall comment
- Last update

**Tobacco smoking summary**
- Overall Status
- Last updated
- Type
  - Status
  - Typical use
  - Comment
- Overall quit date
- Overall years of smoking
- Overall pack years
- Overall comment

**Housing summary**
- Overview
- Housing stability status
- Last updated

**Living arrangement summary**
- Overview
- Last updated

**Occupation summary**
- Overview
- Employment status
- Last updated

**Physical activity summary**
- Overview
- Last updated

**Education summary**
- Overview
- Highest level completed
- Last updated

**Financial summary**
- Overview
- Financial stability status
- Last updated

**Food and nutrition summary**
- Overview
- Food security status
- Last updated

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# Backlog - extension to AUCDI R2

## Adverse reaction risk summary

Adverse reaction status
Clinical management description
Clinical status
Clinical verification
Confirmation of attestation of allergy
Criticality
Date exposed to substance
Dose/frequency and form
Initial exposure
Method of diagnosis/Clinical evidence
Onset of most severe reaction
Onset of last reaction
Duration of reaction
Onset related to clinically relevant date
Onset of initial exposure
Duration of exposure
Patient must avoid statement
Reaction mechanism
~~Severity~~
Status
Timing and duration of exposure
Type/Category
Type of reaction
Verification status
reaction event
- Date of manifestation
- Dosage
- Formulation and strength
- De labelling
- Time/timing exposure to

Adverse reaction – authoring clinician
Immunogenic testing

## Biomarkers

Creatinine - clearance and serum levels
ECG
Full blood examination/count
Lipids
- LDL formula
- Lipoprotein (a)
- TC:HDL ratio

Liver function tests
Fasting insulin
Blood glucose
Folate/B12
Iron studies
Microbiota markers
Nutrigenomics
Thyroid function
Vitamin D

## Medication use statement

Administration aid
Endpoint
Episode type
First prescribed date/Medication start date
Identify medications used in combination
Infusion - related data
Last administration
Medication Details
Medication details
Medication History concepts
Preferred brand
Regular medication indicator
Status for changes
Reason for prescribing
Regular medication

## Vital signs

Blood pressure
- Location of measurement
- Mean arterial pressure
- Method (of measurement)
- Position
- Ambulatory, acute (exceptional)

Body temperature
- Comment
- Location of measurement

Blood glucose
Heartbeat
Oxygen saturation
Peak expiratory flow rate (PEFR)
Pulse
- Body site
- Method (of measurement)
- Regularity
- Rhythm

Respiration
- Body position

**Measurements**
Calculated body weight
~~Body weight~~
- Device
- BMI

## Device

Batch Number
Body site
Route of administration
Target disease
Vaccine serial ID

## Problem/Diagnosis summary

Aetiology
Cause
Course description
Clinical description
Date/time clinically recognised
~~Date/time of onset~~
~~Date/time of resolution~~
Diagnostic certainty
Discharge Diagnosis/Diagnosis type
Impact
Method of diagnosis/Clinical evidence
Manifestation
Practitioner role that confirmed the diagnosis
Qualifiers
Resolution phase
Sensory Impairment
Pain Assessment
Severity
Staging/grading
Type (comorbidity/complication)
Evaluation results

## Menstrual information

~~Last menstrual period~~
Menstrual status

## Estimated Date of Delivery Summary (EDD)

~~EDD by cycle~~
~~EDD by ultrasound~~
~~Date of ultrasound~~
~~Gestation by scan~~
~~Last updated~~

## Sex and Gender

Sex parameter for clinical use

## Encounter

Comment
Type of encounter/modality
Location/s
Outcome

Items marked with a strikethrough have been completed

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# Backlog - extension to AUCDI R2

## Health Interventions
Assistive device fitting
Outcome/effectiveness
Intervention context

## Procedure
~~Description~~
Intent
Total duration
Location performed
Procedure status

## Vaccination administered event
Batch Number
Body site
Route of administration
Target disease
Vaccine serial ID

## Tobacco smoking summary*
Amount
Cessation
Cigarette smoking
Comment
Daily smoking started
Frequency
~~Overall pack years~~
Pattern
Previous episodes of use
~~Quit date~~
Regular smoking started
~~Years of smoking~~

## Goal
Attestor
Steps to achieve goal
Owner/Initiator
Frequency
Function impact
Measurable time frame/SMART
Preventative nutrition goals
Relevant supports

## Health Issue
Issue type (physical, mental, psychological)
Issue status
Health concern/consideration
Date of resolution/closure

## Living arrangements*
Household
Residential setting

## Housing summary*
Housing
~~Housing stability status~~
Rurality

## Food and nutrition summary*
Current diet status
Appetite
Diet restrictions/requirements
Diet
~~Food security~~
Nutritional status

## Education summary*
Last updated

## Financial summary*
Finance
Income
Social economic (?)
Financial stability status

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Items marked with a strikethrough have been completed

# Backlog – new items

**Advanced care directive**

**Adverse event**

**Alternative care (e.g. bush meds)**

**Assistive technologies and tools summary**

**Birth summary**
Place of birth

**Cancer staging**

**Care pathways**

**Care plan**
Care plan summary

**Care team members**
Name
Organisation
Role
Contact
CC option

**Child & adolescent health**

**Clinical evidence**

**Clinical synopsis**
Author
Summary (free text)

**Clinician alerts**

**Communication capability***
Languages spoken
Interpreter required

**Contraindication**

**Culture**
Cultural burden
Connection/Disconnection
Strength based behaviours
Cultural security

**Diagnostic test results**
Arterial blood gases
Cardiac imagery
Colonscopy
ECG
Full blood examination
Gastroscopy
Genetic/genomic test results
Imaging results
Imaging test results – echocardiography
Path test results
Path test results – histology
Spirometry

**Drug interactions**

**Ethnicity***
Aboriginal and Torres Strait Islander status

**Family history**

**Functional status and disability assessment**
Activities of daily living
Barthel's Index
Cognitive capacity
Functional Independence Measure (FIM)
Instrumental Activities of Daily Living (IADLs)
Mini Mental Status Examination
Montreal Cognitive Assessment

**Genetic/genomic test results**
Genetics
Epigenetics

**Gambling summary***

**Health equity summary***
Access of care
Distance from care
Health literacy/numeracy

**Health risk assessment**
Aspiration risk
Falls risk
Wound care

**Imaging completed**

**Imaging results**

**Informed Consent**

**Implanted medical devices summary**

**Medication order**

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Items marked with a strikethrough have been completed

# Backlog – new items

**Medication summary**

**Obstetric summary**
Gravidity/Parity

**Occupation summary**
Occupation

**Oral health**

**Pathology results**

**Personal Information**
Participation capability

**Personal safety summary***
Childhood trauma
History of DFSV - perpetrator
History of DFSV - survivor
Domestic violence

**Pregnancy**
Examinations
Progress
Risk (level)
Start of pregnancy

**Pregnancy Status?**
Careflow steps

**Pregnancy summary**

**PREMs and PROMS**

**Preventative care**

**Product errors**

**Pulse oximetry**
FiO2
SpO2

**Racism**

**Readiness for change**
Motivation for use

**Recommendation**

**Screening activity completed**

**Sexual characteristics**

**Sexual health summary***

**Shock index**

**Side effect register**

**Smokeless Tobacco**

**Social context**
Responsibilities
Interaction with justice

**Social determinants of health and Social emotional wellbeing**
Groups marked with a *

**Social network***
Carer
Next of Kin
Relationships
Social Supportive Network

**Specialist services**

**Support person needs**

**Symptom/sign**

**Transport summary***
Transport access

**Vaping summary**

**Vital status**

**Women's Health**

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Items marked with a strikethrough have been completed

# AUCDI R2

- Due to be published in June 2025
  - Contain all of AUCDI R1 + content from Patient Summary component + content from Chronic Condition Management component
  - A lot of the introductory and explanatory material will be moved to the website
  - AUCDI will focus on the data group library
  - All feedback from the Draft for Comment will be published with the Sparked responses

# AUCDI – maturing from Core to Clinical

**AUCDI Release 1**

- Core of the core
- Use case agnostic
- Setting the foundation

**AUCDI Release 2**

- Expansion of core of the core
- Use case specific content
  - Patient summary
  - Chronic condition management

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# Proposal to change the name of AUCDI

AUCDI Release 1

- Australian CORE Data for Interoperability

AUCDI Release 2

- Australian CLINICAL Data for Interoperability

# Proposal to change the name of AUCDI

AUCDI Release 2

Rename to Australian CLINICAL Data for Interoperability

Includes

- AUCDI Release 1
- Patient Summary content
- Chronic Condition Management content

AUCDI Release 3

Includes

- AUCDI Release 2
- Additional use cases and content
- eRequesting content (AUeReqDI R1)

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# Proposal to change the name of AUCDI

- Data groups and data elements specific to their clinical use cases will be identified as such
  - Core
  - Patient Summary
  - Chronic condition management
  - eRequesting*
- Data groups and data elements can have multiple use cases identified

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* For R3

# Benefits

- All clinical use cases in one place
  - Simpler to find
  - Demonstration of reuse
- Makes clear it builds on the clinical community of practice that has developed AUCDI to expand the scope beyond ‘Core’ to specific use cases.
- TDG can easily identify data groups and elements in scope for different use cases
- Room to grow and add additional clinical use cases and data requirements beyond ‘core of the core’

# Any comments/questions?


- Joint CSIRO and DHCRC Report
- Consulted Government, Clinicians, Providers, Industry and researchers
- Highlights the complexity and fragmentation
- Duplication of data requirements
- No standardization of tools and data requirements (multiple assessment tools)
- Challenges with duplication of effort for primary care
- Challenges with differences in Aged Care and My Health Record legislation
- Gaps in Allied Health digitisation and standards
- Current MYHR document requirements are PDF – healthcare moving to FHIR

# Considerations

- A whole of life-course and ecosystem approach- data needs to follow the individual across the health, aged and social care ecosystem
- Standardised the approach to assessment tools and scales
- Standardised approach to data requirements across the health care ecosystem- single provision multiple use
- Address gaps in AHP data standards and terminology
- Address digitization of AHP
- Use of auPatient Summary to support transitions of care

# Sparked

- ✓ AUCDI- whole of life course and ecosystem
- ✓ AUCDI roadmap includes Functional Status, ADLs etc
- ✓ AU Patient Summary roadmap includes Functional Status, Advance Care Directives
- ✓ Sparked Roadmap to include standard approach to assessments, scales observations
- ✓ Approach to Smart Forms ( CSIRO and ADHA)
- ✓ Allied Health CIS to MyHR (ADHA)
- ✓ Allied Health Terminology ( NCTS)
- ✓ Approach to Careplans/TCAs

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Need a break,
have a Menti break!

# Update from Adelaide February 2025

# Sparked in Adelaide!

- Huge thank you to South Australia Health for hosting us in Adelaide
- Over 220 people attended across the 3 days
  - Leadership event
  - CDG meeting
  - TDG meeting

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# Leadership evening and showcase

- Speakers
  - DOHAC (Daniel McCabe, Simon Cleverly)
  - ADHA (Peter O’Halloran)
  - Bettina McMahon (Healthdirect)
  - Keith McNeil (SA Health)
- Panel
  - Jeremy Sullivan
  - Chris Moy
  - Angela Ryan
    - Marc Belej
    - Grahame Grieve



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# Leadership evening and showcase

- Vendor demonstrating how they are implementing AU Core in their products or in their roadmap

# Design Group meetings

- CDG
  - Updates from DOHAC and ADHA
  - Showcase from SA Health
    - Interoperability update
    - Ambulance Patient Care Record project (amPHI) in South Australia implementing FHIR, AU Core and SNOMED CT-AU
  - Workshops
    - Chronic Condition Management plan template
    - Encounter summary/reason for encounter
    - Patient story


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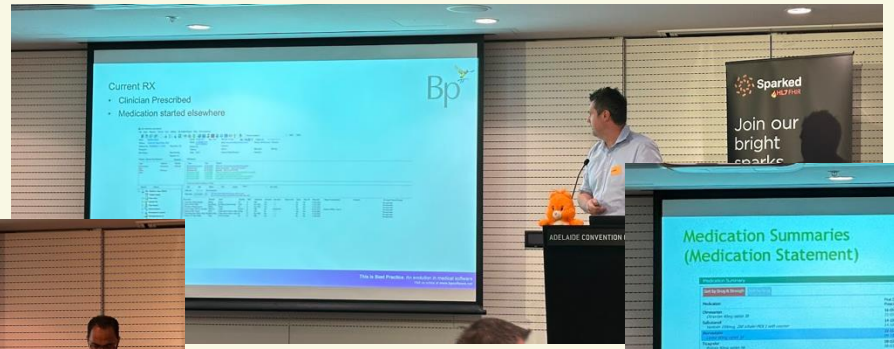
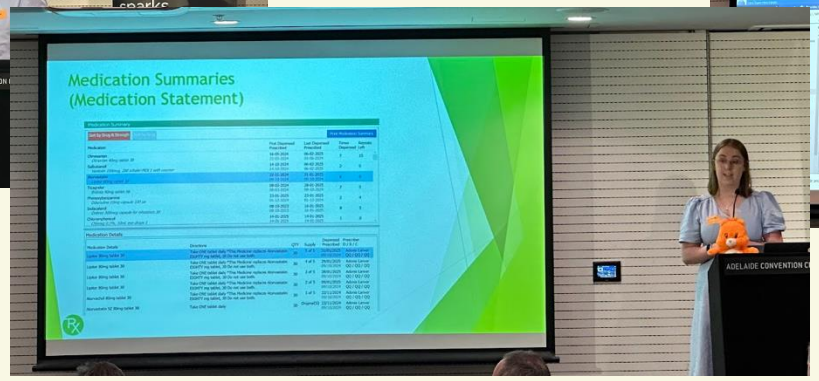
# Design Group meetings

- TDG
  - AU Core and AU PS workshop
    - Medications
    - Exchange considerations and architecture
  - 80 attendees
  - 4 vendor demos






# Content Recap And Overview

## Patient Summary and Reason for Encounter, and Chronic Condition Management

# Patient Summary and Reason for Encounter/ Encounter Record

# Purpose of AU Patient Summary

A Patient Summary is a standardised collection of an individual's health and healthcare information.  Rather than an entire health record, it is the minimum sufficient data to support facilitation of safe, quality and efficient care.

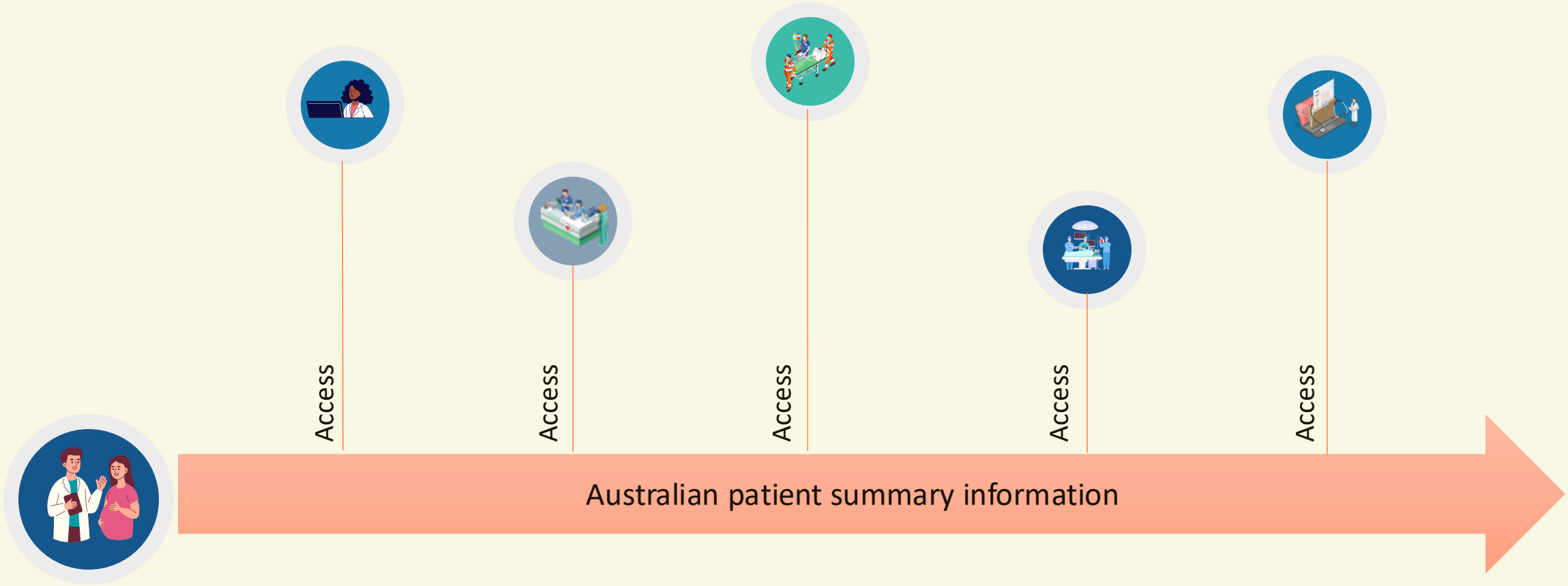
The AU Patient Summary will support the consumer on their healthcare journey providing the consumer and their healthcare providers with timely and current access to relevant health information. It will enable individuals to share their healthcare information when travelling (including internationally).

# Characteristics of AU Patient Summary

The AU Patient Summary will:

- Be an interoperable set of clinical data.
- Will contain as up to date information as possible based on available sources at a point in time.
- May be either an asserted or non-asserted patient summary
- May include asserted and non-asserted information.
- Will be portable and accessible to the individual and their healthcare providers.
- Will support individuals on their healthcare journey.
- Will support all transitions of care.
- Will be conformant to the International Patient Summary Standard.

# Consumer journey

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# Reason for Encounter – Key Discussions so far

**S**ubjective – history including patient agenda

**O**bjective – examination, investigations

**A**ssessment – impression or issues/problem list

**P**lan – management including referrals

Clinical perspective

Need more than just Reason from an Encounter

Learn from previous experiences with event summaries

Need data to demonstrate the value of care

Aide memoire

"Key considerations from the primary care provider may be informed more by the reason for encounter, rather than the primary diagnosis"

To understand complexity of care

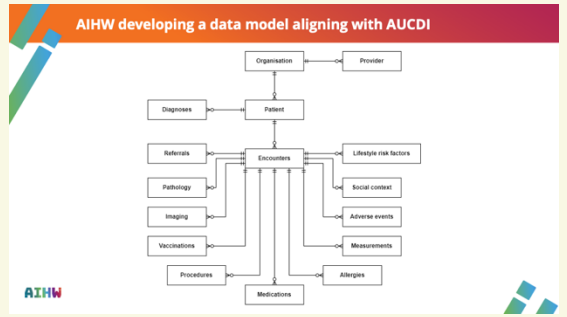
Consumer

Understanding the journey/ interaction with health care system

AIHW

Want all the information related to an encounter

Looking at a population heath point of view



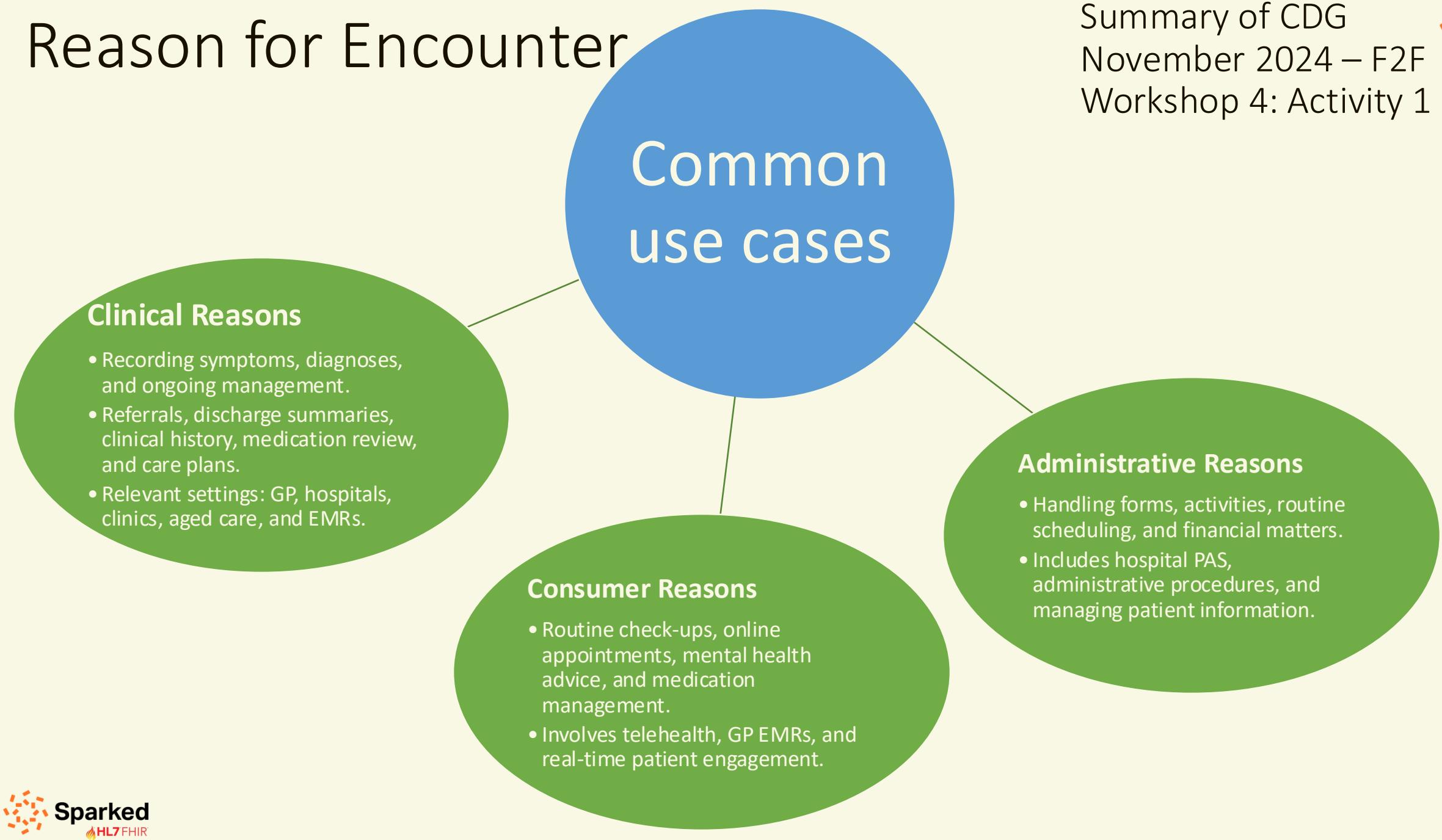

DOHAC

Support funding and sustainability of health system

Spar HL7 FHIR

# Reason for Encounter

Summary of CDG
November 2024 – F2F
Workshop 4: Activity 1

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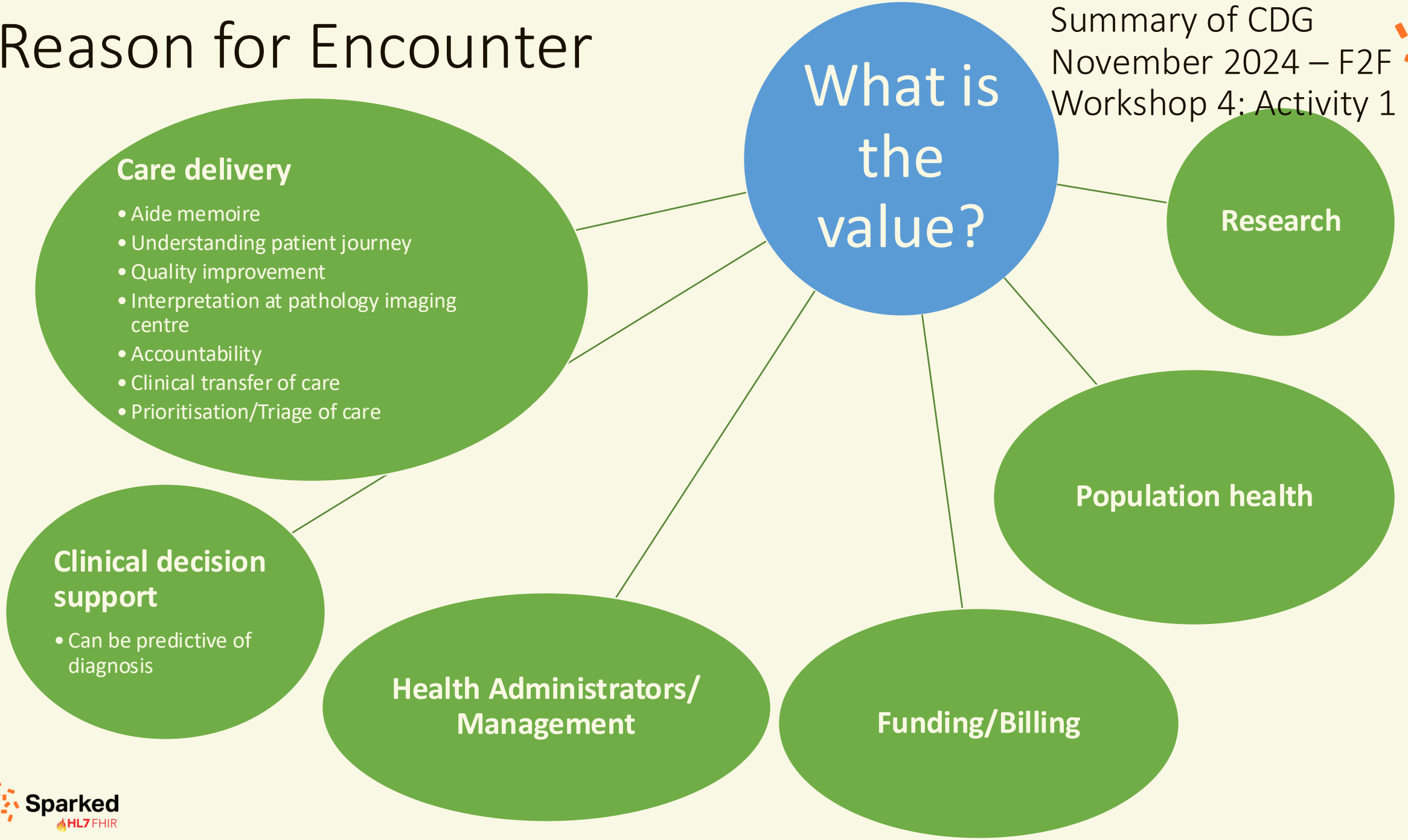
# Reason for Encounter

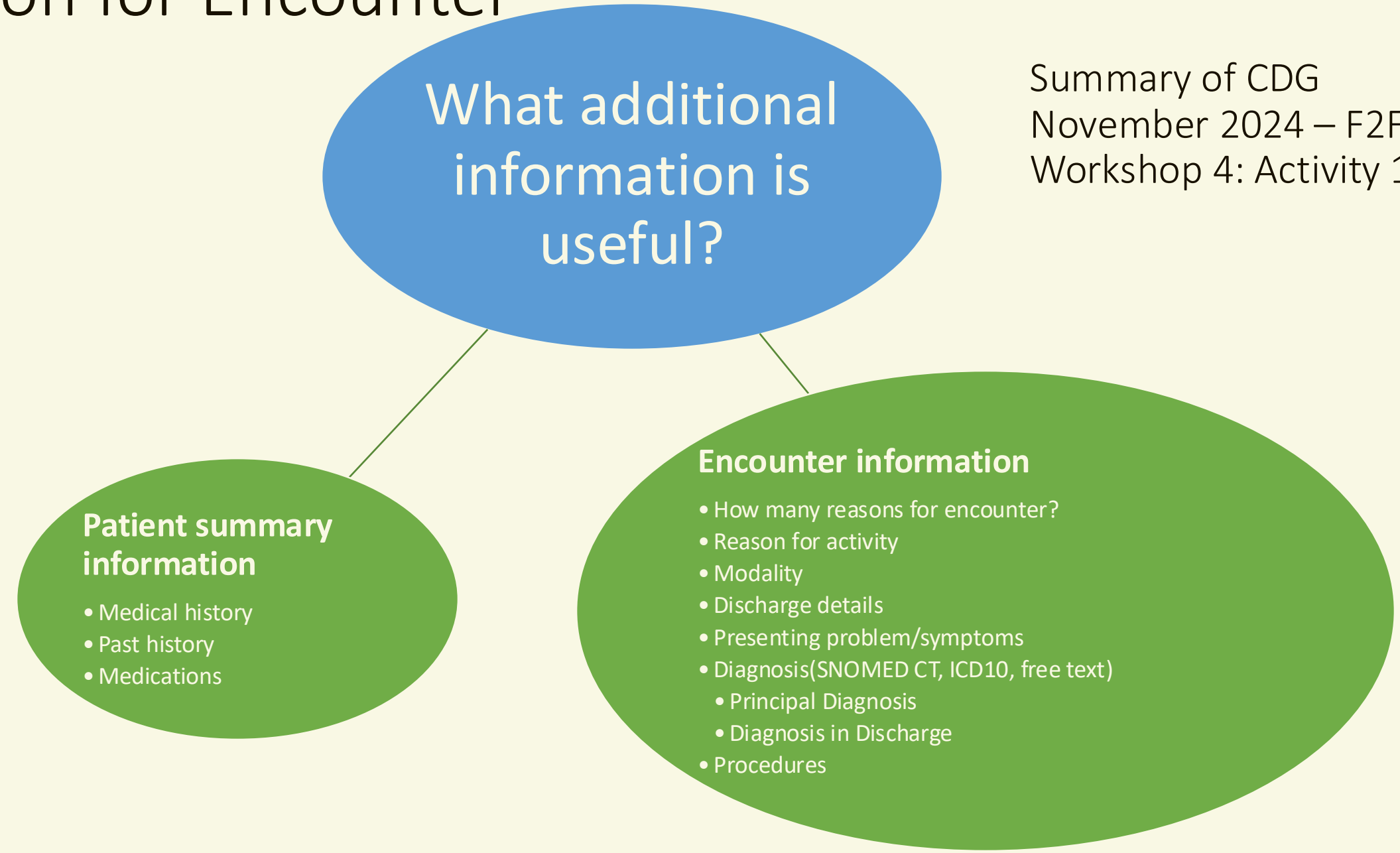
Summary of CDG
November 2024 – F2F
Workshop 4: Activity 1




Sparked HL7 FHIR

# Reason for Encounter

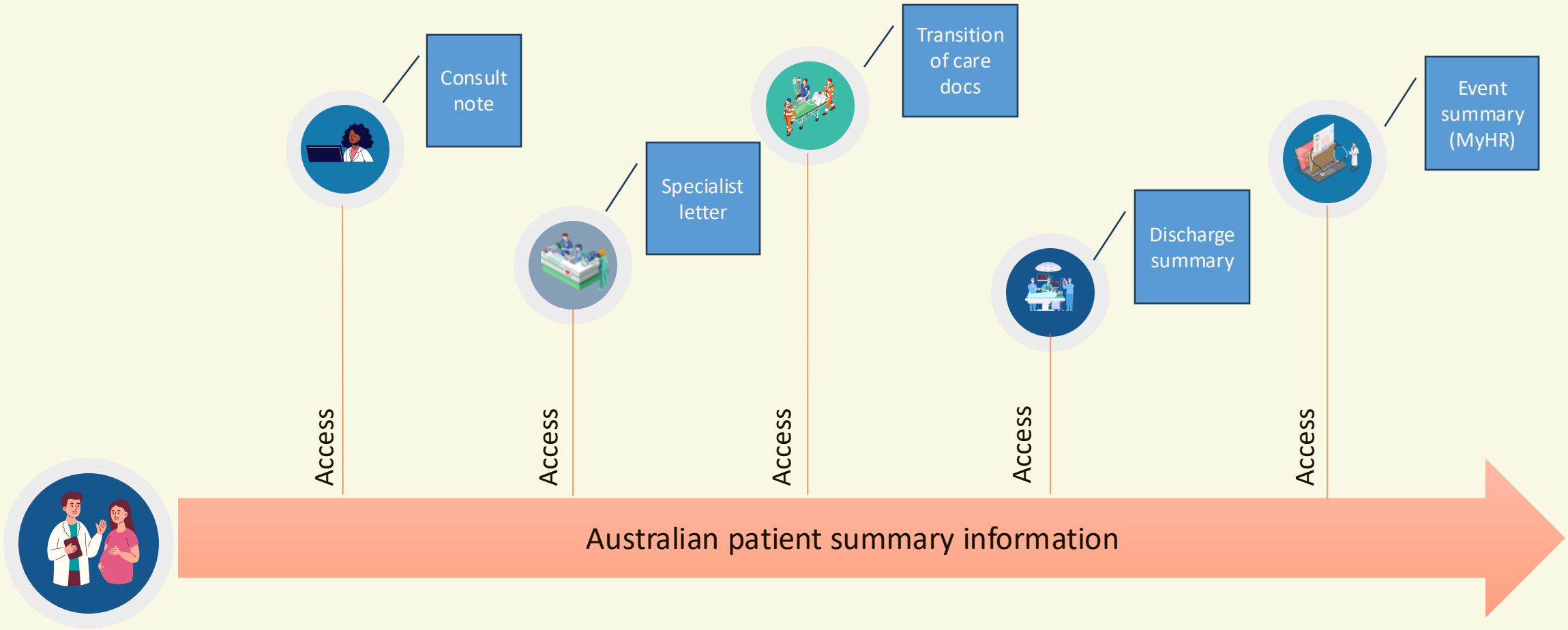
Summary of CDG
November 2024 – F2F
Workshop 4: Activity 1



# So is it more than just a reason for encounter?

- Value in encounter information beyond **just** the reason(s) for encounter
  - Consumer reason for encounter
  - Clinician reason for encounter
  - Investigations
  - Provisional diagnosis
  - Relevant results
  - Recommended treatment plan
  - Follow-ups
  - …
  - …
- A record/summary of the things that happened in an encounter?

# Consumer journey

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# Could these be considered an ‘Encounter Record’?

- Hospital discharge summaries (patient summary PLUS encounter information ?)
- Event summary (MyHR)
- Progress notes/Consultation notes (in local CIS, EMR)
- Consult letter from specialist, allied health back to a usual healthcare provider or GP
- Transition/transfer of care documentation
- Etc
- Etc

# What is an Encounter Record?

- Is it a structured encounter focused record with specific details including
  - Encounter details
    - Date of encounter
    - Length of encounter
    - Who conducted the encounter
    - Method of communication
    - Location of encounter
  - Reasons for encounter
    - Clinician reason
    - Consumer reason
    - Administrative reason
  - Problem/diagnosis
    - Principle and additional diagnoses
    - Working/Suspected
  - Investigations
  - Interventions

?

What is in a name?

Encounter summary
Event summary
Encounter information
Encounter note
Record of encounter

| National Guidelines for On-Screen Presentation of Discharge Summaries (ACSQHC 2017) | RACGP<br>Criterion-c7-1 Content of patient health records |
|---|---|
| Patient details | Patient details |
| Facility details | |
| Recipients | |
| Authors | |
| Encounter details<br>(date, length of encounter, location, episode type…) | Encounter details<br>(Date of consultation, who conducted the consultation, method of communication) |
| Problems and diagnoses | |
| Principal diagnosis | Diagnosis (if appropriate) |
| Reason for presentation | Reason for encounter |
| Secondary diagnoses | |
| Complications | |
| Past medical history | Relevant past medical history |
| Procedures | Examinations and investigations in the encounter |
| Clinical summary | |
| Adverse reaction risk (Allergies/Intolerances) | Adverse reaction risk (Allergies/Intolerances) |
| Medication statement | Medication requests from the encounter |
| Ceased medications | |
| Alerts | |
| Recommendations | Recommended management plan and review (if appropriate) |
| Follow up | Referrals |
| Information provided to patient | |
| Selected investigation results | |

# Patient Summary vs Encounter Record/Notes/Summary

| | Patient Summary | Encounter Record/Notes/Summary |
|---|---|---|
| Clinical summary | | |
| Reason for encounter/presentation | | Reasons for encounter/presentation |
| Follow-ups. referrals | | Follow-ups, service requests and referrals from the encounter |
| Encounter details<br>(date, location, modality…) | | Encounter details |
| Problem/Diagnosis | Summary of all (active and inactive) | Principle and additional diagnosis of the encounter, Provisional diagnosis of the encounter, .. |
| Procedures/Interventions | Summary of completed | Procedures and interventions scheduled or completed during the encounter (includes information provided to patient) |
| Vaccination administered | Summary of all | Administered during the encounter |
| Adverse reaction risk summary | Summary of all | Newly identified or changed |
| Medication use | Current meds list (including both active and inactive) | Changes to medications (new and ceased) from the encounter |
| Test results | Summary of all | Test orders and results associated with the encounter |
| Vital signs and measurements | Summary of all | Measurements from the encounter |
| Plan of care | Management plans | Management plan developed in or used for encounter |
| Assessments and scores | Summary of all | Performed during the encounter |
| Alerts | All | Newly identified or changed |

# What is an Encounter Record?

- A structured encounter focused record with specific details including
  - Encounter details
    - Date of encounter
    - Length of encounter
    - Who conducted the encounter
    - Method of communication
    - Location of encounter
  - Reasons for encounter
    - Clinician reason
    - Consumer reason
    - Administrative reason
  - Problem/diagnosis
    - Principle and additional diagnoses
    - Working/Suspected
  - Investigations
  - Interventions

?

Could this be used to provide up to date information for the AU Patient Summary?

# Consumer journey

?

Do these encounters provide the up-to-date data?

Consult note

Specialist letter

Transition of care docs

Discharge summary

Event summary (MyHR)

Access

Access

Access

Access

Access

Australian patient summary information

Where is data sourced from?

Where does new, up-to date data come from?

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# Consumer journey

Structured encounter records providing a source of data

Australian patient summary information

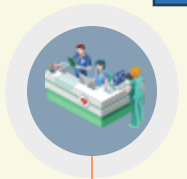
Access

Provides data

Encounter record

Access

Provides data



Encounter record

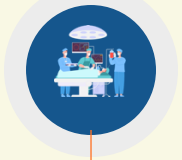
Access

Provides data

Encounter record

Access

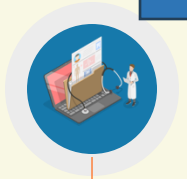
Provides data



Encounter record

Access

Provides data



Encounter record

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# Adelaide Workshop– Encounter Record/Summary

- Explored the idea of an encounter record/summary
  - What's in a name!
- Activities
  - Activity 1 – Encounter record and the consumer journey
    - At which points in the journey would an encounter record would be useful (including current use)
    - At which points in the journey could that encounter record be used to update patient summary information
  - Activity 2 - Prioritisation of data groups for an encounter record

As a **group** at your table


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# Referral to Specialist & Allied Health

Encounter record would be useful

Encounter record could be used to update a Patient Summary

**Patient**

**Joyce Johnson**

**DOB: 06 Feb 1985 (39yo)**

8 8

## 1. Referral Creation

Dr Burrows' shares care of Joyce, who is pregnant and has recently been diagnosed with gestational diabetes. Dr Burrows decides to send electronic referrals to an endocrinologist and a dietitian for further evaluation & support.

2 3

## 2. Referral Received

Each health care provider receives a referral, which allows access to the patient summary at time of referral. The practice nurse or dietitian opens their referral and retrieves the patient summary.

3 1

## 3. Referral Triaged

Using the information in the electronic referral and the most recent patient summary from Dr Burrows, each health care provider triages their referral.

## 4. Endocrinologist Consultation

During the consultation, the endocrinologist accesses the patient summary embedded in their referral to view and confirms the most recent patient summary, including current medications and relevant medical history. The endocrinologist decides to increase Joyce's insulin dose.

13

6

9 2

## 5. Patient Summary Update

The endocrinologist writes a letter to update Joyce's usual GP and her midwife. The endocrinologist also updates a patient summary for Joyce to include the increase to her insulin dose.

2 10

## 6. Dietitian Consultation

During the consultation, the dietitian accesses the patient summary embedded in their referral to view and confirm the most recent patient summary, which has been updated with the increased dosage.

8 2

## 7. Patient Summary Update

The dietitian updates a patient summary for Joyce and writes a letter to update Joyce's usual GP and midwife.

Have a hairy question? Please note on a post it note!

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# Hospital to Aged Care Interstate Transfer

Encounter record would be useful

Encounter record could be used to update a Patient Summary

## Patient

**Eleanore Nielsen**

**DOB: 12 Apr 1945 (79yo)**

### 1. Patient Discharge

3 5

Eleanore is preparing for discharge from the hospital following a hip fracture. No longer able to live in her own home in NSW, Eleanore will be going to an aged care facility in Canberra close to where her daughter lives.

### 2. Information Handover

9 5

Hospital staff update Eleanore's patient summary and discharge information, which will be transferred to her new aged care facility.

### 3. Aged Care Arrival

0 7

Eleanore arrives at the new aged care facility, greeted by the staff who already have her relevant health information on hand.

### 4. Pharmacy Review

6 4

The aged care pharmacist reviews and reconciles Eleanore's current medications.

### 5. GP Consultation at Aged Care Facility

9 10

During the consultation with Eleanore and her daughter, Eleanore's new GP requests her patient summary from her previous GP. They review the hospital discharge summary and patient summary from the previous GP to reconcile her medication and care requirements, confirming her patient summary information is correct and up to date.

### 6. Provide Patient Care

4 1

Eleanore's updated patient information is available to the healthcare providers in her new local area, including her new pharmacy when dispensing her medications.

Have a hairy question? Please note on a post it note!

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# Emergency Hospital Attendance

**Patient**

**Charlotte Morris**

**DOB: 11 Nov 1994 (30yo)**

1 4

## 1. Ambulance Attendance

Charlotte is taken to hospital via ambulance following a car accident. Presenting with various injuries, Charlotte is stable but unconscious

5 5

## 2. Ambulance Transfer

Ambulance staff access Charlotte's patient summary and note that Charlotte has an allergy to opioids & latex.

2 4

## 3. Hospital System Request

During handover, the ED Multidisciplinary Team (MDT) is alerted to Charlotte's opioid and latex allergies and also requests the most recent collated patient summary data.

## 4. Patient Summary Retrieval

The system retrieves the patient summary from Charlotte's usual GP.

1 0

1 0

## 5. Patient Summary Review

Dr Hickson and the ED MDT review the patient summary to see information on allergies, pregnancy status, vaccinations status, current medications and other health information.

10 6

## 6. Hospital Treatment

This allows Dr Hickson and the ED MDT to treat the accident-related injuries while minimising the risk of complications from underlying health conditions.

Have a hairy question? Please note on a post it note!

Encounter record would be useful

Encounter record could be used to update a Patient Summary

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# Activity 1 - Encounter Record and Consumer journey results

| Consumer Journey | Encounter Summary is Useful | Encounter Summary Could Update PS | Top Insights |
|---|---|---|---|
| Hospital to Aged Care Transfer | 91 | 56 | Strong support for use and update at multiple points. |
| Emergency Hospital Attendance | 69 | 41 | Useful in acute events; less consensus on PS update. |
| Referral to Specialist & Allied Health | 90 | 63 | High value in both use and contribution to PS. |

*Key Reflections:*

– Uncertainty about the meaning of “Encounter summary” – suggestions of other names – Encounter record, Encounter note

– Different interpretations: patient summary vs clinician notes vs consult summary.

– Raised need for clarity around scope, granularity, and when/how to trigger updates.

# Activity 2 - Prioritisation of data groups for an encounter record

As a **group** at your table

## Workshop 2 – Activity 2 - Encounter summary

For each summary:

✓ Mark a TICK in the box of data that should be included in the encounter

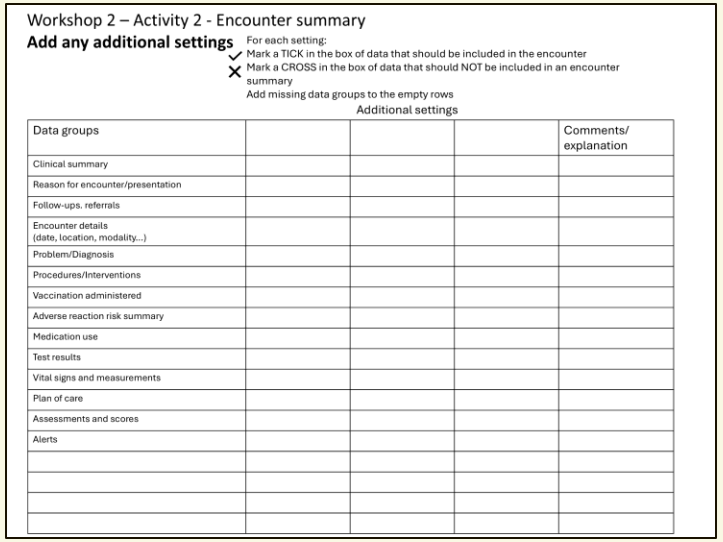
✗ Mark a CROSS in the box of the data that should NOT be included in an encounter summary

Add missing data groups to the empty rows

✓ Agree the top 5 data groups that represents the priority information from an encounter that should be structured and coded to ensure it can flow into a generated patient summary

| Data groups | Acute care discharge summary | GP Encounter summary | Allied Health Encounter summary | Specialist letter/ encounter summary | Comments/ explanation |
|---|---|---|---|---|---|
| Clinical summary | | | | | |
| Reason for encounter/presentation | | | | | |
| Follow-ups. referrals | | | | | |
| Encounter details (date, location, modality…) | | | | | |
| Problem/Diagnosis | | | | | |
| Procedures/Interventions | | | | | |
| Vaccination administered | | | | | |
| Adverse reaction risk summary | | | | | |
| Medication use | | | | | |
| Test results | | | | | |
| Vital signs and measurements | | | | | |
| Plan of care | | | | | |
| Assessments and scores | | | | | |
| Alerts | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| **Mark the top 5 data groups**<br>Priority information from an encounter that should be structured and coded to ensure it can flow into a generated patient summary | |
|---|---|
| Clinical summary | |
| Reason for encounter/ presentation | |
| Follow-ups. referrals | |
| Encounter details (date, location, modality…) | |
| Problem/Diagnosis | |
| Procedures/ Interventions | |
| Vaccination administered | |
| Adverse reaction risk summary | |
| Medication use | |
| Test results | |
| Vital signs and measurements | |
| Plan of care | |
| Assessments and scores | |
| Alerts | |



Workshop 2 – Activity 2 - Encounter summary

**Add any additional settings**

For each setting:
✓ Mark a TICK in the box of data that should be included in the encounter
✗ Mark a CROSS in the box of data that should NOT be included in an encounter summary
Add missing data groups to the empty rows

Additional settings

| Data groups | | | | Comments/ explanation |
|---|---|---|---|---|
| Clinical summary | | | | |
| Reason for encounter/presentation | | | | |
| Follow-ups. referrals | | | | |
| Encounter details (date, location, modality…) | | | | |
| Problem/Diagnosis | | | | |
| Procedures/Interventions | | | | |
| Vaccination administered | | | | |
| Adverse reaction risk summary | | | | |
| Medication use | | | | |
| Test results | | | | |
| Vital signs and measurements | | | | |
| Plan of care | | | | |
| Assessments and scores | | | | |
| Alerts | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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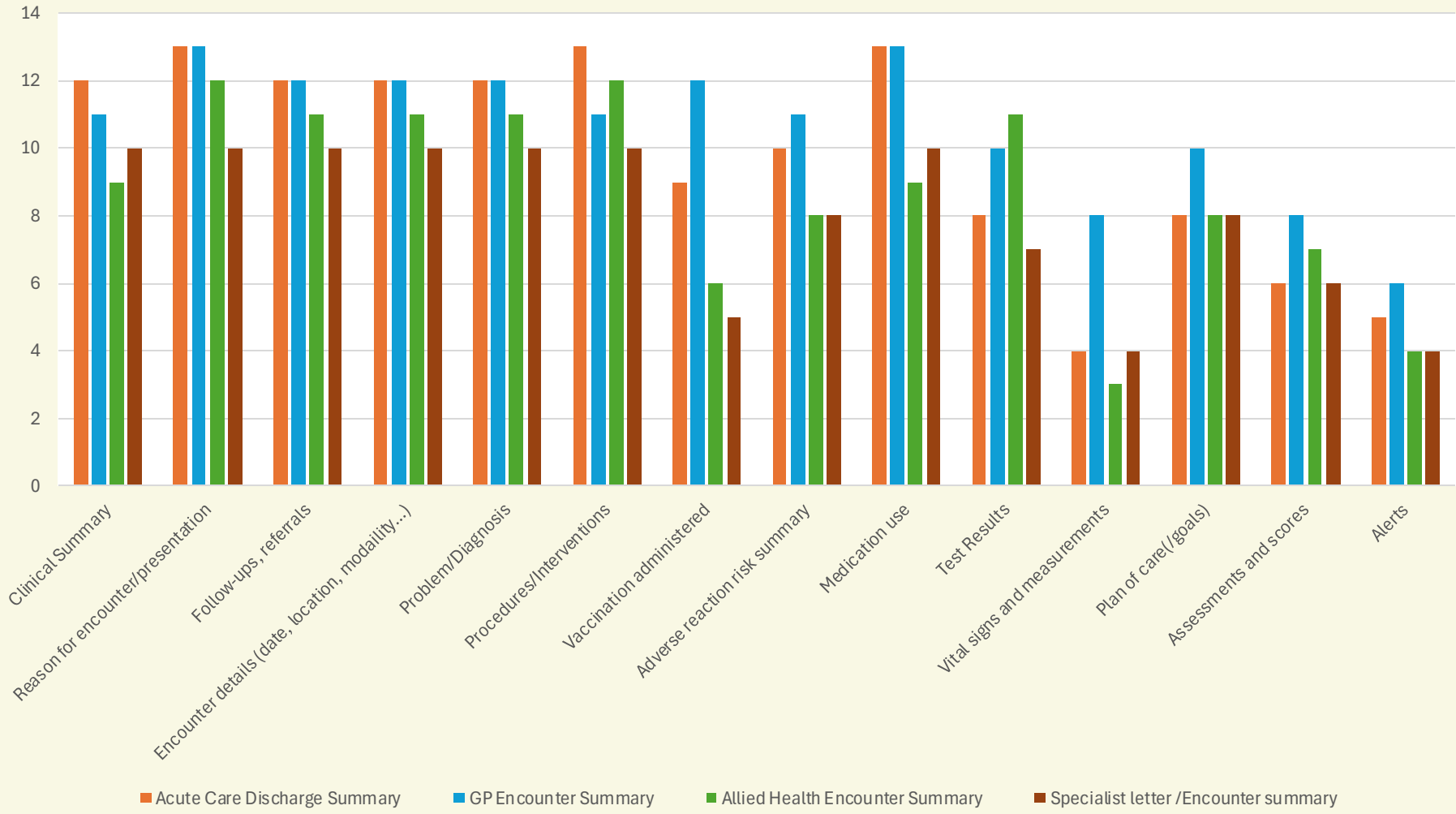
| | Acute care discharge summary | | GP Encounter Summary | | Allied Health Encounter Summary | | Specialist letter/encounter summary | | Comments/explanation |
|---|---|---|---|---|---|---|---|---|---|
| | ✅ | ❌ | ✅ | ❌ | ✅ | ❌ | ✅ | ❌ | |
| Clinical Summary | 12 | | 11 | | 9 | | 10 | | Assume all new information and data captured only if relevant<br>Encounter narrative for every scenario<br>Need always is everything isn't recorded elsewhere<br>Assumed this is medical Hx |
| Reason for encounter/presentation | 13 | | 13 | | 12 | | 10 | | Assume all new information and data captured only if relevant |
| Follow-ups, referrals | 12 | | 12 | | 11 | | 10 | | Assume all new information and data captured only if relevant |
| Encounter details (date, location, modaility...) | 12 | | 12 | | 11 | | 10 | | Assume all new information and data captured only if relevant<br>Date is critical (location may be known/obvious) |
| Problem/Diagnosis | 12 | | 12 | | 11 | | 10 | | Assume all new information and data captured only if relevant<br>Relevant to the encounter e.g. new<br>If made |
| Procedures/Interventions | 13 | | 11 | | 12 | | 10 | | Assume all new information and data captured only if relevant<br>Delta |
| Vaccination administered | 9 | 1 | 12 | | 6 | 2 | 5 | 2 | Assume all new information and data captured only if relevant<br>In scope for some only A.H to administer covid vac<br>CI surgery – ENT will do vaccination<br>If made |
| Adverse reaction risk summary | 10 | 1 | 11 | 1 | 8 | 2 | 8 | 1 | Assume all new information and data captured only if relevant<br>Only if there has been a change<br>Only if new<br>Immunologist |
| Medication use | 13 | | 13 | | 9 | | 10 | | Assume all new information and data captured only if relevant<br>Medication changes rather than a list<br>Reason for encounter<br>Allied health encounter summary - If relevant (e.g. diabetes/dietitian)<br>Medication use – nurse written next to tick |
| Test Results | 8 (*Not all)* | 2 | 10 | 1 | 11 | 1 | 7 | 1 | Assume all new information and data captured only if relevant<br>Abnormal |

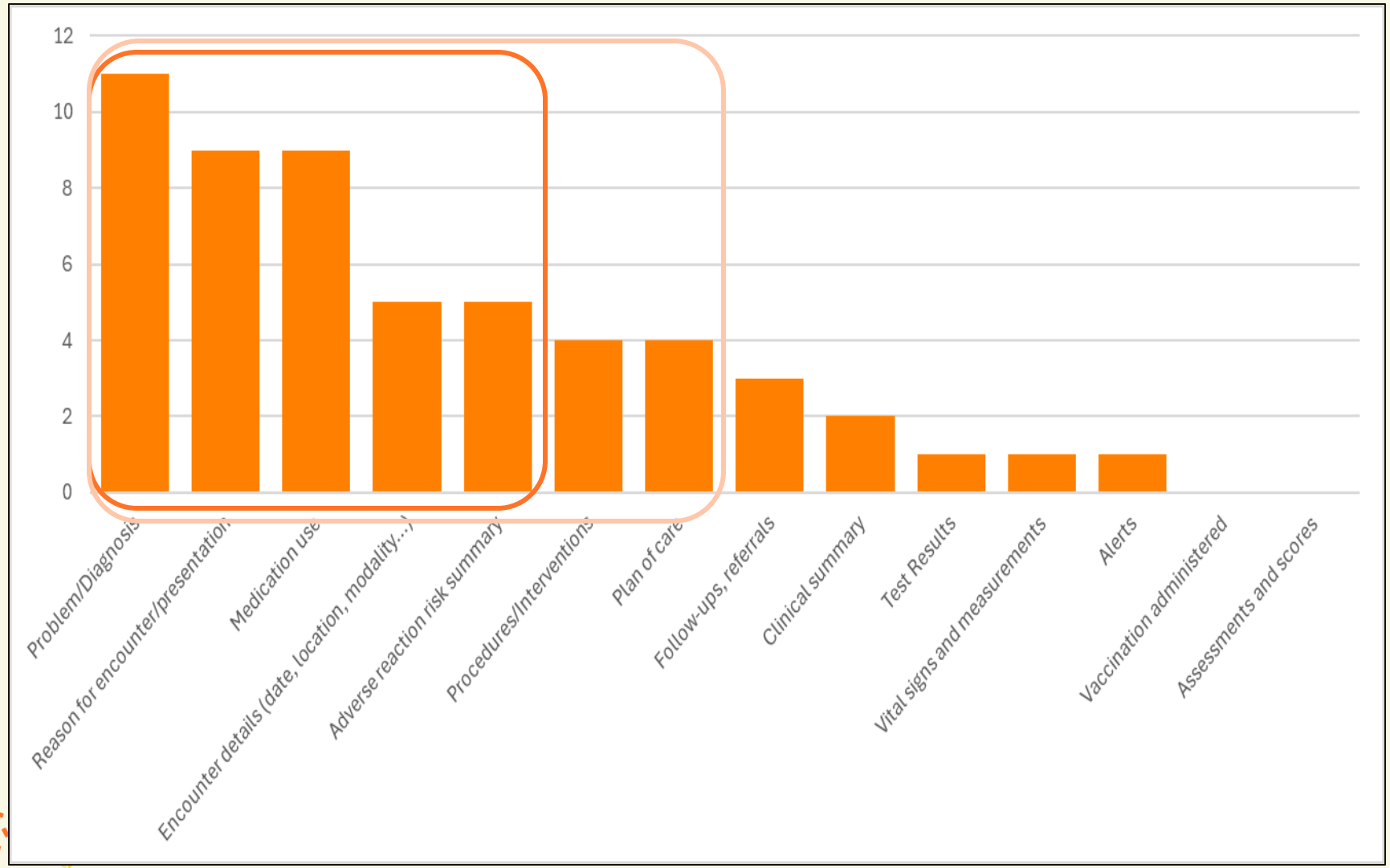
| | Acute care discharge summary | | GP Encounter Summary | | Allied Health Encounter Summary | | Specialist letter/encounter summary | | Comments/explanation |
|---|---|---|---|---|---|---|---|---|---|
| | ✅ | ❌ | ✅ | ❌ | ✅ | ❌ | ✅ | ❌ | |
| Vital signs and measurements | 4 | 3 | 8 | 1 | 3 | 1 | 4 | 1 | Assume all new information and data captured only if relevant<br>Rarely needed in all but will be some<br>Depends/abnormal<br>Depends on context |
| Plan of care*(/goals)* | 8 | | 10 | | 8 | | 8 | | Assume all new information and data captured only if relevant |
| Assessments and scores | 6 | | 8 | | 7 | | 6 | | Assume all new information and data captured only if relevant<br>Mental health scores<br>Depends on context – only if abnormal or pertinent |
| Alerts | ? 5 | 1 | ? 6 | 1 | ? 4 | | 4 | | Need clarity<br>? |
| Documents of advanced care directive | | | | | | | | | |
| Goals of care | | | | | | | | | |
| Social determinants of health | | | | | | | | | Homeless |
| Dept/service/role | 1 | | | | 1 | | 1 | | Type of service |
| Request source | 1 | | | | 1 | | 1 | | |
| Date/document was written | 1 | | 1 | | 1 | | 1 | | |
| Time | | | | | | | | | |

# Reuse of the data in the Encounter Summary




Sparked HL7 FHIR

# Priority Data Groups for an Encounter Record




1. Problem/Diagnosis
2. Reason for encounter
3. Medication use
4. Encounter Details
5. Adverse Reaction risk summary
6. Procedures/Interventions
7. Plan of care
8. Follow-ups, referrals
9. Clinical summary
10. Test results
11. Vital signs and measurements
12. Alerts
13. Vaccination administered
14. Assessments and scores

# Chronic Condition Management

# AUCDI Release 2 – Chronic Condition Management

**Health Issue**
- Issue name
- Description
- Date of onset
- Last updated

**Goals**
- Goal name
- Description
- Clinical indication
- Initiator role
- Initiator
- Start date
- Proposed end date
- Actual end date
- Outcome
- Comment
- Last updated

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

**Substance use summary**
- Substance name
- Overall status
- Overall comment
- Last update

**Tobacco smoking summary**
- Overall Status
- Last updated
- Type
  - Status
  - Typical use
  - Comment
- Overall quit date
- Overall years of smoking
- Overall pack years
- Overall comment

**Alcohol consumption summary**
- Overall status
- Overall comment
- Last update

**Procedure completed**
- Procedure name
- Description
- Body site/laterality
- Clinical indication
- Date performed
- Comment

**Health education**
- Education topic
- Description
- Date/time provided

**Medical equipment supply**
- Equipment type
- Description
- Date/time provided

**Psychosocial therapy**
- Therapy type
- Description
- Date/time provided

**Physical assistance**
- Assistance type
- Description
- Date/time provided

**Education summary**
- Overview
- Highest level completed
- Last updated

**Financial summary**
- Overview
- Financial stability status
- Last updated

**Food and nutrition summary**
- Overview
- Food security status
- Last updated

**Housing summary**
- Overview
- Housing stability status
- Last updated

**Living arrangement summary**
- Overview
- Last updated

**Occupation summary**
- Overview
- Employment status
- Last updated

**Physical activity summary**
- Overview
- Last updated

Proposed scope AUCDI R2 CCM

New content for AUCDI Release 2 are noted in black text
Service request brought across from AUeReqDI R1

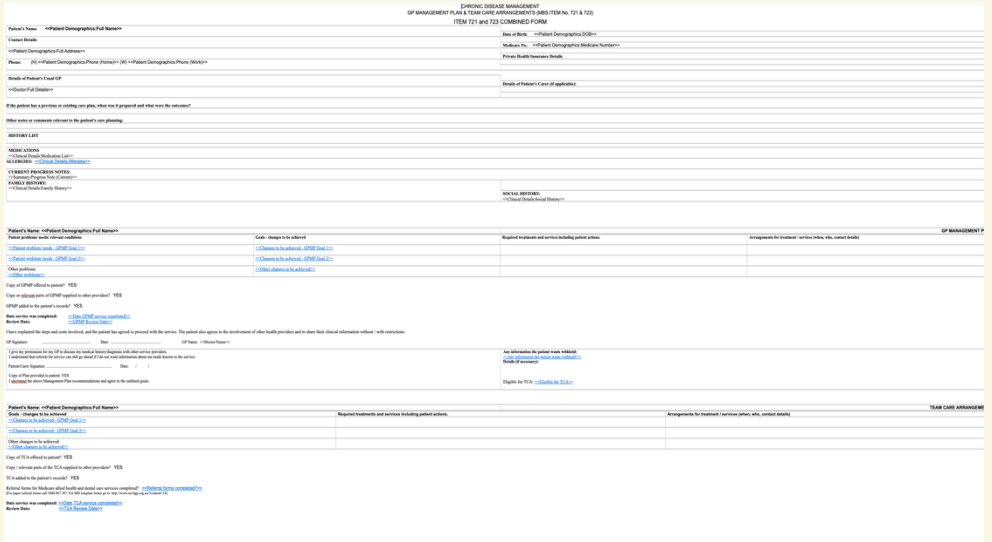
# Team Care Arrangement/Chronic Condition Management Plan

TCA/GP Management Plan Template?

Sparked - AUCDI, AU Core

FHIR

Smart forms



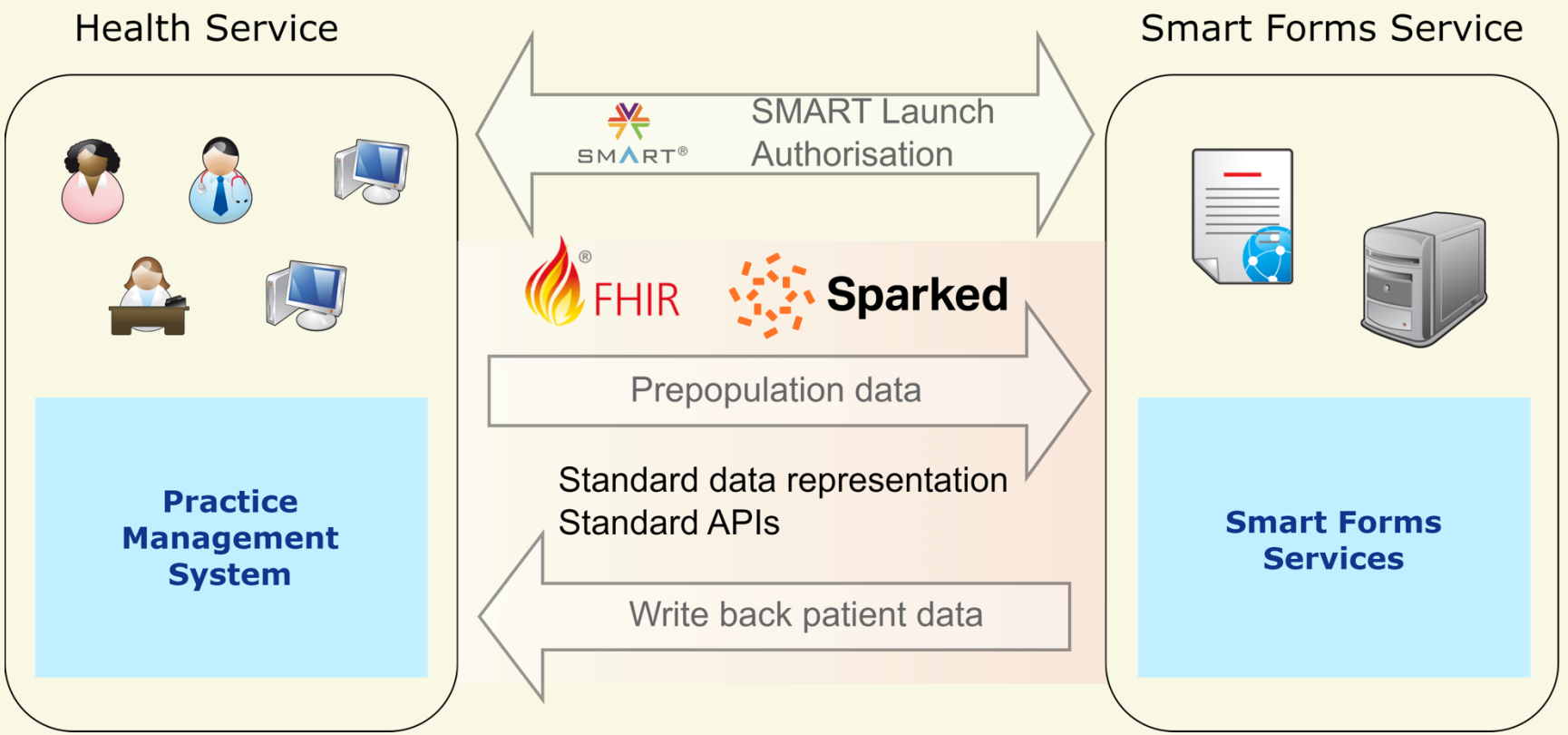
Would a FHIR questionnaire template that supports team care arrangements be useful?

Sparked HL7 FHIR

# Smart Forms Principles

- Forms based solution for health assessments
- Capable of integrating into existing clinical systems
- Data exchange and reuse
- Data quality improvement
- Improve efficiency for delivering clinical care

# Interface


Health Service
Smart Forms Service
SMART Launch
Authorisation
FHIR
Sparked
Prepopulation data
Standard data representation
Standard APIs
Write back patient data
Practice Management System
Smart Forms Services

# Smart Health Checks

Aboriginal and Torres Islander Health Check Assessment

- Smart Forms software
- FHIR Implementation Guide

*Thanks to the sponsor*

*First Nations Health Division, Department of Health and Aged Care*

# National SMART App Initiatives

- First Nations Peoples Health Check
  - Smart Forms App
- Comprehensive Health Assessment Program (CHAP) (ADHA)
  - Smart Forms App
- Aus CVD Risk-i Calculator
  - SMART App
- + more

# Exchange requirements

| Resource interactions | First Nations Health Check Chronic Condition Management Draft Template | |
|---|---|---|
| Read & Search | Practitioner<br>Patient<br>Encounter<br>Condition<br>Observations<br>MedicationStatement<br>AllergyIntolerance | AU Core |
| | QuestionnaireResponse | Smart Forms |
| Create & Update | QuestionnaireResponse | |

## GP MANAGEMENT PLAN (MBS ITEM No. 721)

| | |
|---|---|
| **Patient's Name:** <<Patient Demographics:Full Name>> | **Date of Birth:** <<Patient Demographics:DOB>> |
| **Contact Details:**<br><<Patient Demographics:Full Address>> | **Medicare or Private Health Insurance Details:**<br><<Patient Demographics:Medicare Number>><br><<Patient Demographics:Health Insurance>> |
| **Details of Patient's Usual GP:**<br><<Doctor:Name>><br><<Doctor:Full Address>> | **Details of Patient's Carer (if applicable):** |

**Date of last Care Plan/GP Management Plan (if done):** <<Date of last Care Plan/GPMP>>

**Other notes or comments relevant to the patient's management plan:**

**PAST MEDICAL HISTORY**

<<Clinical Details:History List>>

**FAMILY HISTORY**

<<Clinical Details:Family History>>

**MEDICATIONS**

<<Clinical Details:Medication List>>

**ALLERGIES**

**Patient's Name:** <<Patient Demographics:Full Name>>

### GP MANAGEMENT PLAN

| Patient problems / needs / relevant conditions | Goals - changes to be achieved | Required treatments and services including patient actions | Arrangements for treatments/services (when, who, and contact details) |
|---|---|---|---|
| A | 1<br>2<br>3 | T (1)<br>T<br>T | |
| | | | |
| | | | |
| | | | |
| | | | |

Problem/diagnosis/ needs/health issue

Goals

Interventions (treatments and services), incl patient actions

Arrangements for interventions

**Copy of GP Management Plan offered to patient?** <<Copy of GPMP offered to patient?>>

**Copy / relevant parts of the GP Management Plan supplied to other providers?** <<Copy of GPMP supplied to other providers?>>

**GP Management Plan added to the patient's records?** <<GPMP added to patient's records?>>

| | |
|---|---|
| **Date service was completed:** <<Date service completed>> | **Proposed Review Date:** <<Proposed review date (recommended 6 months)>> |

**I have explained the steps and any costs involved, and the patient has agreed to proceed with the plan.** <<Steps and costs explained, patient agreed>>

GP's Signature: _____ Date:_____

Patient details
Usual GP details

Care plan details

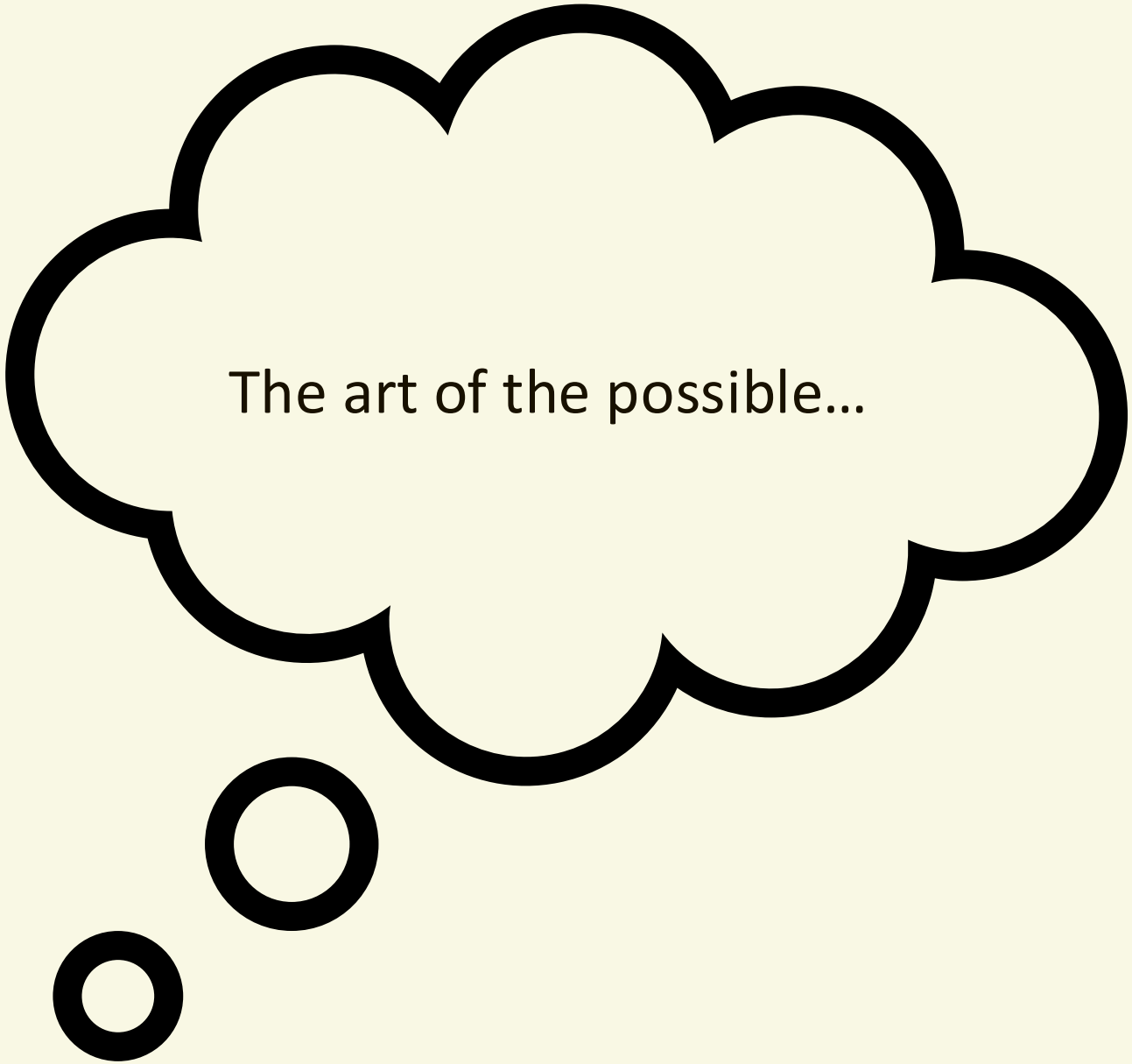
Patient summary information

The management plan

Sparked HL7 FHIR

Murrumbidgee PHN Generic GPMP/TCA plan

| GP MANAGEMENT PLAN - MBS ITEM No. 721 (DIABETES) | | | |
|---|---|---|---|
| **Patient problems / needs / relevant conditions** | **Goals - changes to be achieved** | **Required treatments and services including patient actions** | **Arrangements for treatments/services (when, who, contact details)** |
| **1. General** | | | |
| Patient's understanding of diabetes | Patient to have a clear understanding of diabetes and patient's role in managing the condition | Patient education | GP / nurse<br>Diabetes educator |
| **2. Lifestyle** | | | |
| Nutrition | Maintain healthy diet | Patient education<br><br>OR<br>As per Lifescripts action plan | GP to monitor<br>Dietician |
| Weight | Your target: BMI < __<br>Ideal:<br>BMI ≤ 25 kg/$m^2$ | Monitor<br>Review 6 monthly<br><br>OR<br>As per Lifescripts action plan | Patient to monitor<br>GP/nurse to review |
| Physical activity | Your target:<br><br>Ideal:<br>Exercise at least 30 minutes walking or equivalent 5 or more days per week | Patient exercise routine<br><br>OR<br>As per Lifescripts action plan | Patient to implement |
| Smoking | Complete cessation | Smoking cessation strategy:<br>Consider:<br>- Quit<br>- Medication<br><br>OR<br>As per Lifescripts action plan | Patient to manage<br>GP to monitor |
| Alcohol intake | Your target:<br>< __ standard drinks per day<br>Ideal:<br>≤ 2 standard drinks per day (men)<br>≤ 1 standard drinks per day (women) | Reduce alcohol intake<br>Patient education<br><br>OR<br>As per Lifescripts action plan | Patient to manage<br>GP to monitor |
| **3. Biomedical** | | | |
| Cholesterol/Lipids | Your targets:<br>LDL < __<br>Cholesterol < __<br>HDL > __<br>Triglycerides < __<br>Ideal:<br>LDL < 2.5 mmol/L<br>Cholesterol < 4.0 mmols/L<br>HDL ≥ 1.0 mmol/L<br>Triglycerides < 2.0 mmol/L | Annual check | GP |
| Blood pressure | Your target: < __<br>Ideal:<br>< 130/80 mm Hg | Check every 6 months | GP/nurse |
| HbA1c | Your target: < __<br>Ideal:<br>≤ 7% | Check every 6 months | GP/nurse |
| Blood glucose level | Your target: < __<br>Ideal:<br>< 7 mmols/L (4-6 fasting) | Daily monitoring<br>Check every 6 months | Patient<br>GP/nurse |
| **4. Medication** | | | |
| Medication review | Correct use of medications, minimise side effects | Patient education<br>Review medications | GP to review and provide education |
| **5. Complications of diabetes** | | | |
| Eye complications | Early detection of any problems | Eye check every 2 years<br>Referral by GP | GP<br>Eye specialist |
| Foot complications | Prevent foot complications | Patient education on foot care<br>Patient to check feet regularly<br>Check feet every 6 months | GP / podiatrist / nurse<br>Patient<br>GP |
| Kidney damage | Avoid renal complications<br>Your targets:<br>< __ µg/min timed overnight collection<br>< __ mg mg/L spot collection<br>< __ mg/mmol women<br>< __ mg/mmol men albumin creatinine ratio<br>Ideal:<br>< 20 µg/min timed overnight collection<br>< 20 mg mg/L spot collection<br>< 3.5 mg/mmol women<br>< 2.5 mg/mmol men albumin creatinine ratio | Test for microalbuminuria annually | GP |
| Sexual dysfunction | Maintain sexual function | To be discussed with patient where applicable | GP |


The art of the possible…

# Adelaide Workshop Chronic Condition Management Template

At your table, discuss and document on the worksheet

- Key usability principles for a chronic condition management template (team care)
- Workflow challenges
  - Example – multiple contributors updating asynchronously, review and status updates, alignment of problems/goals/activities (interventions), provider directory,
- Additional information that should be recorded
  - Suggested features for future iterations

As a **group** at your table

# Summary Key usability principles

## Access

- Patient access and contribution (e.g. update status of goals)
- Data sharing – Consent, privacy principles
- Carer access and validation
- Dynamic Real-time information transfer/contribution (not a PDF)
- Multi-practitioners able to access and update
- Ensure proper communication between providers and patient
- Integration with practice software

## Support team care contributions

- Team members – when joined, left, context
- Multiple contributers from different organisations
- Care team function - roles – owner, contributor, informational
- Support patient self-management
- Irrelevant of eligibility of programs
- Understand why particular pathways were not continued

## Traceability of information

- Visibility of source

## Visibility/Presentation of information

- Problems/ diagnoses, summary of chronic conditions
- Communication tips for effective outcomes
- Flexibility of retrieving more current information
- Timelines/dates for when conditions occurred/resolved, progress easy to track
- Different views – summary, user based, condition based, customizable

## Inclusion of Information (content)

- Free text AND coded information should be allowed
- Prepopulation of relevant ifno
- Goals should be manageable and agreeable
- Health issues – what the patient sees as the current issue
- RAG status – how far along are you
- Updated contact details of all providers
- Wearables data

## Use of CDS tools

- Trigger alerts
- Prompt clinicians to ask appropriate questions
- Linking information/ standardized actions against best practice guidelines

## Link to Referrals

- Links back to referrals

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# Summary Workflow challenges

## Need to form consensus

- Goals
- Updates to care plan

## Communication

- Accessibility of care plan
- Ensuring information finds appropriate destination (directory)
- Need for acknowledgement
- Authentication
- Shared view
- Patient admin systems data exchange and sync
- Integration of test and imaging requests, referral workflow
- Provenance of information

## Care team

- Lack of provider/Health registry
- Limited widespread formal CCM
- Difficulty of identification of eligible patients for care plan
- Multiple care providers involved
- Need to include patients and carers
- Need for reviews and status updates
- original date goal due, number of revisions and current dates
- Supporting synchronous and asynchronous outcomes and interactions
- Role and accountability
- Funding models

## Curation of Patient information

- Maintenance and curation of information/ too much information
- Need a depth of information but then that needs to be curated

## Patient

- Readiness of patient to engage in self-management
- Not all have a regular GP
- Currently patient-initiated care not included
- Acceptance/ consent
- Regard patient engagement with activities

## Care management

- Limited widespread formal CCM

# Summary Additional information that should be recorded or additional features

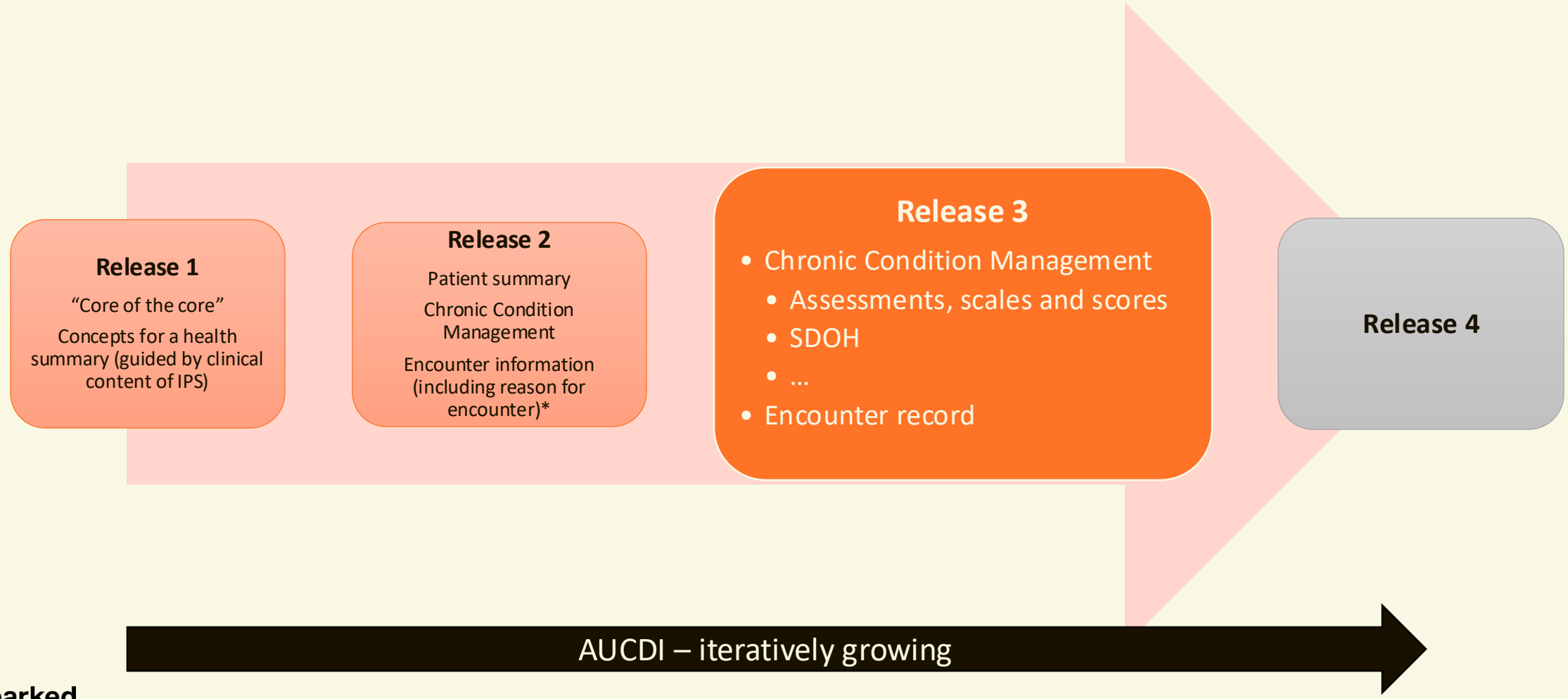
- Priority of conditions (when multiple)
- Funding accessibility
  - Pension/NDIS/Medicare/MBS billing
- Outcomes
  - Measurable outcomes
- Patients
  - health values and prioritisations
  - Preferences, barrier to care
  - SDOH factors
  - Health concerns and problems
  - Self management/empowerment principles/considerations
- Goals
  - SMART formatted
  - Measurable
  - Barriers to achieve
  - Urgency
  - Ownership
  - Timeframes
  - Personal goals/clinical goals
  - Agreement of goals by patient and GP
- Activities
  - Ownership
  - Information re historical interventions/goals
  - Self management/education
- Care team details
- Follow up flags
- Referrral recommendations
  - Noting patient affordability for team and services when may prevent evidence-based goals being included due to non-accessibility
- Integration with
  - Provider registry
  - eRequesting
  - eReferrals
- Updates to the care plan from all involved providers
- Guidelines – easily retrieved or embedded
- Provenance of information
- Control of accessible data - – make the clinically relevant information available to the right team member and the team when they are engaged with care
- Reports/monitoring metrics (patients pov as well)

# AUCDI Next Steps

# AUCDI R3 Next steps

- Further exploration of identified priority data groups for Encounter Record and Chronic Condition Management for AUCDI R3
  - Functional Status
  - ADLs
  - SDOH
  - Advance Care Directives
  - Repeatable approach to assessment tool, scores, etc.
  - ??
- Continue developing the Chronic condition management plan as a Smart Form
  - Leverage AUCDI and AU Core
  - Build on the feedback provided by the CDG
- Will be a focus for July 2025 CDG (face to face)
  - Prioritisation of data requirements for inclusion in AUCDI R3

# What next?




*CDG scoping and requirement gathering for future releases

# Wrapping up 2 years of Sparked CDG

# What a journey it’s been so far!

## 2 years of Sparked CDGs

All the meetings!

- 6 face to face CDG workshops (+ 2 bonus Rural and Remote, Health equity)
- 6 cities
- 10 online meetings
- 4 online CFG meetings
- 25 workshop activities
- Oodles of menti polls, A3 and A0 worksheets, post it notes and sticky dots!

1 release of AUCDI of 1 almost there!

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# Upcoming Events 2025

## May 2025

- **28th** – Sparked Partners Symposium

## July 2025

- **29th & 30th in Sydney** – CDG and TDG face to face meeting

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# Thank you!