

# Sparkled



## Sparkled Clinical Design Group

13 August Workshop

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.



# Agenda

Item	Topic	Time	Lead/facilitator
1	Welcome	2 mins	Kate Ebrill
2	Update AUCDI R1, AUeReqDI R1	10 mins	Kylynn Loi
3	Update AU Core TDG	10 mins	Marvin Malcolm (Co-Chair AU Core TDG)
4	Recap F2F May workshop; Sparked Rural and Remote Health Equity Roundtable	20 mins	Kate Ebrill, Kylynn Loi
5	AUCDI R2 planning and September Community Co-Design Workshop preparation	40 min	Kate Ebrill, Kylynn Loi, Heather Leslie
6	Sparked evaluation update	5 min	Michael Hosking
7	Wrap up and close	3 mins	Kate Ebrill

# Sparked Team

[FHIR@csiro.au](mailto:FHIR@csiro.au)



Danielle Tavares-Rixon  
FHIR Technical Lead



Michael Hosking  
Deputy Lead



Kylynn Loi  
Clinical Design Lead



Kate Ebrill  
Sparked Lead



Michael Wilson  
FHIR Solution Architect



Bernadette Cranston  
Program Director



Steph Ong  
Infrastructure Lead



Tor Bendle  
Program Engagement  
Lead



Matt Cordell  
Clinical Terminology  
Specialist



Brett Esler  
FHIR Expert



Dr Heather Leslie  
Lead Clinical Data  
Modeler



Madison Black  
Engagement & Events



Ilya Beda  
FHIR Expert



Liam Barnes  
FHIR Questionnaire  
Developer



Shelley Behen  
Senior Business  
Analyst



Dusica Bojicic  
FHIR IG Author



Chris Kellalea-Maynard  
Senior Business Analyst



Nisha Subramanian  
Business Analyst



Kyle Pettigrew  
Senior Engineer



Michael Osborne  
FHIR Terminologist



Jaymee Murdoch  
FHIR Standards Developer



Heath Frankel  
FHIR Expert



Olivia Carter  
Engagement Analyst



**Sparked**  
HL7 FHIR



# Sparked CDG team



Kate Ebrill –  
Sparked Lead



Michael Hosking –  
Sparked Deputy  
Lead



Kylynn Loi –  
Clinical Design  
Lead



Dr Heather Leslie  
– Lead Clinical  
Data Modeller



Tor Bendle  
Program Engagement  
Lead



Shelley Behen  
Senior Business Analyst



Matt Cordell –  
Clinical  
Terminology  
Specialist



Michael Osborne  
– FHIR  
Terminologist



# Sparked CDG Clinical Co-Leads

To remind us and keep us focused & on track based on scope



Chris Moy



Harry Iles-Mann



Charlotte Hespe



Andrew Hugman



Chaturica Athukorala

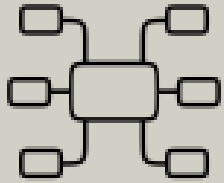


Australian Core Data for  
Interoperability Release 1  
Update

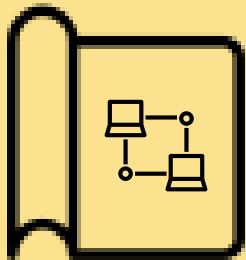


# What is AU Core and Australian Core Data set for Interoperability (AUCDI)?

CDG is here



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



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

TDG is here



# Thank you!



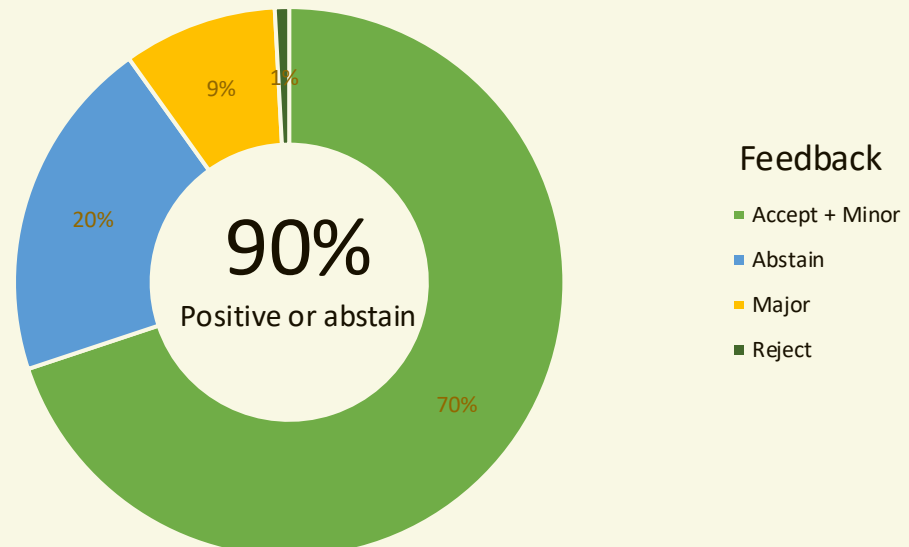
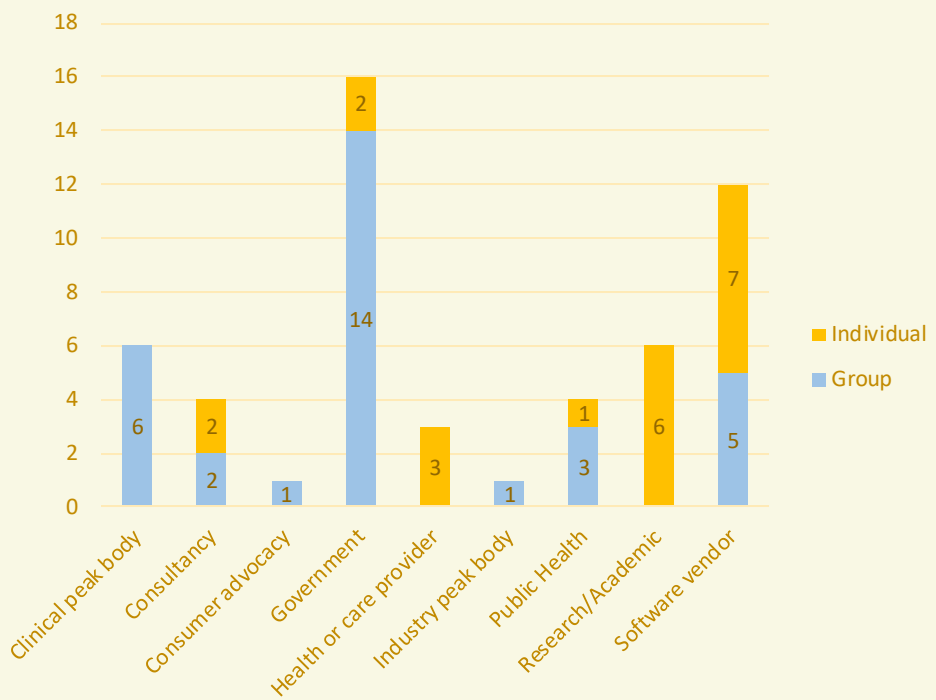
- AUCDI R1 published in June!
  - R1 document
  - Backlog
  - Feedback and responses
  - Summary of themes
- <https://sparked.csiro.au/index.php/sparked-products-resources/australian-core-data-for-interoperability/aucdi-release-1/>

# AUCDI Release 1 Draft for Community Review Progress Report

Feedback period  
**6 weeks**

Number of respondents  
**52**

Number of feedback items  
**400+**



New data items added  
**16**

Last updated data elements have been added to each for the "summary" data groups e.g. Tobacco smoking summary, Adverse reaction risk summary  
Data of measurement or date of observation have been added to each Biomarker, Vital sign and Measurement  
Date of Assertion has been added to Medication use summary

New data items removed  
**2**

"Last administration" and "Endpoint" have been removed from Medication use statement due to lack of data and confusion of meaning. They have been added back to the backlog for further discussions

New items on backlog  
**126**

Backlog to be published on the Sparked website soon

AUCDI R1 was published

Last week of June



# Summary of themes of feedback

<p><b>Overall document</b></p> <ul style="list-style-type: none"> <li>•Questions around rationale for optional vs mandatory</li> <li>•Request for additional national references and international FHIR references</li> <li>•Questions around datatypes</li> <li>•Need for data elements capturing date/time to be explicitly included</li> </ul>	<p><b>Adverse reaction risk</b></p> <ul style="list-style-type: none"> <li>•More information around adverse reaction risk e.g severity, clinical verification status etc. to be included</li> <li>•Need for other data groups e.g. Adverse events, Drug-drug interactions</li> </ul> <p>+ New data element: Last updated</p>	<p><b>Problem/diagnosis summary</b></p> <ul style="list-style-type: none"> <li>•Need for additional data elements</li> </ul> <p>+ New data element: Last updated</p>	<p><b>Procedure completed</b></p> <ul style="list-style-type: none"> <li>•Need for additional data elements</li> </ul> <p>↔ Update to value set</p>	<p><b>Vaccination administered</b></p> <ul style="list-style-type: none"> <li>•Need for additional data elements</li> </ul> <p>↔ Update to value set</p>	<p><b>Tobacco smoking summary</b></p> <ul style="list-style-type: none"> <li>•Need for additional data elements</li> <li>•Need for additional data groups e.g. Vaping</li> </ul> <p>+ New data element: Last updated</p>
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<p><b>Measurements and vital signs general comments</b></p> <ul style="list-style-type: none"> <li>•Need for dates of observation/measure ment</li> <li>•Questions around specific structure</li> <li>•Questions around specific units (UCUM)</li> </ul>	<p><b>Blood pressure</b></p> <ul style="list-style-type: none"> <li>•Need for additional data elements</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>Pulse information</b></p> <ul style="list-style-type: none"> <li>•Need for additional data groups e.g. Rhythm</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>Body temperature</b></p> <ul style="list-style-type: none"> <li>•Need for additional data elements</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>Respiration information</b></p> <ul style="list-style-type: none"> <li>•No other additional themes</li> </ul> <p>+ New data element: Date of observation</p>	<p><b>Body height/length</b></p> <ul style="list-style-type: none"> <li>•Questions around allowed decimal places</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>Body weight</b></p> <ul style="list-style-type: none"> <li>•Need for additional data elements</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>Waist circumference</b></p> <ul style="list-style-type: none"> <li>•No other additional themes</li> </ul> <p>+ New data element: Date of measurement</p>
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<p><b>Biomarkers general feedback</b></p> <ul style="list-style-type: none"> <li>•Need for dates of measurement</li> <li>•Need for additional data groups</li> </ul>	<p><b>Lipids</b></p> <ul style="list-style-type: none"> <li>•Need for additional data elements</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>HbA1c</b></p> <ul style="list-style-type: none"> <li>•Questions around units</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>eGFR</b></p> <ul style="list-style-type: none"> <li>•No other additional themes</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>uACR</b></p> <ul style="list-style-type: none"> <li>•No other additional themes</li> </ul> <p>+ New data element: Date of measurement</p>	<p><b>Medication use statement</b></p> <ul style="list-style-type: none"> <li>•Issues with Last administration and Endpoint</li> <li>•Issues relating to Medication use statement vs medication order vs administration record</li> <li>•Need for additional data elements</li> </ul> <p>+ New data element: Date of assertion</p> <p>- Removal of data elements: Endpoint Last administration</p>	<p><b>Encounter - clinical context</b></p> <ul style="list-style-type: none"> <li>•No other additional themes</li> </ul>	<p><b>Sex and gender</b></p> <ul style="list-style-type: none"> <li>•Questions around sex assigned at birth and sex parameter for clinical use</li> <li>•Need for additional data groups</li> <li>•Need for additional data elements</li> </ul> <p>+ New data element: Last updated</p>
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## Problem/Diagnosis summary

Date/time clinically recognised  
Date/time of onset  
Date/time of resolution  
Diagnostic certainty  
Method of diagnosis/Clinical evidence  
Practitioner role that confirmed the diagnosis  
Qualifiers  
Resolution phase  
Severity  
Staging/grading

## Procedure completed event

Description  
Intent  
Total duration  
Location performed  
Procedure status

## Vaccination administered event

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

## Adverse reaction risk summary

Adverse reaction status  
Clinical management description  
Clinical status  
Clinical verification  
Criticality  
Date exposed to substance  
Dose/frequency and form  
Initial exposure  
Method of diagnosis/Clinical evidence  
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  
- Delabelling  
- Time/timing exposure to  
Adverse reaction

## Encounter – clinical context

Comment  
Type of encounter/modality

## Sex and Gender

Sex parameter for clinical use

## 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

## 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 History concepts  
Preferred brand  
Regular medication indicator  
Status for changes

## Vital signs

Blood pressure  
• Location of measurement  
• Mean arterial pressure  
• Method (of measurement)  
• Position  
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

## Biomarkers

Creatinine - clearance and serum levels  
ECG  
Full blood examination  
Lipids  
• LDL formula  
• Lipoprotein (a)  
• TC:HDL ratio  
Liver function tests

# Backlog – new items

Adverse event

Alcohol consumption  
summary

Blood glucose

Care pathways

Care plan

Care team

Clinical evidence

Clinical synopsis

Consent

Contraindication

Current pregnancy

EDD  
Pregnancy status

Diet

Drug interactions

Ethnicity

Family history

Genetic/genomic test  
results

Housing

Imaging completed

Imaging results

Indigenous status

Living arrangements

Medical devices

Medication order

Medication summary

Menstrual information

Last menstrual period  
Menstrual status

Pathology results

Physical activity summary

Place of birth

Pregnancy history

PREMs and PROMS

Product errors

Screening activity  
completed

Sexual characteristics

Shock index

Side effect register

Social determinants of  
health and Social  
emotional wellbeing

Substance use summary

Vaping summary

Vital status



# AUCDI Release 1 at a glance

## Problem/Diagnosis

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

## Procedure completed

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

## Vaccination administered event

- Vaccine name
- Sequence number
- Date of Administration
- Comment

## Adverse reaction risk summary

- Substance name
- Manifestation/s
- Comment
- Last updated

## Medication use statement

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

## Sex and Gender Summary

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

## Tobacco smoking summary

- Overall Status
- Last updated

## Biomarkers\*

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

## Vital signs\*

- Blood pressure
  - Systolic
  - Diastolic
- Pulse
  - Rate
- Body temperature
- Respiration
  - Rate

## Measurements\*

- Height/length
- Body weight
- Waist circumference

## Encounter – clinical context

- Reason for encounter
- Modality



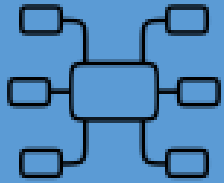
Australian eRequesting  
Data for Interoperability  
Release 1 Draft  
Update



# What are AU eReq IG and Australian eRequesting Data for Interoperability (AUeReqDI)?

CDG is here

AU  
eReq  
DI



Specifies “*WHAT*” clinical information (and corresponding data elements and terms) should be included for data entry, data use and sharing information supporting eRequesting

AU  
eReq  
IG



Specifies “*HOW*” the core set of data (above) and information should be structured, accessed and shared between systems for the eRequesting use case

TDG is here





# AUeReqDI R1 Draft for Comment

- Draft for Comment now closed
- Currently working through comment and feedback
- 26 submissions received
  - Group and individuals
  - Government, Health or care providers, industry peak bodies, software vendors and consultants
- 110+ feedback items
  
- Due to be published October 2024

The background is a solid orange color. There are six white rounded rectangles scattered across the page. One is at the top left, one at the top right, one in the middle left, one in the middle right, one at the bottom left, and one at the bottom right. The text is located in the bottom right corner.

AU Core TDG update  
Marvin Malcolm

The image features a solid orange background with six white, rounded rectangular shapes scattered across the left and center areas. These shapes are tilted at various angles, creating a dynamic, abstract composition. The text 'Recap of F2F May Sydney' is positioned in the lower right quadrant of the image.

Recap of F2F May Sydney



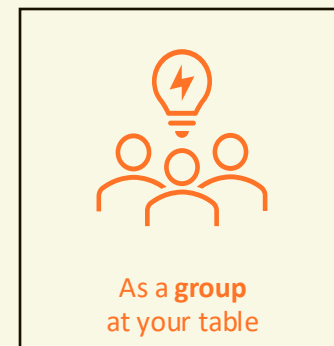
# May F2F CDG Meeting

- 1 day event held in Sydney
- 90+ CDG (and TDG) attendees



# Workshop activity: Patient Summary, Chronic Disease Management priority use case summary

Patient Summary	Chronic Disease Management
Organisation to Organisation Within Sector (e.g. GP to GP)	Continuity and Co-Ordination of Care Across Time/Location/Provider Type
Organisation to Organisation Across Sectors (e.g. Aged Care to Public Hospital)	Remote Patient Monitoring
My Health Record to Consumer App	Advanced Care Directives
	Medication Management:
Patient to International Care	
My Health Record to HIE	Patient Care Management Plan
Service Availability	Setting Goals of Care and Follow up
Consumer to MDT	Risk management
Patient Summary Attached to Service Request	Value based healthcare
	Patient/Consumer Self Management
	Public Health Initiatives

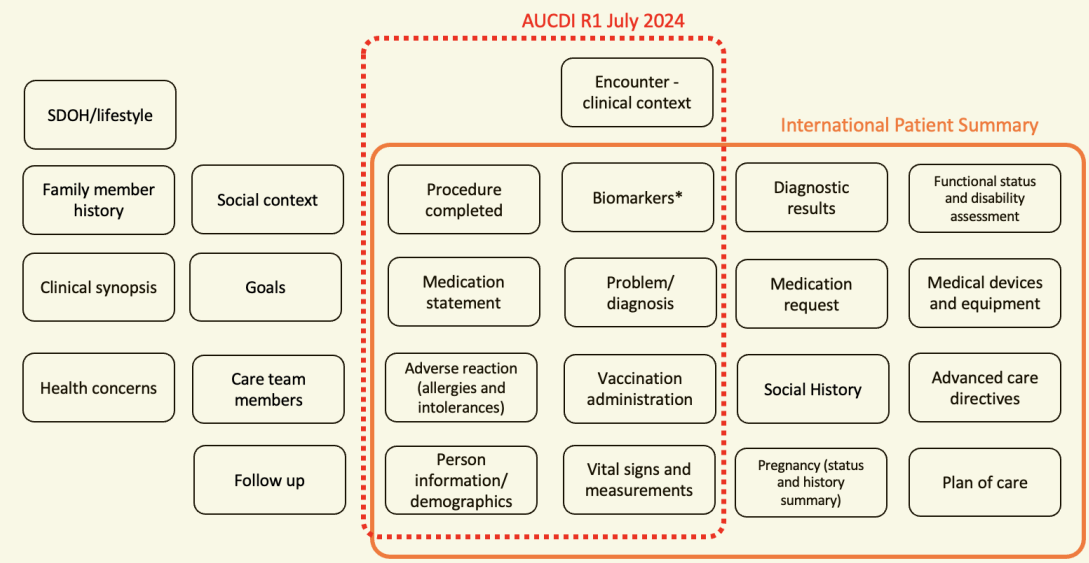




# Workshop activity

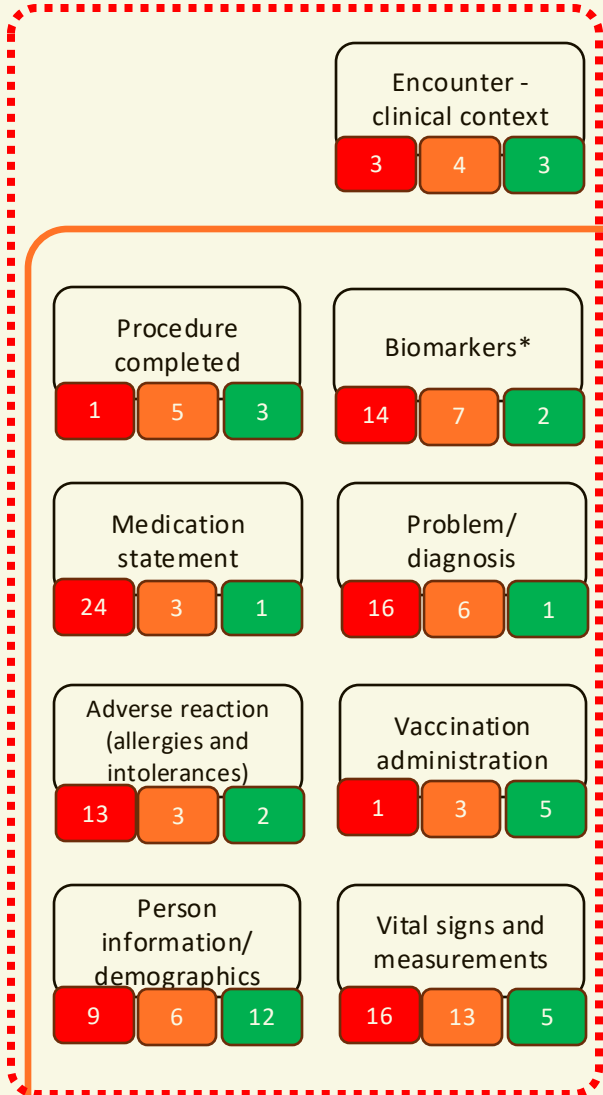
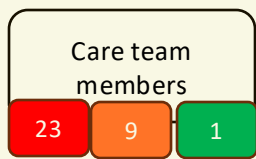
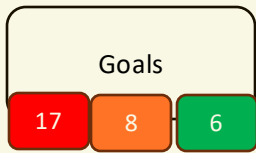
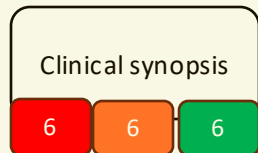
Stakeholders were asked, as an individual, to identify priority data groups to be expanded/included in the next release of AUCDI;

They were asked to identify 5x high priority (red), 5x medium priority (orange), and 5x low (green) priority use cases

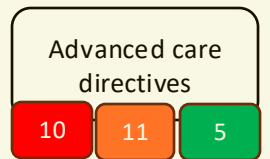
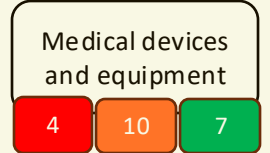
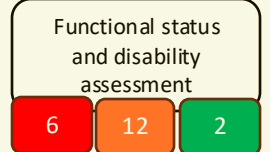
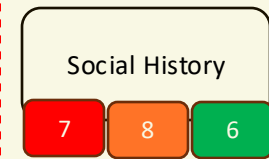
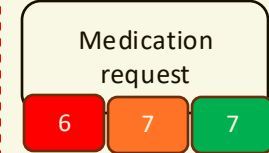
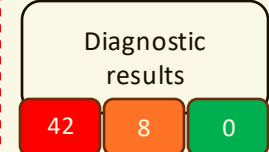


# Chronic Disease Management Use Case

AUCDI R1 July 2024

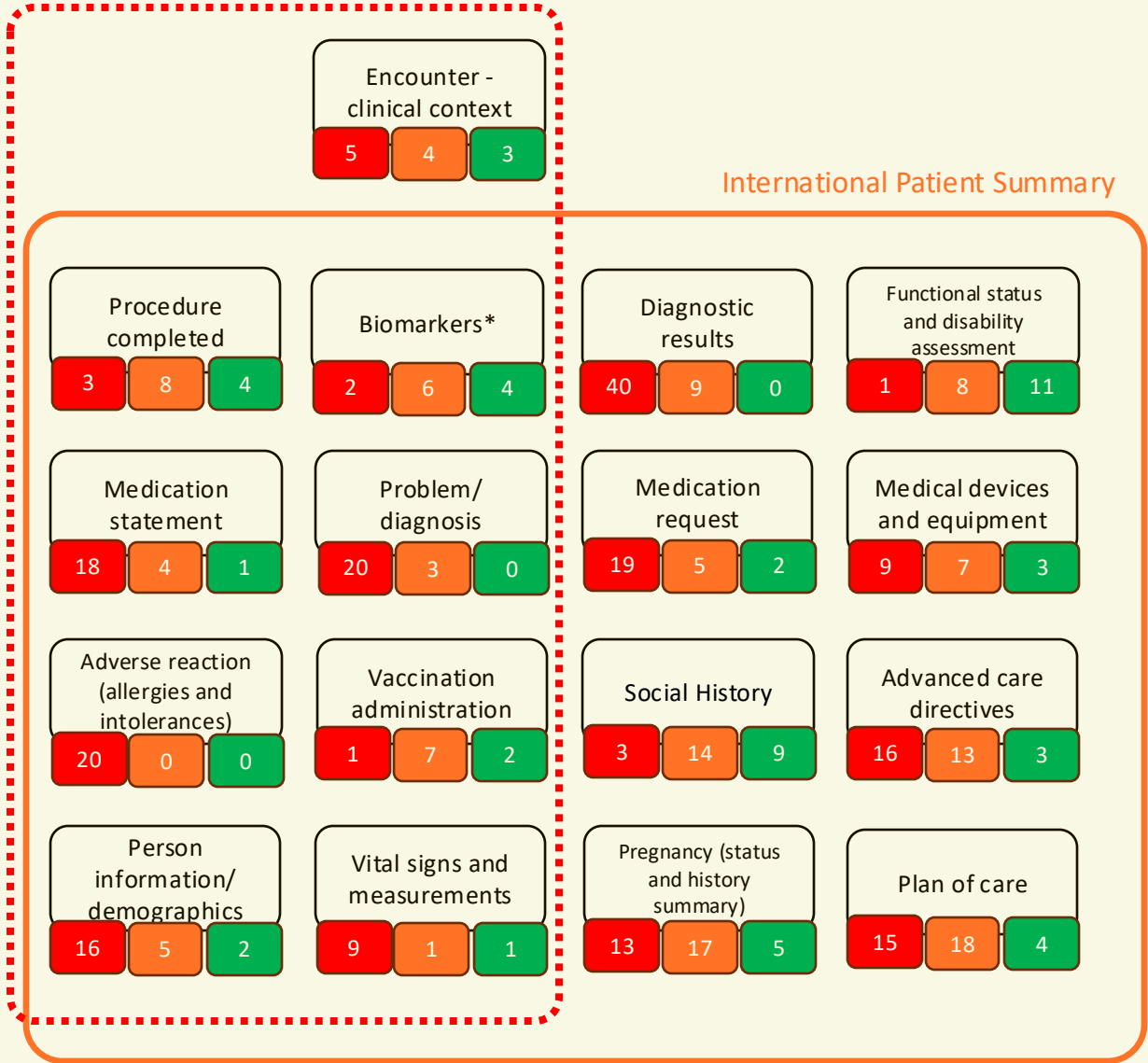
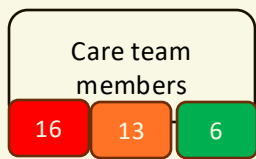
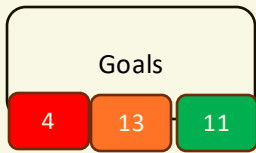
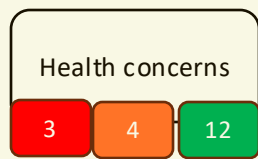
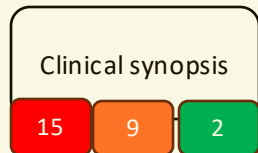


International Patient Summary



# Patient Summary / Portability of Record Use Case

AUCDI R1 July 2024

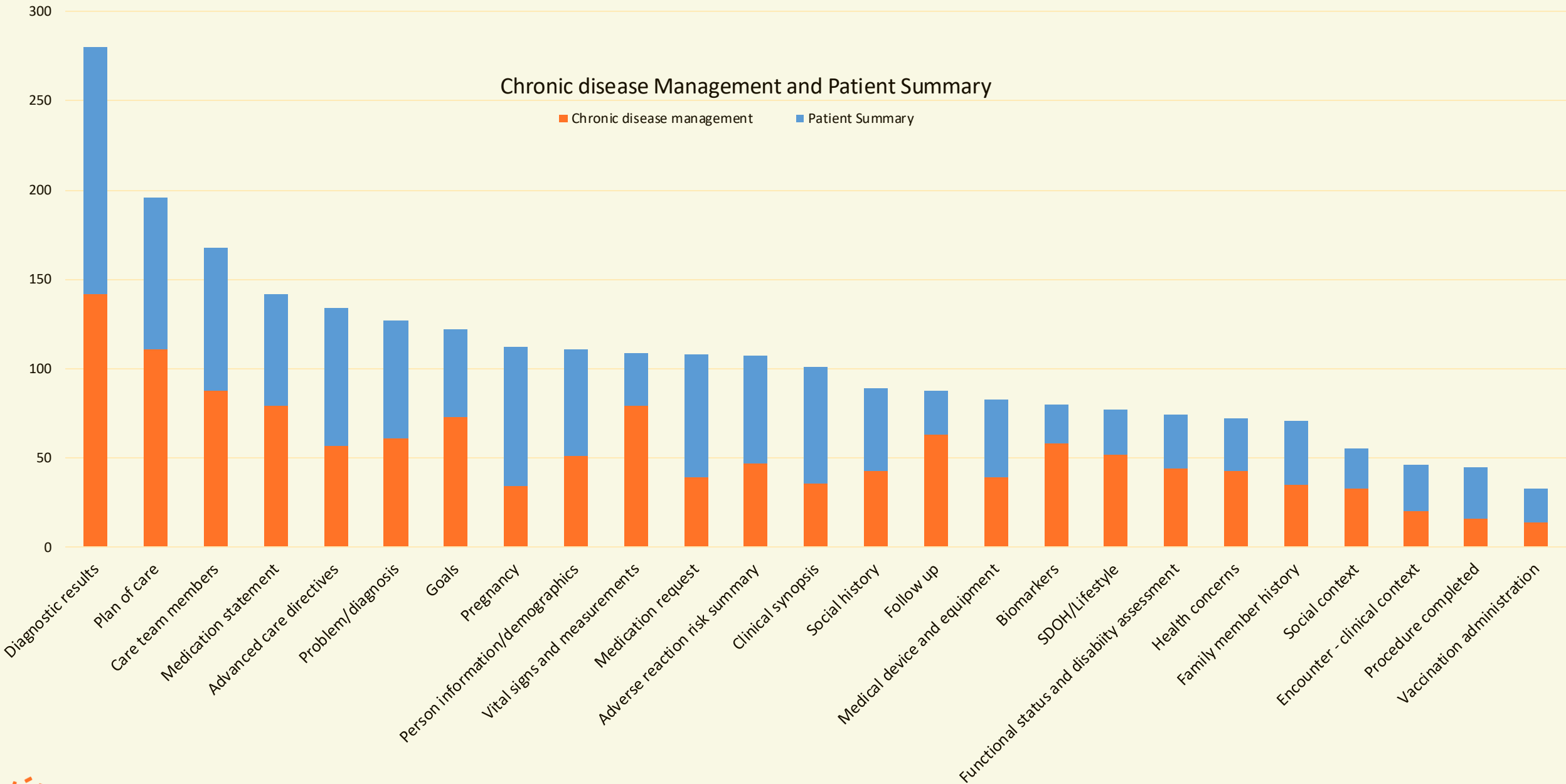


International Patient Summary



## Chronic disease Management and Patient Summary

Chronic disease management Patient Summary





# Workshop activity

Stakeholders were asked, as a group at their tables, to discuss the high priority data groups and then agree the following:

What is the most important information to be defined in the AUCDI?

Who does that information need to be shared with (included in a future FHIR IG)

How will this information be used? (e.g., decision support, reporting assessment information)

Identify policies/inputs that will help scope/should be considered

Which stakeholders should be involved

# WORKSHOP RESULTS (SUMMARY)

What is the most important information to be defined in the AUCDI?

Who does that information need to be shared with (included in a future FHIR IG)

How will this information be used? (e.g., decision support, reporting assessment information)

Identify policies/inputs that will help scope/should be considered

Which stakeholders should be involved

- New data items identified (and added to backlog)
  - Advance care directive
  - Biomarkers
    - Fasting insulin
    - FBC
    - Folate/B12
    - Iron studies
    - Microbiota markers
    - Nutrigenomics
    - Thyroid function
    - Vit D
  - Care team members
    - CC option
    - Contact
    - Name
    - Organisation
    - Role
  - Diagnostic test result
    - Arterial blood gases
    - Cardiac imagery
    - Colonoscopy
    - Gastroscopy
    - Imaging – echocardiography result
    - Path test result – histology
    - Spirometry
  - Encounter
    - Location/s
    - Outcome
  - Genetics/Epigenetics
  - Goal
- BMI
- Clinical synopsis
  - Author
  - Summary (Free text)
- Place of birth
- Interpreter required
- Alternate names/pseudonyms
- Pregnancy domain
  - Gravidity/Parity
  - Start of pregnancy
  - Progress
  - Risk (level)
- Social context
  - Education level
  - Financial summary
  - Health equity summary
  - Housing summary
  - Occupation summary
  - Social history
  - Social network
  - Transport summary
- Pulse oximetry
  - FiO2
- Adverse reaction risk summary
  - Adverse reaction – authoring clinician
  - Immunogenetic testing
- Frequency
- Functional impact
- SMART
- Preventative nutrition goals
- Relevant supports

- Care team
  - GP
  - Specialist
  - Allied Health
  - Pharmacist
  - Aged Care
  - Acute care/hospital
  - Disability care
  - Food providers
  - Ambulance
  - Nurse care workers
- Consumer, patient, family, carer
- Govt services
  - Medicare, Centrelink, councils
  - Billing, insurers
  - My HR

- CDS\*
- Smart guidelines
- Referrals
- Assessments
- Medication review
- Quick view
- Visibility
- Ongoing communication
- Appointments/recall
- Targeted correspondence
- Reporting
- Monitoring

Patient right to share and access data  
 Patient API legislate  
 Consent management, cross border sharing, privacy/security billing  
 PBS  
 IHI

Patient  
 Carers  
 Care providers involved in care plan/care team  
 Consumer groups  
 Government/payors  
 Admin/billing  
 Colleges



Recap of July Rural and  
Remote Health Equity  
Roundtable



# Rural and Remote Health Equity Roundtable

- Held in Darwin, in early July
- Attendees
  - Federal government
  - State government
  - State public health
  - Services Australia
  - Healthdirect
  - ACCHOs
  - ACRRM
  - RACGP
  - RFDS
  - PHNs
  - Clinicians
  - Consumers
  - Industry
  - Digital Health CRC





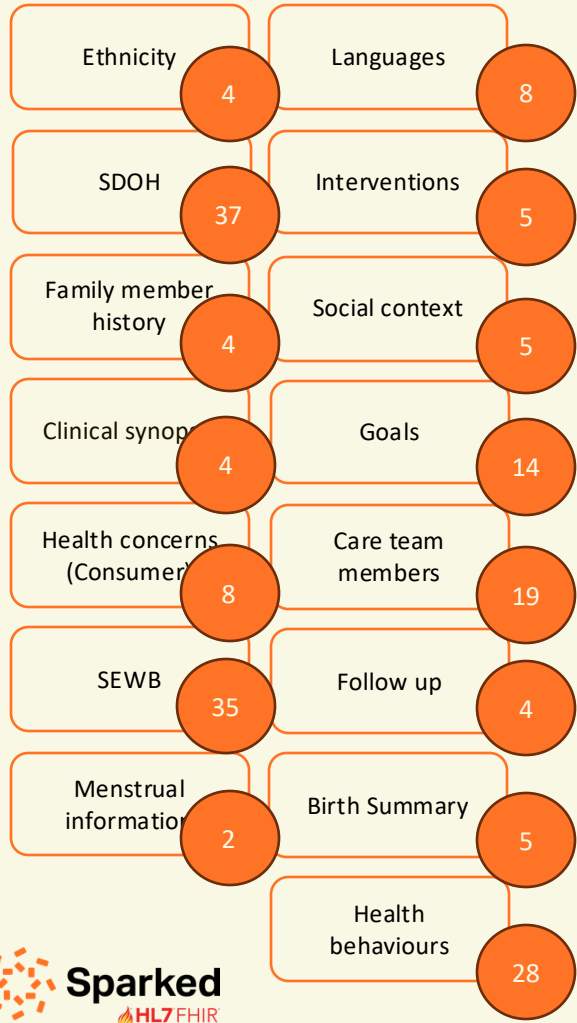
# Use cases identified – Rural remote focus

Patient Summary	Chronic Disease Management
Organisation to Organisation Within Sector (e.g. GP to GP)	Patient Care Management Plan (e.g. Mental Health Plan, Chronic Disease Plans)
Organisation to Organisation Across Sectors (e.g. Aged Care to Public Hospital)	
Summary for kids in out of home care	
Summary from prisons	
Patient Summary Attached to Service Request	
System workarounds when rural and remote areas are cut off (wet season etc.) - offline capacity	
Child development monitoring - child health record	
Sharing information across government departments (e.g., My Aged Care, NDIS)	

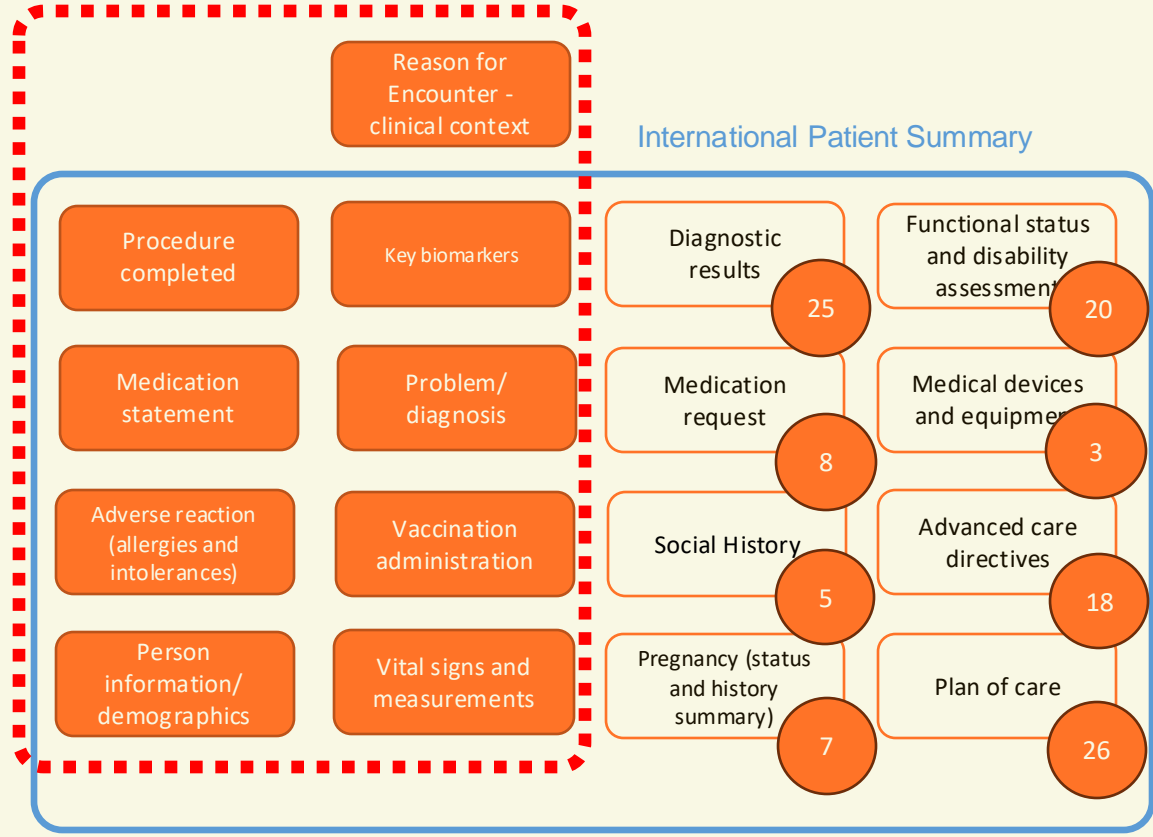


# Workshop - Rural and remote – Prioritisation activity

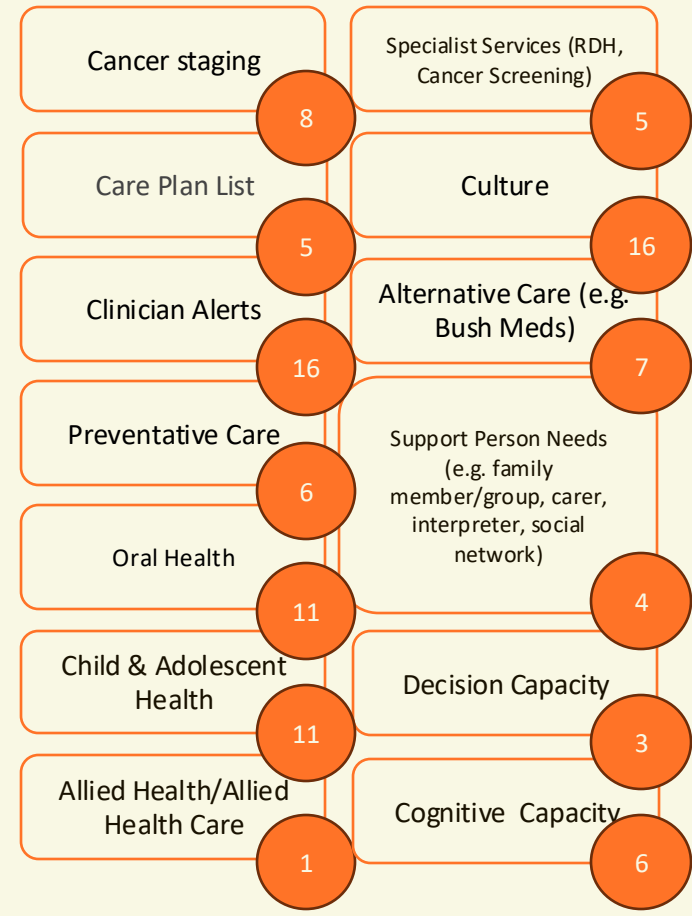
## Existing



## AUCDI R1 July 2024



## Gaps identified

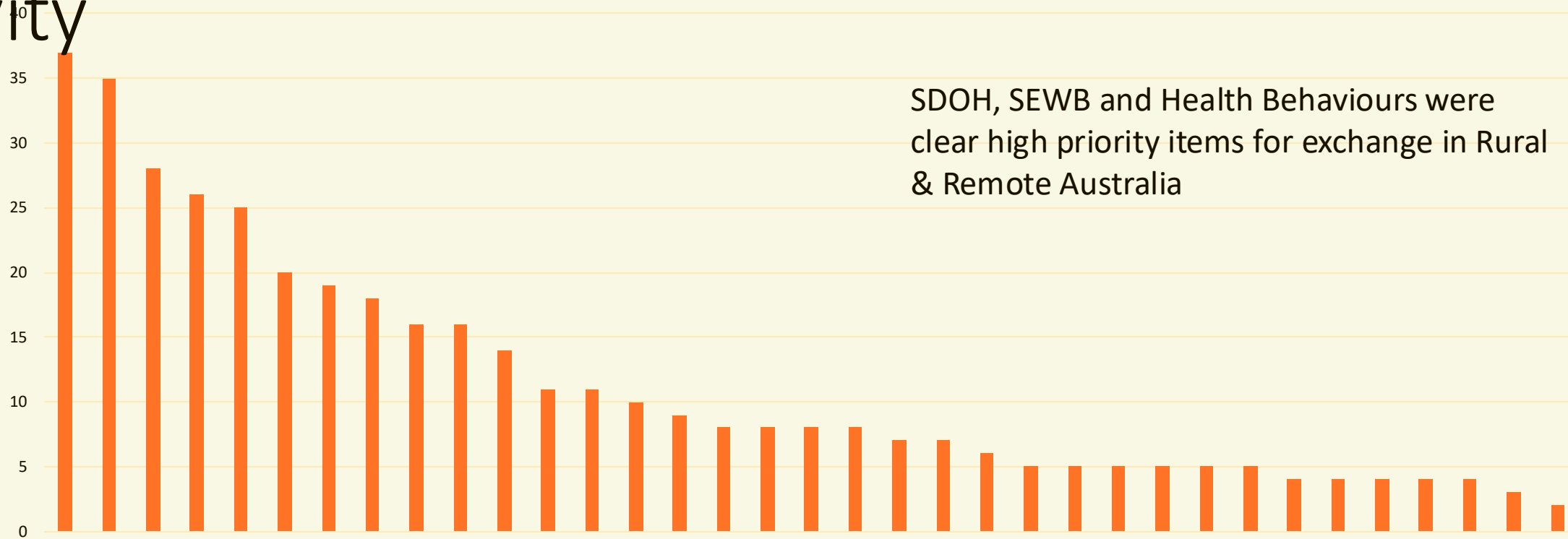


# Workshop - Rural and remote – Prioritisation



AU CDI R2 Prioritisation

## activity



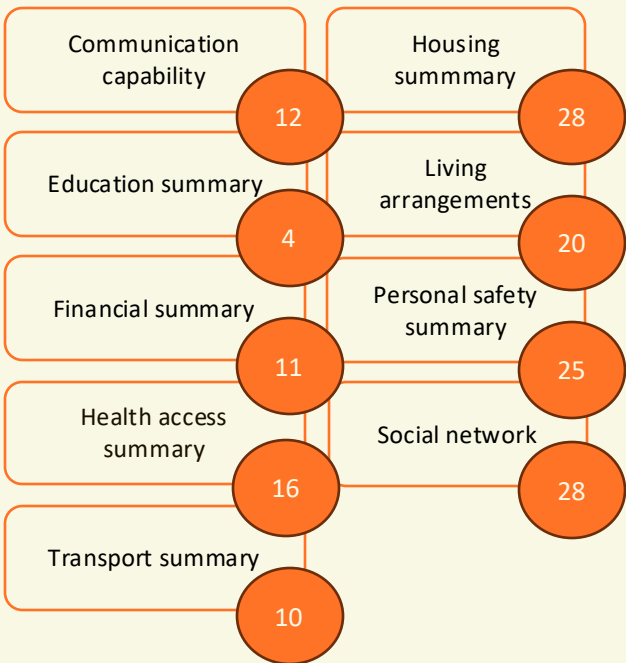
SDOH, SEWB and Health Behaviours were clear high priority items for exchange in Rural & Remote Australia



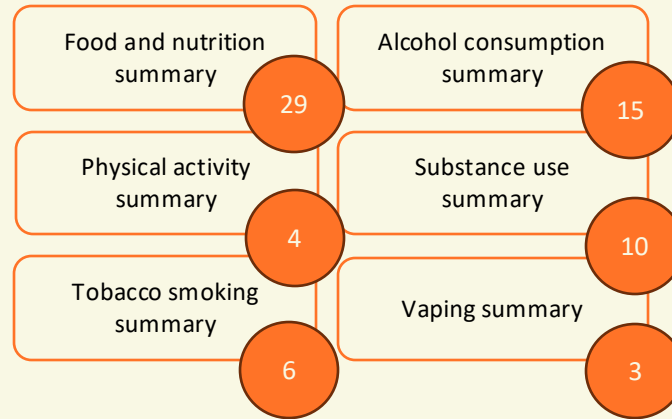


# Workshop – SDOH, SEWB, Health behaviour prioritisation

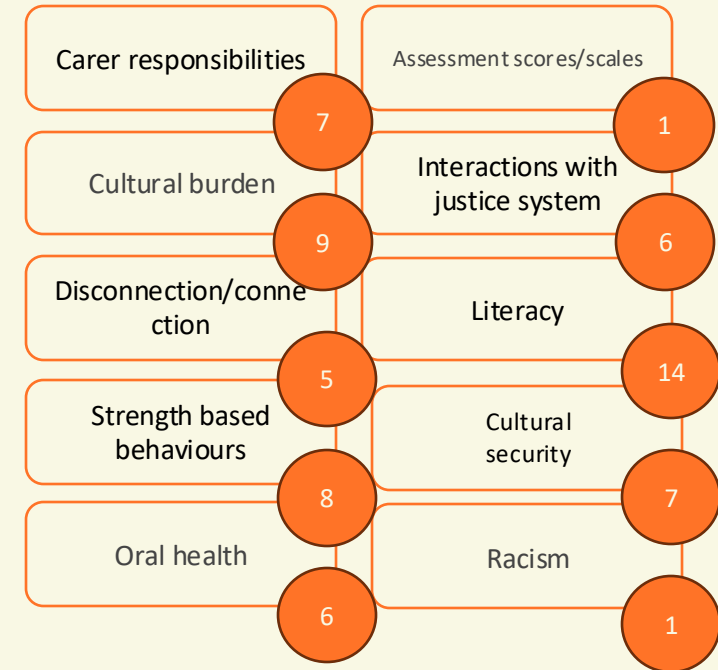
## SDOH topics in the backlog



## Health Behaviour topics in the backlog

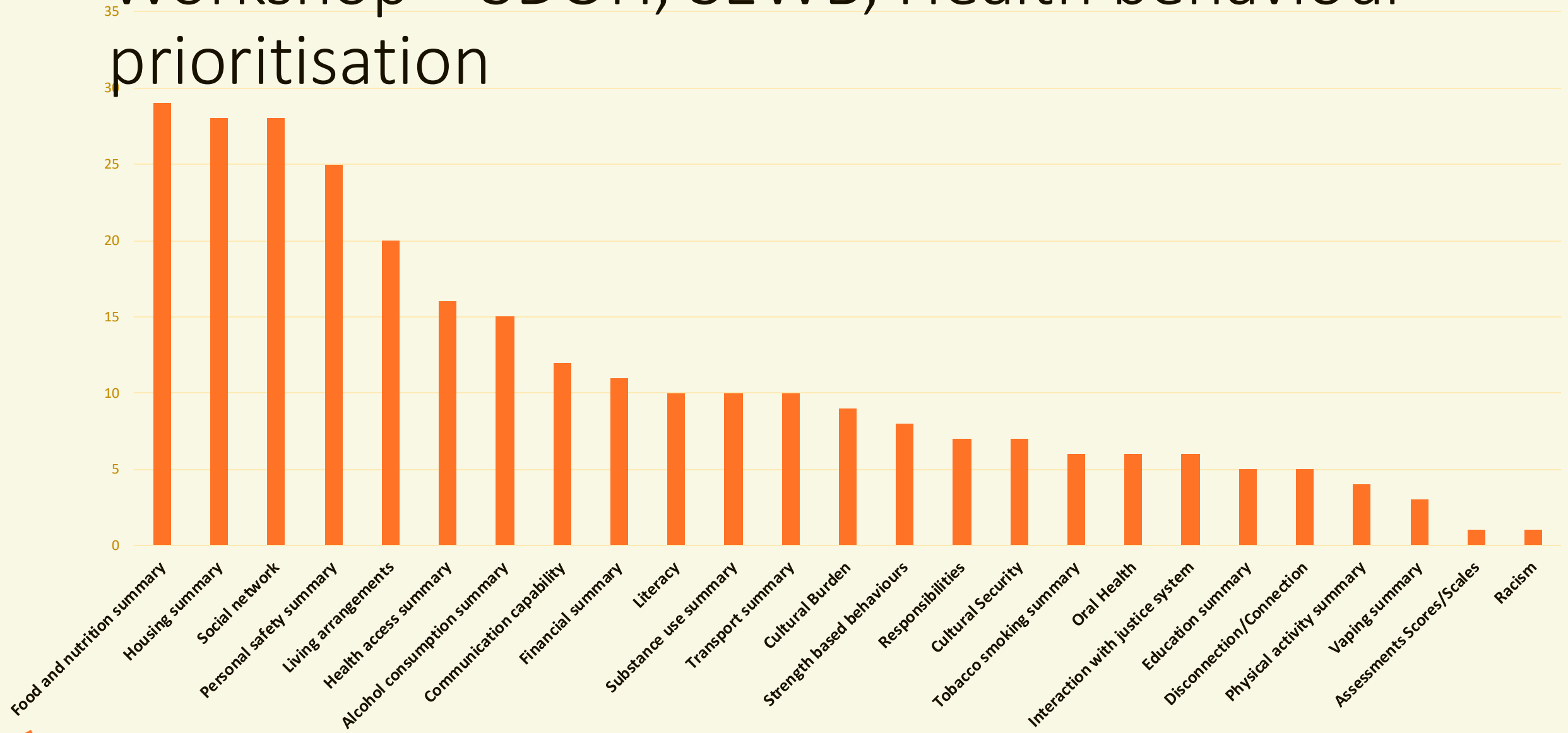


## Gaps identified





# Workshop – SDOH, SEWB, Health behaviour prioritisation



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AUCDI R2



# Summary of use cases identified from both workshops

## Patient Summary

- Organisation to Organisation Within Sector (e.g. GP to GP)
- Organisation to Organisation Across Sectors (e.g. Aged Care to Public Hospital)
- My Health Record to Consumer App
- Patient to International Care
- My Health Record to HIE
- Consumer to MDT
- Patient Summary Attached to Service Request
- System workarounds when Rural and Remote Areas are cut off
- Child Development Monitoring – Child Health Record
- Sharing Information Across Government Depts (e.g. Children out of Home Care, Prisons)

## Chronic Disease Management

- Continuity & Co-Ordination of Care Across Time/Location/Provider Type
- Remote Patient Monitoring
- Advance Care Directives
- Medication Management
- Patient Care Management Plan (e.g. Mental Health Plan, Chronic Disease Plans)
- Setting Goals of Care and Follow Up
- Risk Management
- Value Based Healthcare
- Patient Self Management
- Public Health Initiatives



# Backlog - extension to AUCDI R1



**Problem/Diagnosis summary**  
 Date/time clinically recognised  
 Date/time of onset  
 Date/time of resolution  
 Diagnostic certainty  
 Method of diagnosis/Clinical evidence  
 Practitioner role that confirmed the diagnosis  
 Qualifiers  
 Resolution phase  
 Severity  
 Staging/grading

**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

**Encounter**  
 Comment  
 Type of encounter/modality  
 Location/s  
 Outcome

**Adverse reaction risk summary**  
 Adverse reaction status  
 Clinical management description  
 Clinical status  
 Clinical verification  
 Criticality  
 Date exposed to substance  
 Dose/frequency and form  
 Initial exposure  
 Method of diagnosis/Clinical evidence  
 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  
 - Delabelling  
 - Time/timing exposure to  
 Adverse reaction – authoring clinician  
 Immunogenic testing

**Procedure completed event**  
 Description  
 Intent  
 Total duration  
 Location performed  
 Procedure status

**Device**  
 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

**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

**Sex and Gender**  
 Sex parameter for clinical use

**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

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

# Backlog – new items

<b>Advanced care directive</b>
<b>Adverse event</b>
<b>Alcohol consumption summary</b>
<b>Alternative care (e.g. bush meds)</b>
<b>Birth summary</b> Place of birth
<b>Cancer staging</b>
<b>Care pathways</b>
<b>Care plan</b>
<b>Care team members</b> Name Organisation Role Contact CC option

<b>Child &amp; adolescent health</b>
<b>Clinical evidence</b>
<b>Clinical synopsis</b> Author Summary (free text)
<b>Clinician alerts</b>
<b>Communication capability*</b> Languages spoken Interpreter required
<b>Contraindication</b>
<b>Culture</b> Cultural burden Connection/Disconnection Strength based behaviours Cultural security
<b>Estimated Date of Delivery (EDD)</b>

<b>Diagnostic test results</b> 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
<b>Drug interactions</b>
<b>Education summary*</b> Education level
<b>Ethnicity*</b> Aboriginal and Torres Strait Islander status
<b>Family history</b>
<b>Financial summary*</b> Finance Income Social economic (?)
<b>Food and nutrition summary*</b> Diet Food security

<b>Functional status and disability assessment</b> Cognitive capacity
<b>Goals</b> Frequency Function impact Measureable time frame/SMART Preventative nutrition goals Relevant supports
<b>Genetic/genomic test results</b> Genetics Epigenetics
<b>Health concerns</b>
<b>Health equity summary*</b> Access of care Distance from care Health literacy/numeracy
<b>Housing summary*</b> Housing Housing status Rurality
<b>Imaging completed</b>
<b>Imaging results</b>
<b>Informed Consent</b>

# Backlog – new items

## Living arrangements\*

Household  
Residential setting

## Medical devices

## Medication order

## Medication summary

## Menstrual information

Last menstrual period  
Menstrual status

## Obstetric summary

Gravidity/Parity

## Occupation summary

Occupation

## Oral health

## Pathology results

## Personal safety summary\*

Childhood trauma

## Physical activity summary\*

## Pregnancy

Examinations  
Progress  
Risk (level)  
Start of pregnancy

## Pregnancy summary

## PREMs and PROMS

## Preventative care

## Product errors

## Pulse oximetry

FiO2  
SpO2

## Screening activity completed

## Service request

Follow up

## Sexual characteristics

## Shock index

## Side effect register

## 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

## Specialist services

## Substance use summary

## Support person needs

## Transport summary\*

Transport access

## Vaping summary

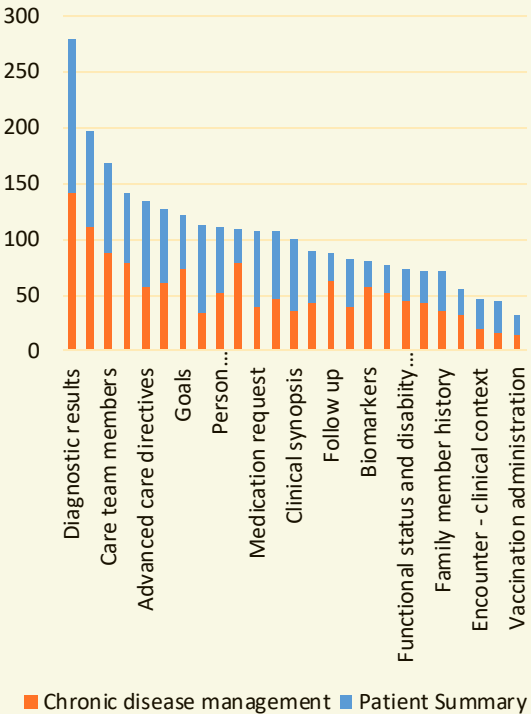
## Vital status

## Racism



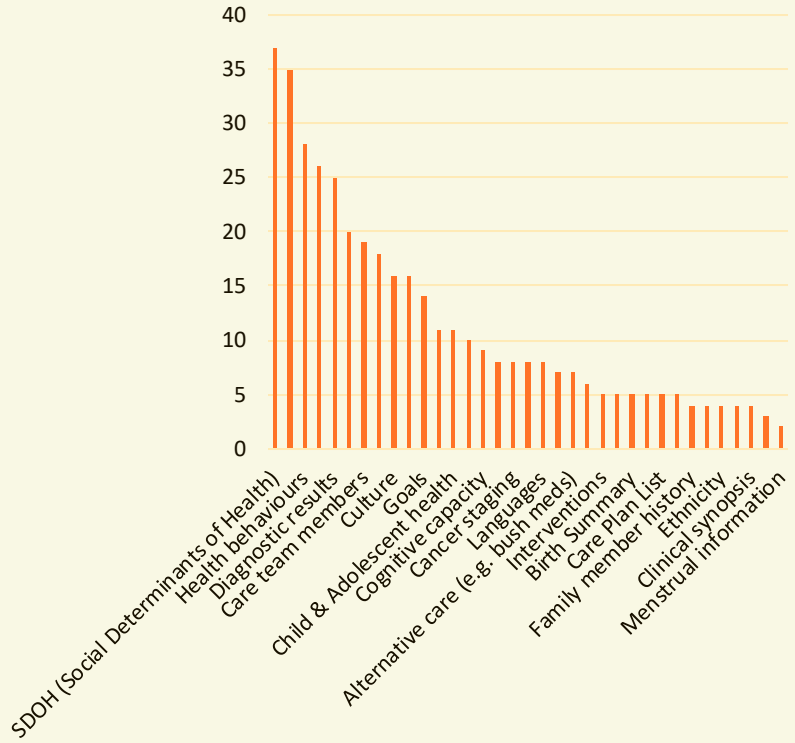
# Prioritisation

May F2F prioritisation



1	Diagnostic results
2	Plan of care
3	Care team members
4	Medication statement
5	Advanced care directives
6	Problem/diagnosis
7	Goals
8	Pregnancy
9	Person information/demographics
10	Vital signs and measurements
11	Medication request
12	Adverse reaction risk summary
13	Clinical synopsis
14	Social history
15	Follow up
16	Medical device and equipment
17	Biomarkers
18	SDOH/Lifestyle
19	Functional status and disability assessment
20	Health concerns
21	Family member history
22	Social context
23	Encounter - clinical context
24	Procedure completed
25	Vaccination administration

Roundtable prioritisation



1	SDOH (Social Determinants of Health)
2	SEWB (Social Emotional Wellbeing)
3	Health behaviours
4	Plan of care
5	Diagnostic results
6	Functional status and disability assessment
7	Care team members
8	Advanced care directives
9	Culture
10	Clinician alerts
11	Goals
12	Oral health
13	Child & Adolescent health
14	Allied health
15	Cognitive capacity
16	Health concerns (consumer)
17	Languages
18	Medication request
19	Cancer staging
20	Pregnancy (status and history summary)
21	Alternative care (e.g. bush meds)
22	Preventative care
23	Interventions
24	Social context
25	Birth Summary
26	Social history
27	Specialist services
28	Care Plan List
29	Ethnicity
30	Family member history
31	Clinical synopsis
32	Follow up
33	Support person needs
34	Medical devices and equipment
35	Menstrual information



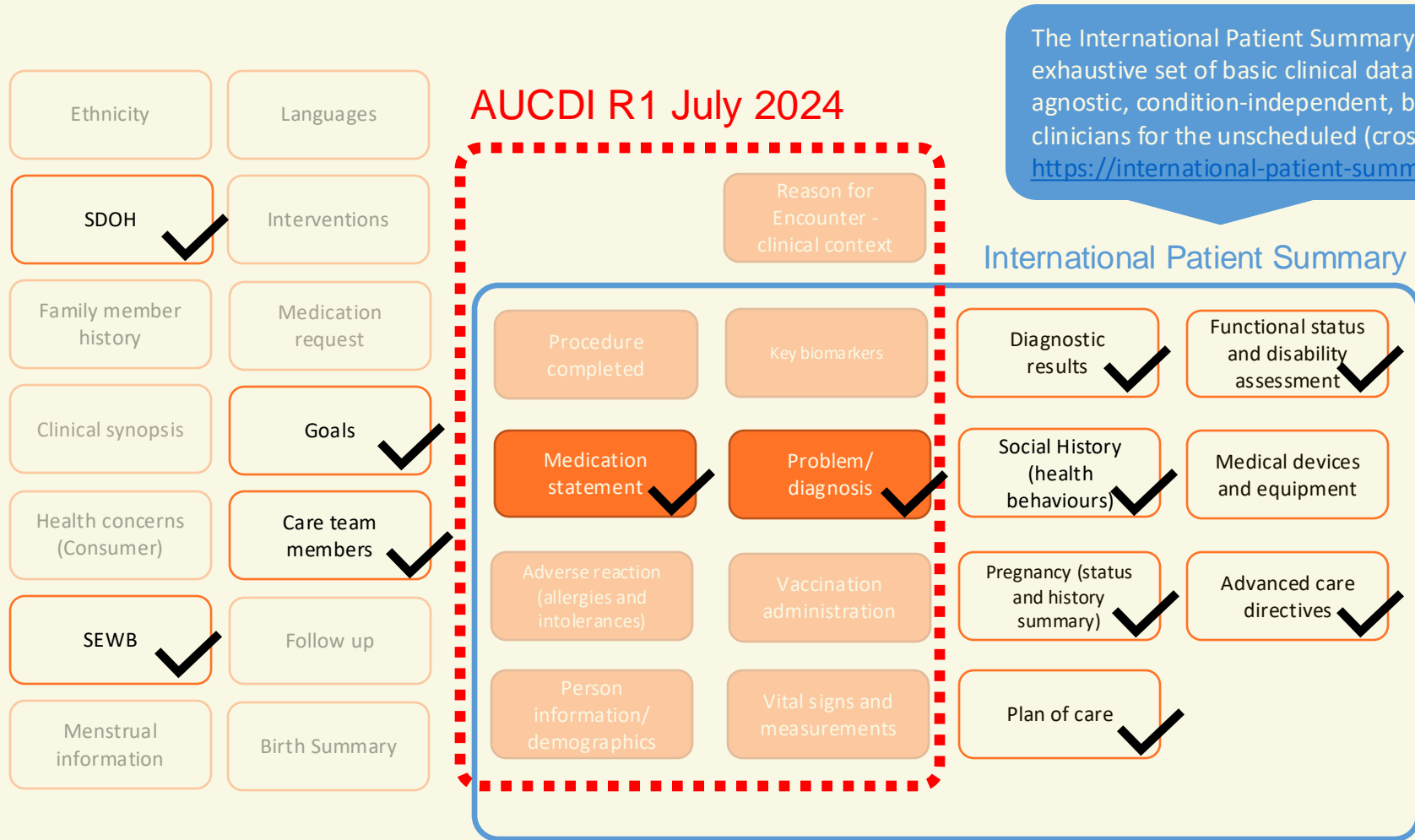
# Bringing them together

Priority data groups (top 12)	Patient summary	Chronic disease management
Diagnostic results*	Y	Y
Plan of care*	Y	Y
Care team members*		Y
Medication statement (extend R1)	Y	Y
Advanced care directives*	Y	Y
Problem/diagnosis (extend R1)	Y	Y
Goals	Y	Y
Pregnancy	Y	
SDOH (Social Determinants of Health)	Y	Y
SEWB (Social Emotional Wellbeing)	Y	Y
Health behaviours (social history)	Y	Y
Functional status and disability assessment	Y	Y

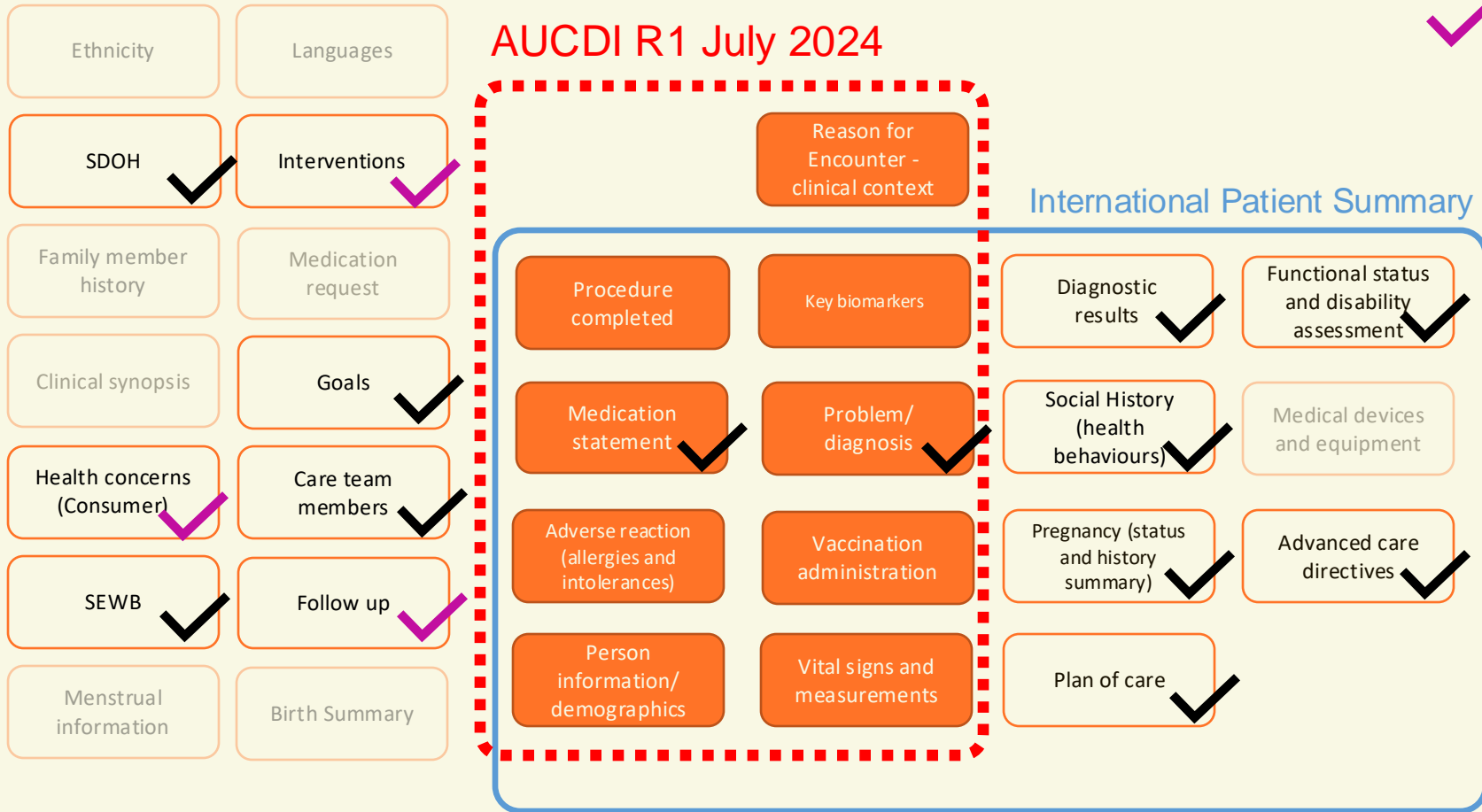
\* Priority data group that was in top 8 of both workshops



# What this looks like against the backlog



The International Patient Summary (IPS) is a minimal and non-exhaustive set of basic clinical data of a patient, specialty-agnostic, condition-independent, but readily usable by all clinicians for the unscheduled (cross-border) patient care. <https://international-patient-summary.net/>





# Questions

- Considering that this is just the starting point to take into our workshop in September
  - What are your concerns?
  - What else should we consider?
  - What additional prioritisation drivers should we consider?
    - Accelerators
      - Patient summary
      - Example: National Lung Cancer Screening Program (launching July 2025)
    - Decelerators
      - Dependencies on other programs of work, policy, etc.
      - Example: SEWB (alignment to MBS715 and national work around terminology)



# Exploring these high-level concepts

- SDOH/health behaviours/SEWB
- Plan of care
- Advance care directives
- Functional status assessments
- Pregnancy

## **Our challenge:**

How do we break them down to data groups and data elements?

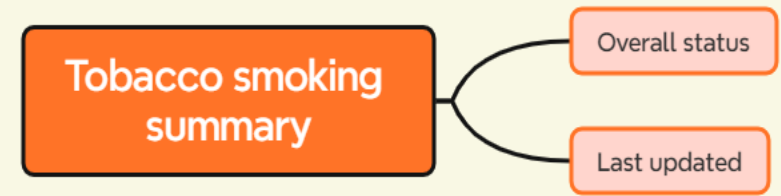


# Context for R2 'well-being' concepts

## SDOH, Health Behaviours and SEWB Voting Results (Darwin)



## AUCDI Release 1 content



## IPS content

- Alcohol use
- Tobacco use

# 'Well-being' concepts – structured, coded

What structured, coded SDOH, health behaviour, SEWB information would be of most benefit?

## Proposed approach

- Expand
  - Tobacco smoking
- Add new
  - Alcohol
  - Substance use

SDOH, Health Behaviours and SEWB Voting Results (Darwin)

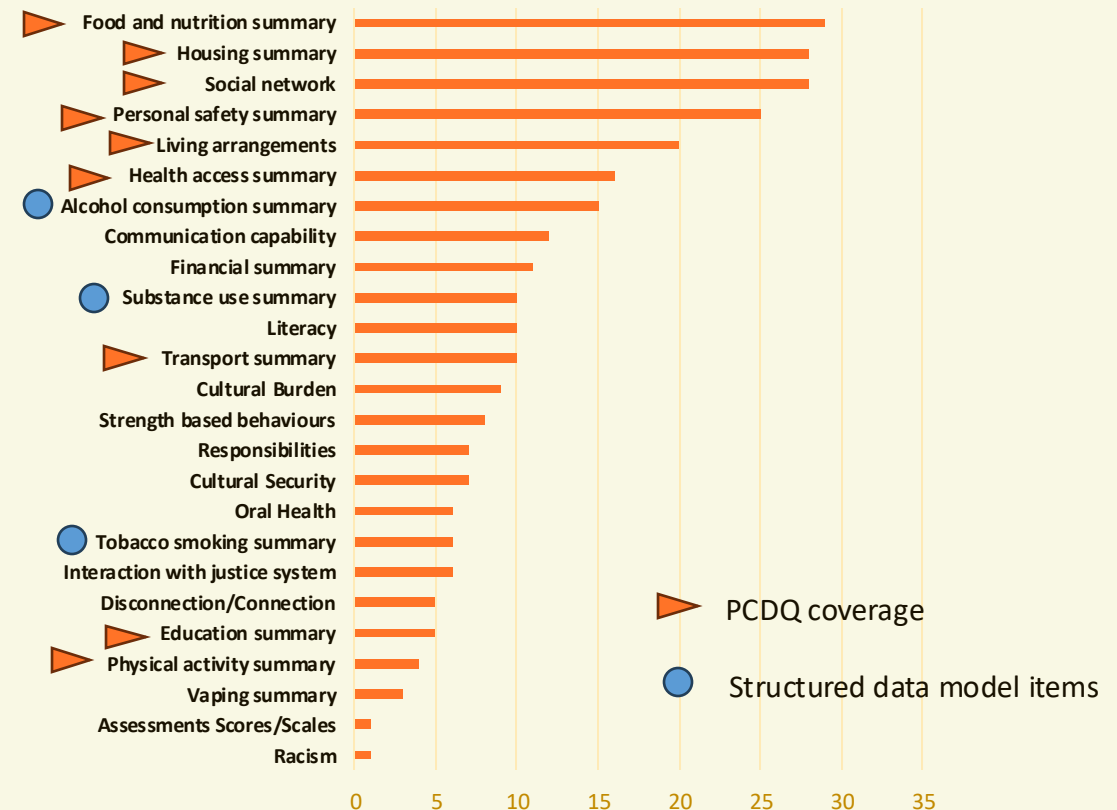


# Social determinants of health, health behaviours, social emotional wellbeing

During previous work in the Primary care data quality (PCDQ) project – looked at

- Physical activity summary
- Food and nutrition summary
- Sexual health summary\*
- Gambling summary\*
- Housing summary
- Living arrangement summary
- Social network summary
- Transport access summary
- Personal safety summary
- Education summary
- Occupation summary

SDOH, Health Behaviours and SEWB Voting Results

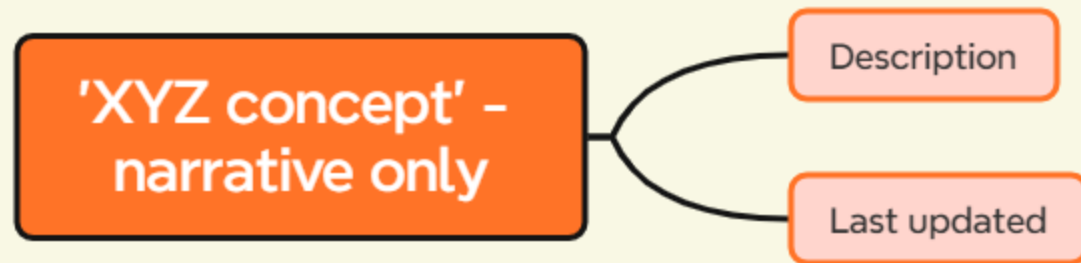




# R2 well-being proposal – narrative

## Pattern 1

- **<XYZ concept>**
  - **Description** - narrative
  - **Last updated**



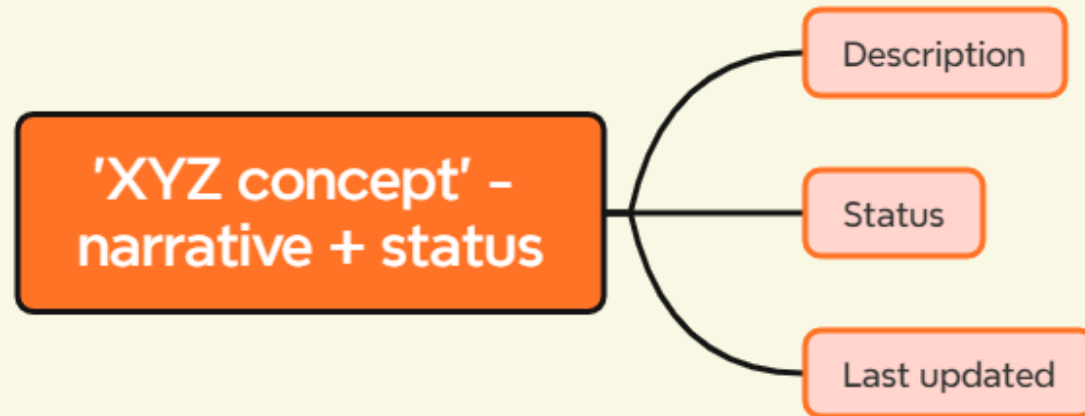
## Possible concepts

- **Living arrangements summary**
  - Living alone or with others
- **Occupation summary**
- **Education summary**
- **Communication capability**
- **Physical activity summary**
- **Literacy summary**
- **Gambling summary**
- **Sexual health summary**

# R2 well-being proposal – status + narrative

## Pattern 2

- **<XYZ concept>**
  - **Description** - narrative
  - **Status**
  - **Last updated**



## Possible concepts

- **Diet and nutrition summary**
  - Food security
- **Housing summary**
  - Housing security
- **Social network summary**
  - Social connectedness
- **Financial summary**
  - Financial security
- **Personal safety summary**
  - Personal safety
- **Transportation summary**
  - Transport security
- **Healthcare access summary**
  - Health access

# Proposed approach

Use the two patterns as a first step to represent

- Physical activity summary
- Food and nutrition summary
- Sexual health summary
- Gambling summary
- Housing summary
- Living arrangement summary
- Social network summary
- Transport access summary
- Personal safety summary
- Education summary
- Occupation summary
- Health access summary
- Financial summary
- Literacy
- Communication capability

## Proposed approach

- Use the two patterns as a first step to represent the SDOH identified
- Coordinate and synchronise with the ongoing development of SEWB terminology within ACCHOs and the National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people program run by the RACGP-NACCHO partnership

# Advance care directive

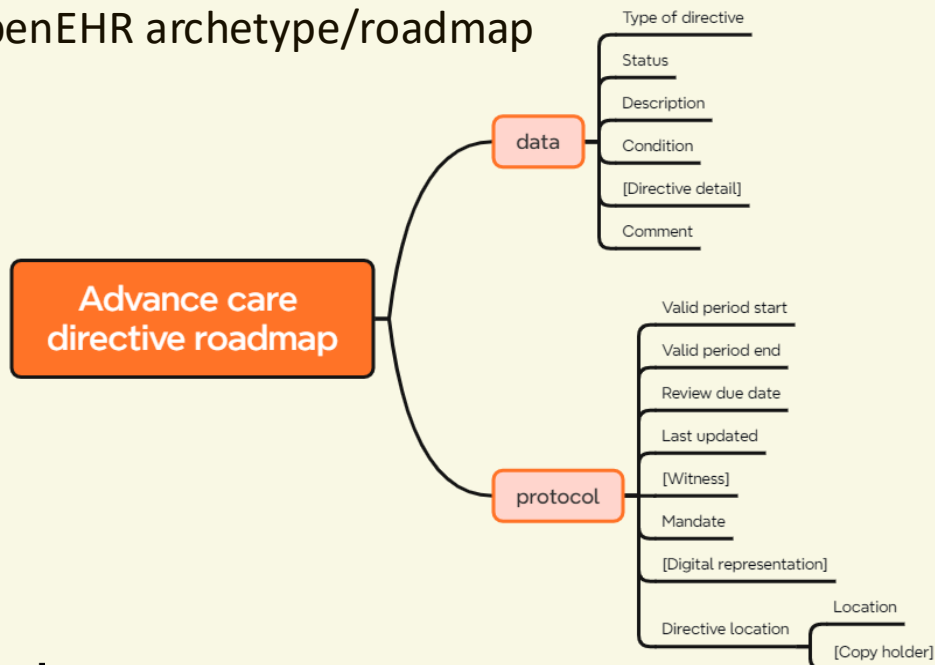
## My Health Record

- Digital representation (PDF)
- Custodian details

## IPS

Advance directive - The advance directives section contains a narrative description of patient's advance directives.

## openEHR archetype/roadmap



## Proposed approach

Start with a simple model as first step

- Status
  - present/absent/unknown
- Directive location (Custodian details)
  - Physical/digital location
  - Copy holder
- Last updated



# Plan of care

## IPS

Plan of care - The plan of care section contains a narrative description of the expectations for care including proposals, goals, and order requests for monitoring, tracking, or improving the condition of the patient.

- AUeReqDI (reuse and extend)
  - Service request
    - Follow-up
- AUCDI backlog
  - Goal\*
  - Health concern\*
  - Care team member
  - Intervention
  - Follow up

## Proposed approach

- Explore related items from backlog
- Investigate other items required for a care plan

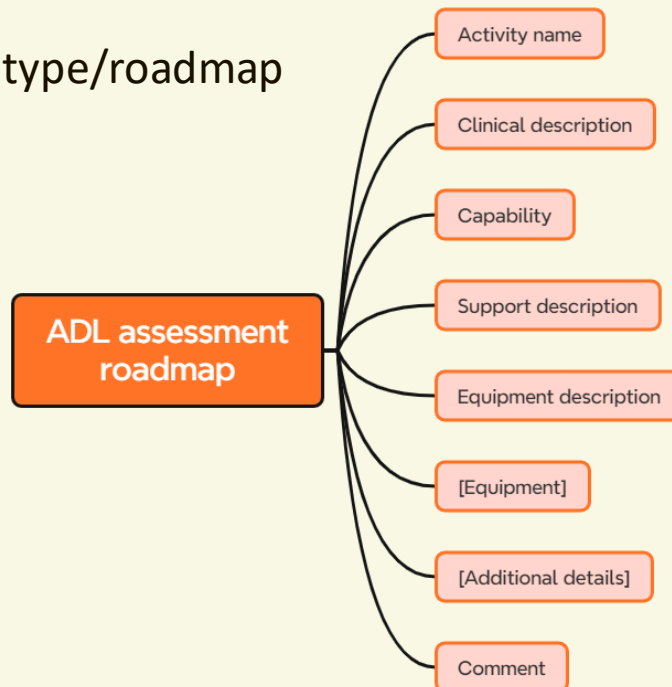


# Functional status assessment

## IPS

The functional status section contains a narrative description of capability of the patient to perform acts of daily living, including possible of the patient to be continuously assessed by third parties. The invalidity status may in fact influence decisions about how to administer treatments. Profiles to express disabilities and functional assessments will be specified by future versions of this guide.

openEHR archetype/roadmap



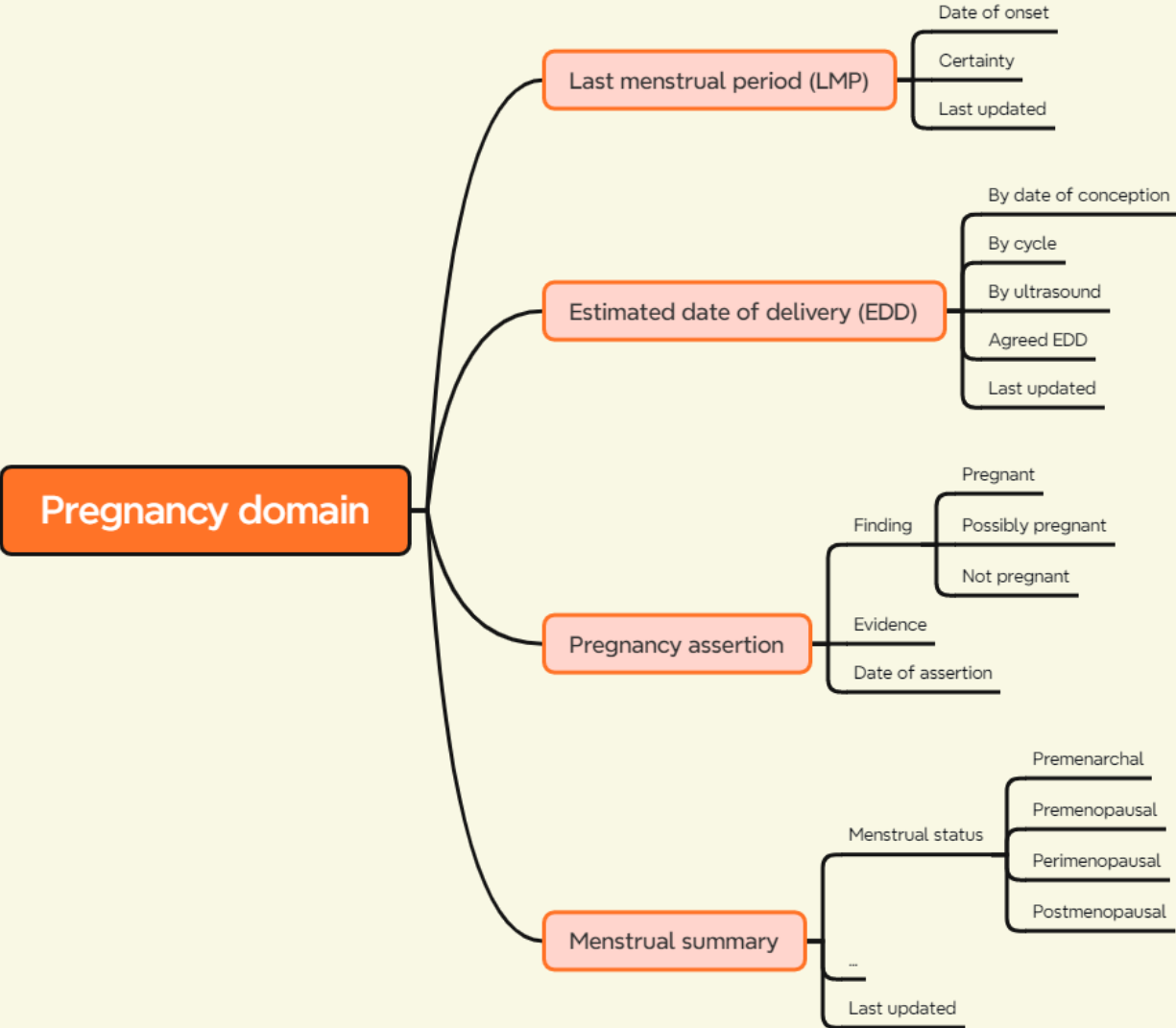
## Proposed approach

- Explore Activities of Daily Living (ADL) assessment roadmap for inclusion
- Consider other functional status assessments, comprehensive assessments, aged care transfers, score and scales in common use

# Pregnancy domain

- **Pregnancy test result**
  - Self-test result
  - Date of observation
- **EDD**
  - By date of conception
  - By cycle
  - By ultrasound
  - Agreed EDD
  - Last updated
- **Last menstrual period**
  - Date of onset
  - Certainty
  - Last updated
- **Pregnancy assertion**
  - Finding
    - Pregnant/Possible pregnancy/  
Not pregnant/Unknown
  - Evidence
  - Date of assertion
- **Current pregnancy phase**
  - Status
    - Preconception/Pregnant/Postpartum
  - Last updated
- **Menstrual summary**
  - Menstrual status
    - Premenarchal/Premenopausal/  
Perimenopausal/Postmenopausal
  - Menarche
  - Menopause
  - Typical pattern of menstruation
  - Last updated
- **Menstrual cycle event**
  - Start
  - Duration
  - Description
  - Relative flow
  - Clots
  - Date of observation
- **Obstetric summary**
  - Gravidity
  - Parity
  - Term births
  - Miscarriages
  - Live births
  - Stillbirths
  - Caesarean sections etc
  - Last updated
- **Pregnancy summary**
  - Synopsis
  - Pregnancy outcome
  - Pregnancy duration/gestation
  - Pregnancy end date
  - Number of foetuses
  - Onset of labour
  - Induction method
  - Reason for induction
  - Total duration of labour
  - Estimated blood loss
  - Place of outcome
  - Maternal complication
  - Per infant
    - Label/name
    - Delivery outcome
    - Neonatal outcome
    - Date/time of delivery
    - Presenting part
    - Position
    - Birthweight
    - Feeding
    - Neonatal summary
    - Infant complication

# Proposed pregnancy domain scope



**Proposed approach**

- Begin with Pregnancy items identified during AUReqDI work



# Summary of proposed approach for AUCDI R2

Topic	Proposed approach
Social determinants of health, health behaviours, social emotional wellbeing	<ul style="list-style-type: none"><li>• Expand tobacco smoking, add alcohol and substance use</li><li>• Use the two patterns as a first step to represent the SDOH identified</li><li>• Coordinate and synchronise with the ongoing development of SEWB terminology within ACCHOs and the National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people program run by the RACGP-NACCHO partnership</li></ul>
Advance care directive	<ul style="list-style-type: none"><li>• Start with a simple model as first step</li></ul>
Plan of care	<ul style="list-style-type: none"><li>• Explore related items from backlog</li><li>• Investigate other items required for a care plan</li></ul>
Functional status assessment	<ul style="list-style-type: none"><li>• Explore Activities of Daily Living (ADL) assessment roadmap for inclusion</li><li>• Consider other functional status assessments, comprehensive assessments, aged care transfers, score and scales in common use</li></ul>
Pregnancy	<ul style="list-style-type: none"><li>• Begin with Pregnancy items identified during AUeReqDI work</li></ul>

# Next CDG in September 2024 in person

- AUCDI R2 focussed around
  - Patient Summary
  - Reason for Encounter
  - Chronic Disease Management
- eRequesting
  - Workshop
    - Visual representation of data model and terminology value sets
- AUCDI R2 Homework
  - Consider discussions from this meeting
  - Program and Policy
    - Programs of activity around transition of care, other related work
    - Policies (Colleges, business)
    - Future foundation
  - Data requirements
    - For each of the use cases, what are your priority data points?
      - Core of the core
      - Data points that sit across all the use cases
      - Consider the data points required to support the level of detail
      - Additional accelerators/decelerators

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Sparked evaluation



# Sparked Evaluation

## CSIRO Evaluation

### **CSIRO Evaluation Team**

to ensure Sparked is fit for purpose and is serving the community's needs

## DoHAC Evaluation

### **Independent external evaluation**

to examine the broader Sparked deliverables and policy perspectives

## Why should you participate?

- Influence what's needed to improve the community process
- Support our agile way of working so we can adapt
- Contribute to the global benchmark of what success looks like for a national accelerator
- Shape the future direction for creation and adoption of FHIR standards in Australia



# CSIRO Sparked Evaluation Update

The CSIRO AeHRC is continuously evaluating the effectiveness of Sparked to inform improvements and changes to the accelerator





# DoHAC Evaluation Update

DoHAC have selected Voronoi as an independent evaluator of the Sparked accelerator





# Upcoming items

- Webinar
  - August 28 Sparked Program Update focused around FHIR and lessons learned from implementers
- Next face to face meeting
  - 11/12 September 2024 in Brisbane



Thank you

See you next time!