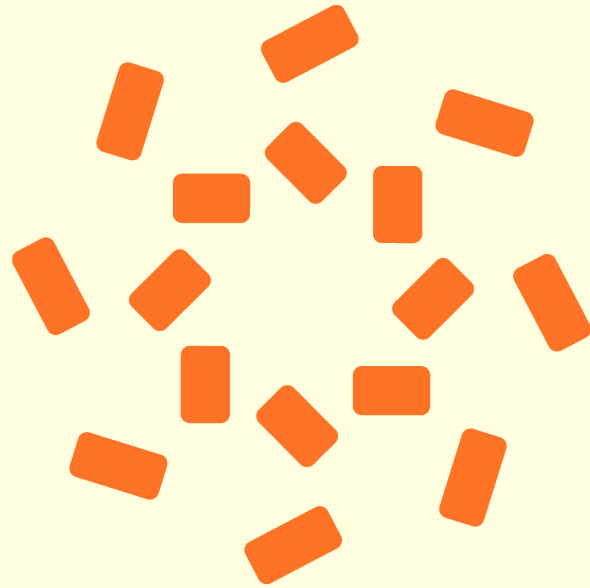


Please be advised that this Clinical Design Group will be recorded for use on our website and in other written and online publications.



Sparked



Clinical Design Group

Wednesday 8th October 2025 1:00-2:30

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 Torres Strait Islander people, acknowledging the First Peoples as the first scientists, educators and healers.

'Eternal Wisdom, Infinite Innovation'
artwork by Rachael Sarra, working with Gilimbaa.



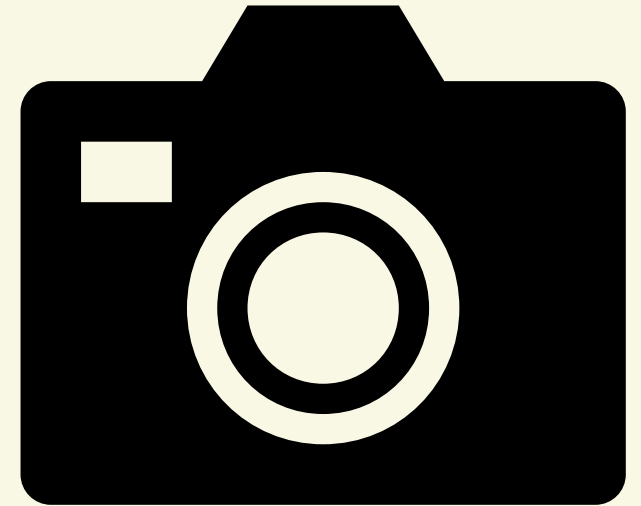


Photos/Video

Please be advised that this Clinical Design Group will be recorded for use on our website and in other written and online publications.

By entering this meeting, you consent to the photography and video and using your image and likeness.

If you do not wish to be photographed or videoed, please turn off your camera. Thank you





Agenda

- AUCDI R3 update
- AUCDI R3 data discussion
 - Update to Implanted medical device summary
 - Data supporting function assessments
- Next steps



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

Clinical
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

Technical is
here

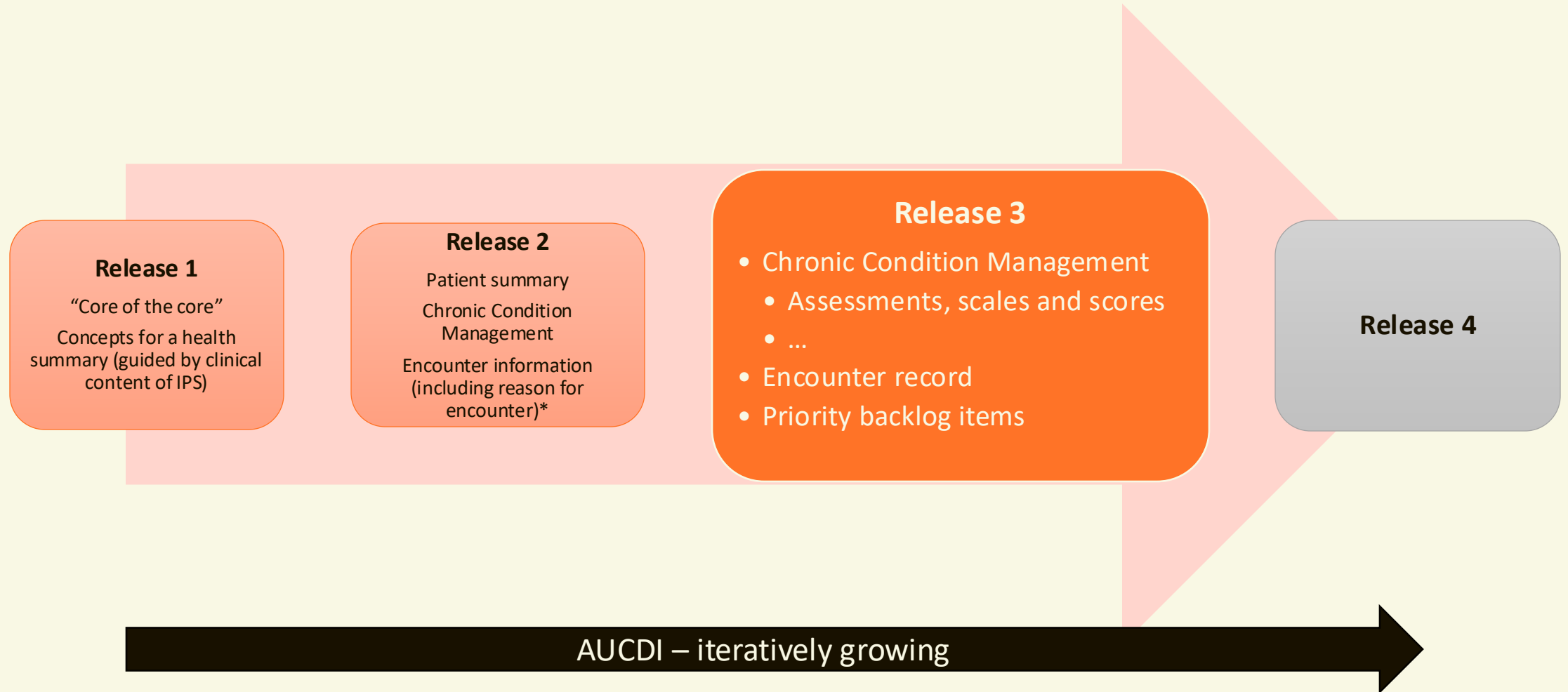
AU
Core



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



AUCDI R3





Last meeting recap

- Update on AUCDI
- AUCDI R3
 - Agreed on
 - Head circumference
 - Vaping summary
 - Implanted medical device
 - Health assessment data group
 - Implanted medical device summary



AUCDI Release 3 – New content to date

Adverse reaction risk summary

- Substance name
- Date/time of onset of first reaction
- Verification status
- Criticality
- Adverse reaction event summary
 - Specific substance
 - Manifestation/s
 - Severity of reaction
 - Initial exposure
 - Clinical management description
 - Comment
- Onset of last reaction
- Comment
- Last updated

Vaping summary

- Overall status
- Overall description
- Last updated

Vital signs*

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

Measurements*

- Height/length
- Body weight
- Waist circumference
- Head circumference

Health assessment

- Assessment name
- Description
- Clinical indication
- Date of assessment

Implanted device summary**

- Device name**
- Status**
- Specific implanted device details
 - Device name
 - Status
 - Insertion date
 - Implant body site
 - [Structured device detail (Medical device)]
 - Removal date
 - Comment
- Overall comment**
- Last updated**

Medical device

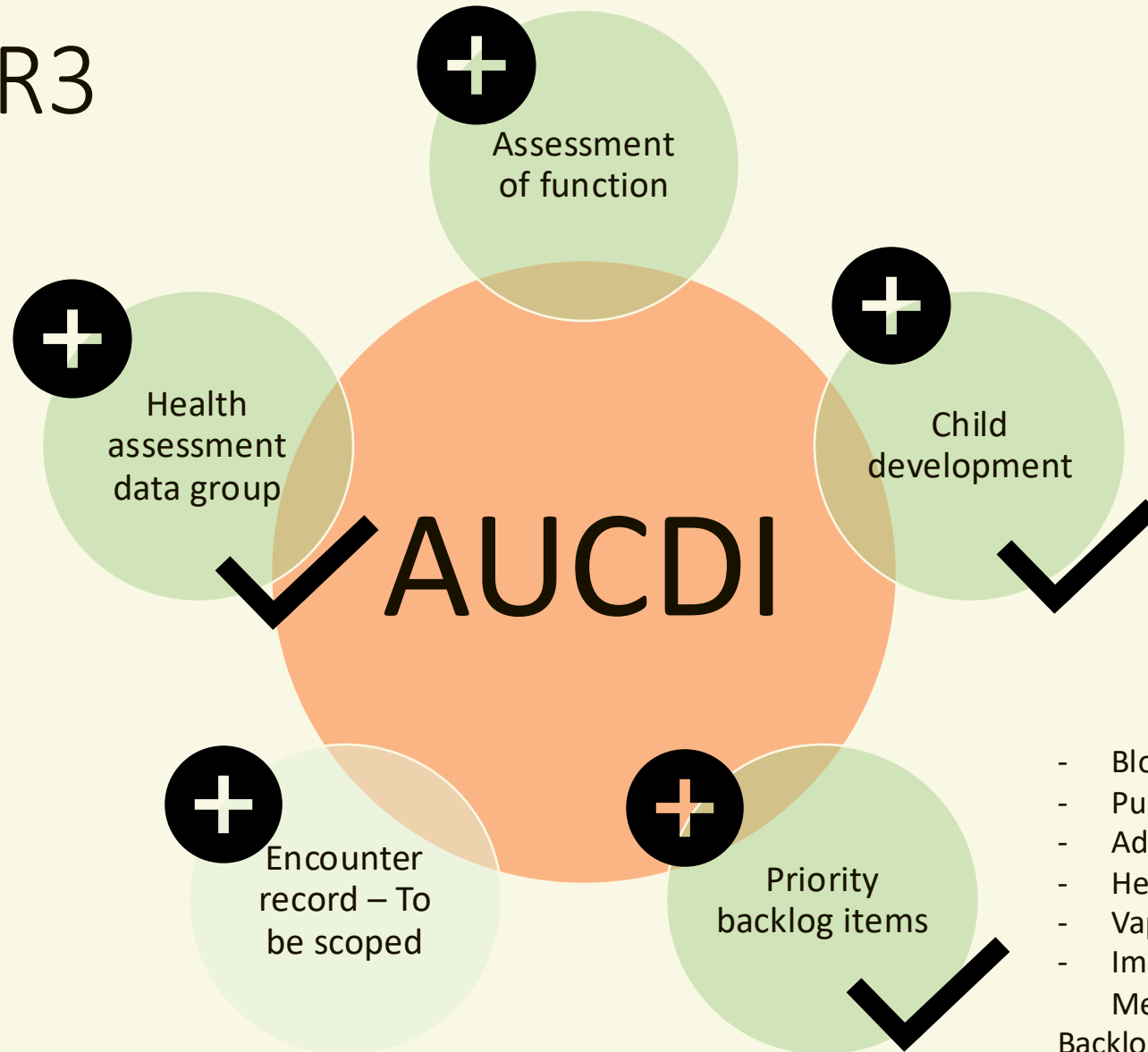
- Device name
- Unique device identifier (UDI)
- Date of expiry

Developmental milestone summary

- Overall description
- Per milestone
 - Milestone name
 - Status
 - Date achieved
 - Date of assertion
 - Comment
- Last updated

Items in black text are new content for AUCDI R3
Items in white are not new content and have only been included for context

AUCDI R3



- Blood pressure
 - Pulse regularity
 - Adverse reaction risk summary
 - Head circumference
 - Vaping summary
 - Implanted medical device summary and Medical device
- Backlog for further discussion
- About me
 - Procedure – Clinical outcome



AUCDI R3 plan

In progress
(this meeting)

Data to support assessment of function

- To support aged care, disability care and all other health settings

Update to Implanted medical device summary

- Based on technical feedback received

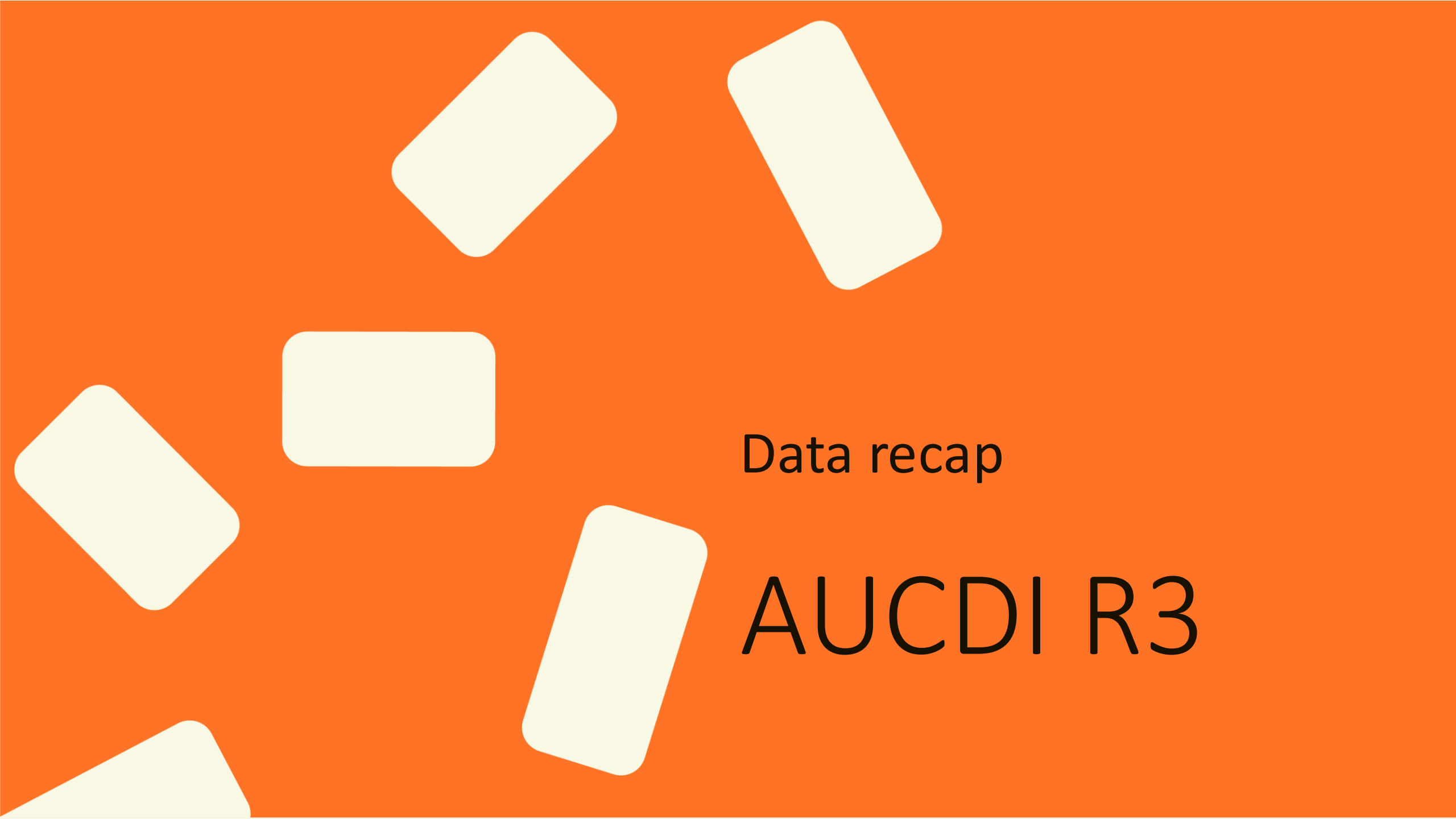
In discovery/ scoping
phase
(upcoming meetings)

TBC - Encounter record information

- To support an Encounter Record (ER)
- Prioritise a first release of ER

Backlog items

- About me
- Procedure extension - clinical outcome



Data recap

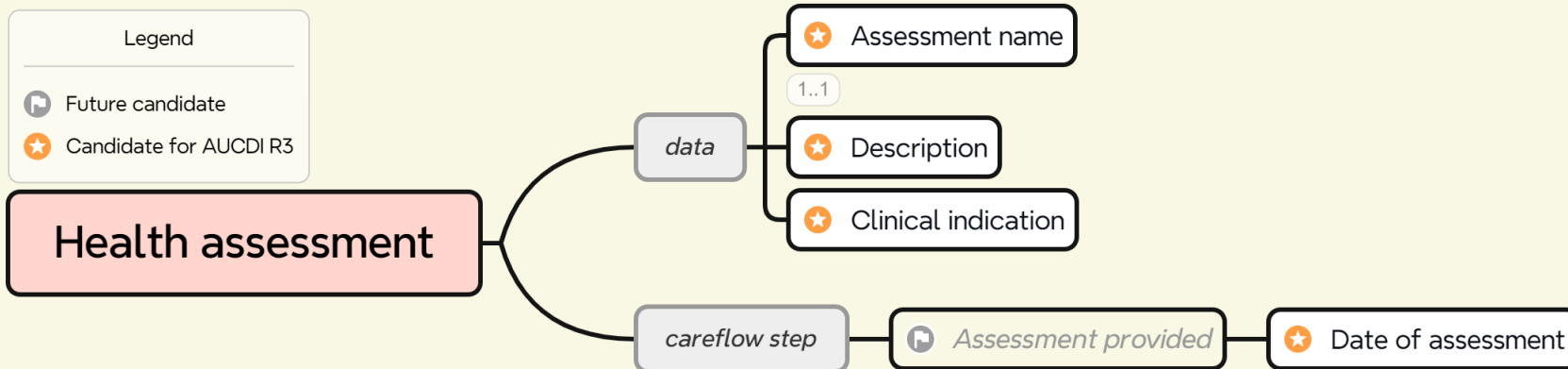
AUCDI R3



New data group: Health assessment

- **Concept description:** Provision of a health assessment required to evaluate an individual's physical, mental, developmental, or functional health status, for the purposes of prevention, screening, diagnosis, or care planning.
- **Purpose:** To record details about the provision of a health assessment at clinically relevant events in the intervention lifecycle, from planning to completion, and including deviations or interruptions.
- **Representation:** Record one instance per careflow step for each procedure recorded in a health record.

- **Assessment name**
 - Name of the assessment, or type of assessment.
- **Description**
 - Narrative description about the provision of the health assessment, applicable to the careflow step.
- **Clinical indication**
 - The clinical symptom, sign, problem, or diagnosis that necessitates the assessment.
- **Date of assessment**
 - The assessment has been provided; active careflow steps are in process.





New data group : Head circumference

Concept description: The measurement of the longest distance around the head.

Purpose: To record the measurement of the longest distance around the head.

Representation: Record one instance per observation event within a health record.

- **Head circumference**

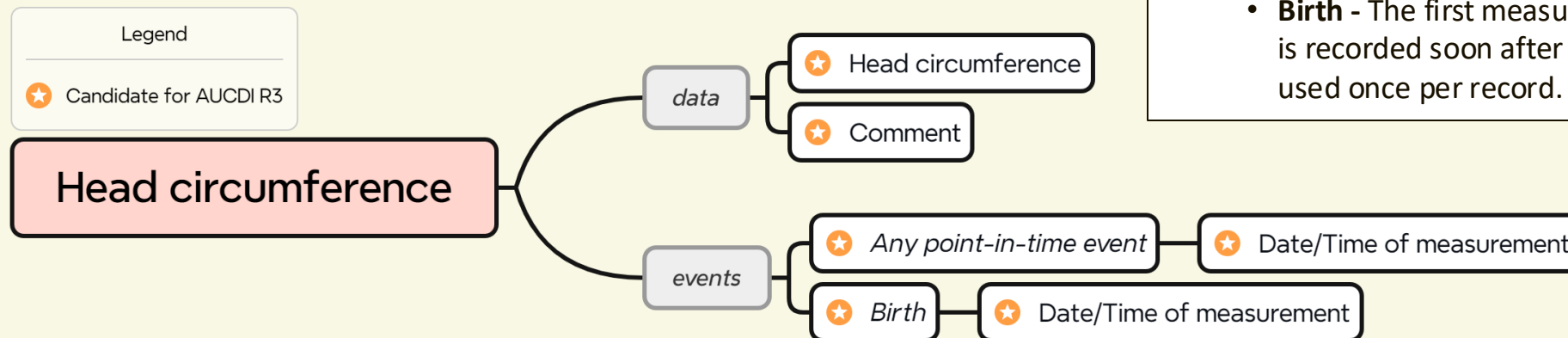
- The measurement of the longest distance around the head.

- **Comment**

- Additional narrative about the measurement of the longest distance around the head.

- **Date/Time of measurement**

- **Any point-in-time event** - Default, unspecified point-in-time event which may be defined more explicitly in an implementation, if necessary.
- **Birth** - The first measurement of head circumference that is recorded soon after birth. This event should only be used once per record.





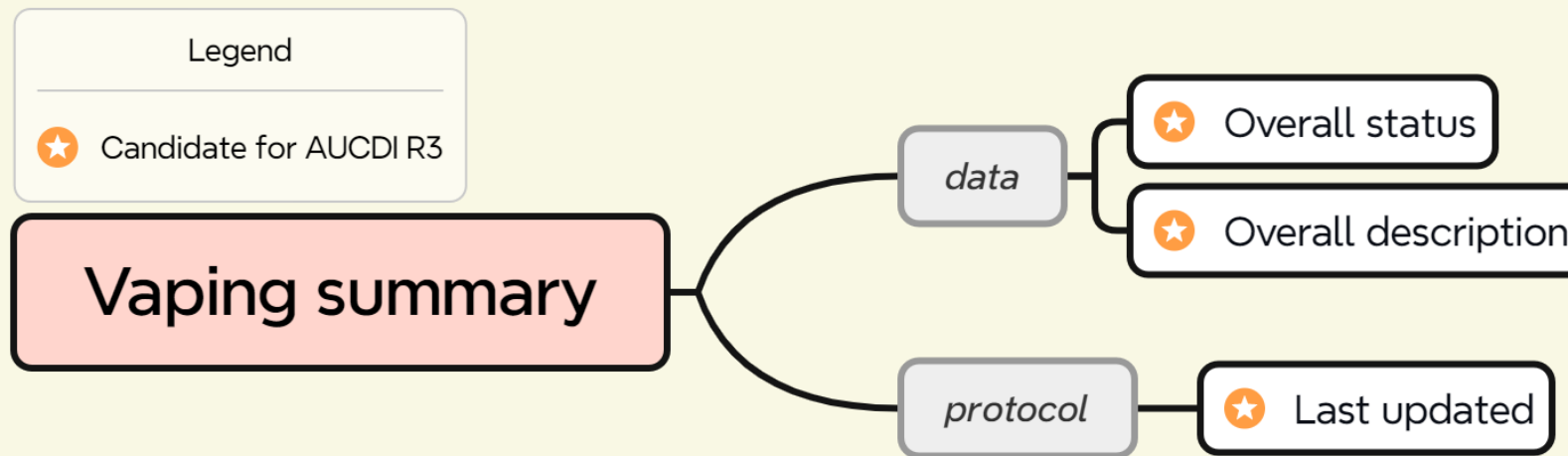
New data group: Vaping summary

Concept description: Summary or persistent information about the vaping habits of an individual.

Purpose: To record summary information about the individual's pattern of vaping of substances and e-liquids.

Representation: Record only one instance of this data group per substance in the health record; any changes or updates over time are captured as revisions to the original entry rather than creating a new entry.

- **Overall status**
 - Statement about the current consumption for all types of vapes or vaping devices.
- **Overall description**
 - A description or summary about the individual's overall vaping pattern and history.
- **Last updated**
 - Date when this vaping summary data group was last updated.

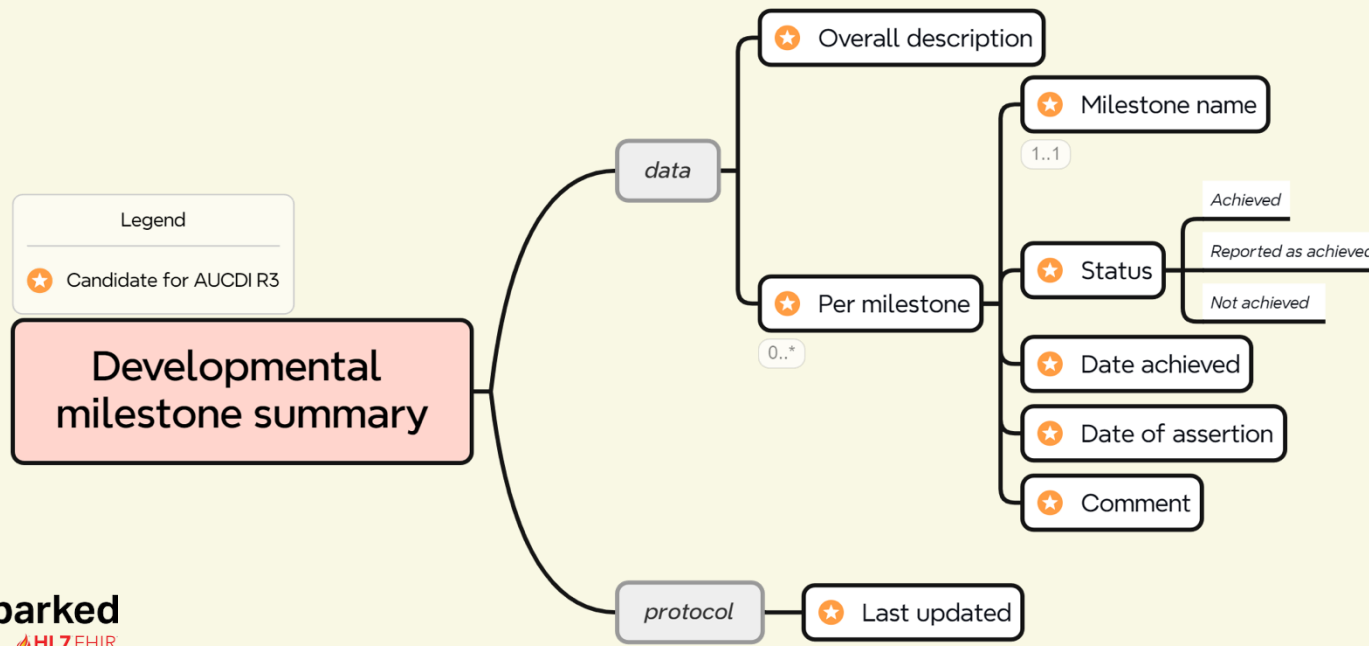


New data group: Developmental milestone summary



- **Concept description:** Summary information about the achievement of developmental milestones for an individual, usually a child, to monitor progress over time.
- **Purpose:** To record an overview of developmental progress across all age-appropriate milestones and details about each specific milestone.
- **Representation:** Record one instance of this data group within a health record; any changes or updates over time are captured as revisions to the original entry rather than creating a new entry.

- **Overall description:** Narrative summary about the individual's overall progress in achieving developmental milestones.
- **[Per milestone]**
 - **Milestone name:** Name of the milestone.
 - **Status:** Statement describing the current level of achievement for the identified milestone.
 - **Date achieved:** The date when the milestone was reached.
 - **Date of assertion:** The date when the milestone was assessed.
 - **Comment:** Additional narrative about the individual's developmental progress related to the identified milestone not captured in other fields.
- **Last updated:** The date when the developmental milestone record was last updated.





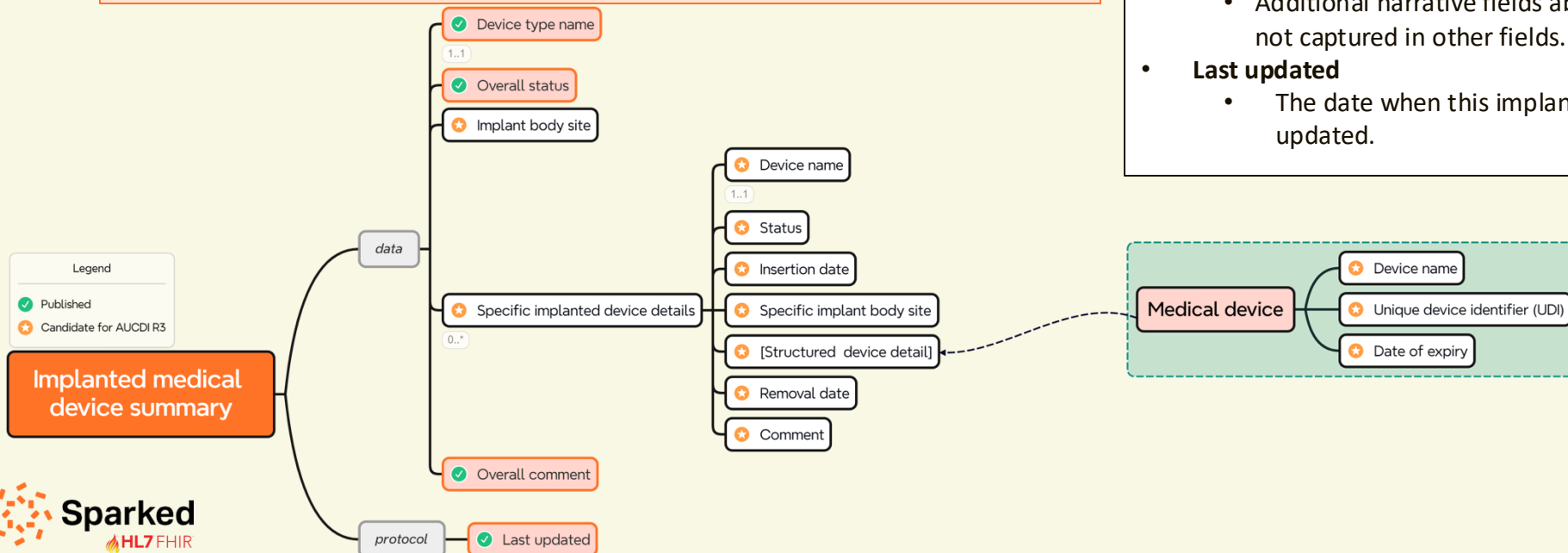
Implanted medical device summary (AUeReqDI)

Concept description: A summary or overview detailing the history and context of use for a specified type of implantable medical device, including details about specific implantation episodes.

Purpose: To record a summary or overview detailing the history and context of use for a specified type of implantable medical device.

Representation: Record one summary instance per medical device or device category within a health record.

- **Device type name**
 - Name of the implanted medical device category.
 - *For example: Cochlear implant; Intracardiac pacemaker; Coronary stent*
- **Overall status:**
 - Assertion about the whether the device type is currently in situ.
 - *In situ*
 - *Removed*
- **Add 'Implant body site'**
 - Identification of the body structure or region where the all devices of this type have been inserted
- **Overall comment**
 - Additional narrative fields about the implanted medical device type, not captured in other fields.
- **Last updated**
 - The date when this implanted medical device summary was last updated.



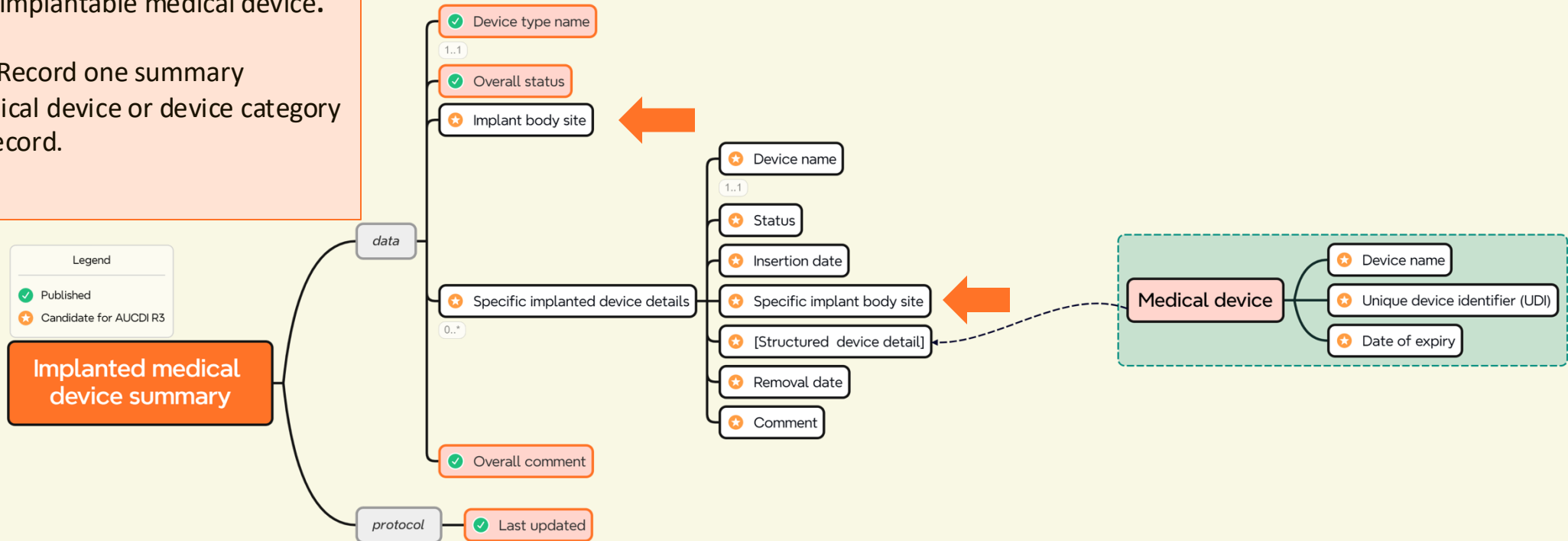


Update: Implanted medical device summary

Concept description: A summary or overview detailing the history and context of use for a specified type of implantable medical device, including details about specific implantation episodes.

Purpose: To record a summary or overview detailing the history and context of use for a specified type of implantable medical device.

Representation: Record one summary instance per medical device or device category within a health record.



Any questions



From Aug& Sept CDG: Results of community pitches for AUCDI R3

Status	Plan	Pitch	CDG Requirements
Accepted	Update	Blood pressure	Body position ✓
Accepted	Update (with changes)	Heart rhythm	Heart rhythm (value set: regular/irregular) ✓
Accepted	Update	Adverse reaction risk summary	Verification status Criticality Date/Time onset of last reaction Specific substance Onset of reaction Initial exposure Clinical management description ✓
Accepted	New	Head circumference	Head circumference Date of measurement ✓
Accepted	New	Vaping summary	Overall status ✓
Accepted	Update + New	Device	Unique Device Identifier (UDI) Body site Date of implantation Date of revision ✓



AUCDI R3

Exploring
“Functional status”



“Functional Status”

Typically categorised by **WHAT** we are measuring
& **HOW** we are measuring that function





HOW do we measure Functional Status?

How do we measure functional status?

Kessler Psychological

CHAP

GP-COG

Distress Scale (K10)

Braden Scale – Pressure Ulcers

TUG*

Falls – past 12 months

HEEADSS Falls Risk (FRAT)

Falls Efficacy scale – International (FES-I)

Mini-Cog

Four Stage Balance Test

Grip Strength Single Leg Stance

Mini-mental state examination

Step Test

Abbey Pain Scale

Barthel Index

Timed up and go

RUIS, RFIS

Hospitalisation (Single item)

Depression, Anxiety and Stress Scale (DASS21)

SF-36

2- minute walk test

Four Stage Balance Test

Gugging Swallowing Questionnaire

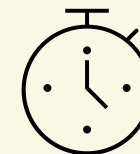
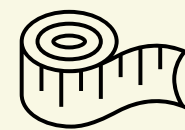
Kessler Psychological

Integrated Assessment Tool (IAT)

Distress Scale (K5)

De Moreton Mobility Index (DEMMI)

Berg Balance Test





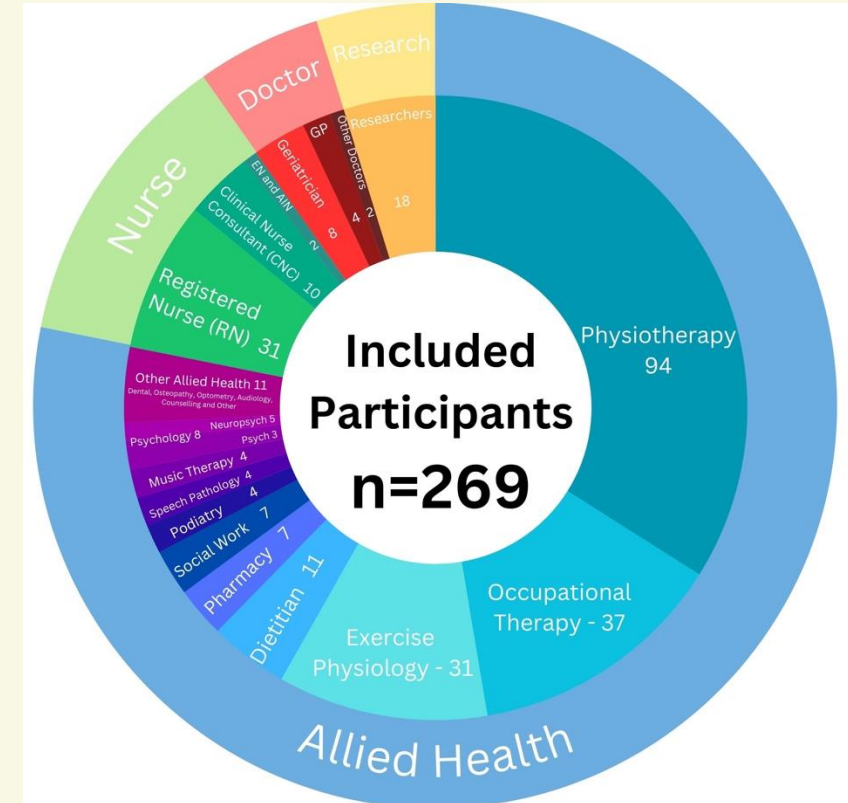
GEM-OMATIC Project

Why did we do a project on Data Standards?

- Inefficiencies due to repetition and redundancy in data collection
“Duplication of items across tools” – Physiotherapist
- Increased assessment burden
“it can mean the patient answers the same question several times” - Registered Nurse
- Limited collaboration and data sharing
“lack of integration and information sharing between organisations” – Nurse

Project Methodology

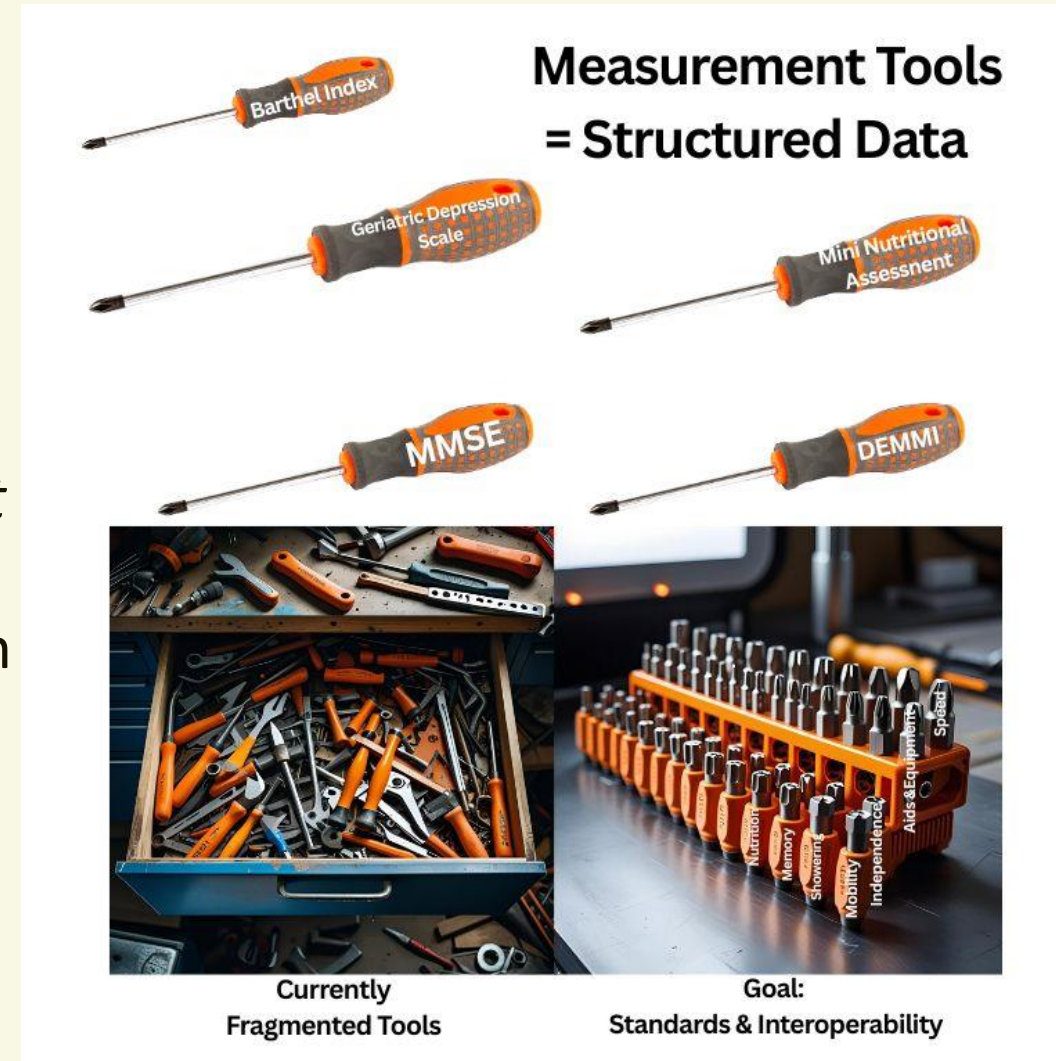
- Paper based research
 - mapping Measurement Tools mandated and recommended in Australian context
 - mapping areas of duplication
- Survey
 - 269 clinicians
 - 24 disciplines





Why focus on Measurement Tools?

- Data is collected in a standardised way and provides a common language for assessment and communication
 - “measurement tools give us a short-hand to communicate” – Geriatrician*
- Clinicians already use them in practice
 - *66% of survey participants use measurement tools frequently*
- Comprehensive assessment of older adults often require suites of tools with duplication of data items among them
 - *“Batteries that combine multiple items provide the best clinical markers”*

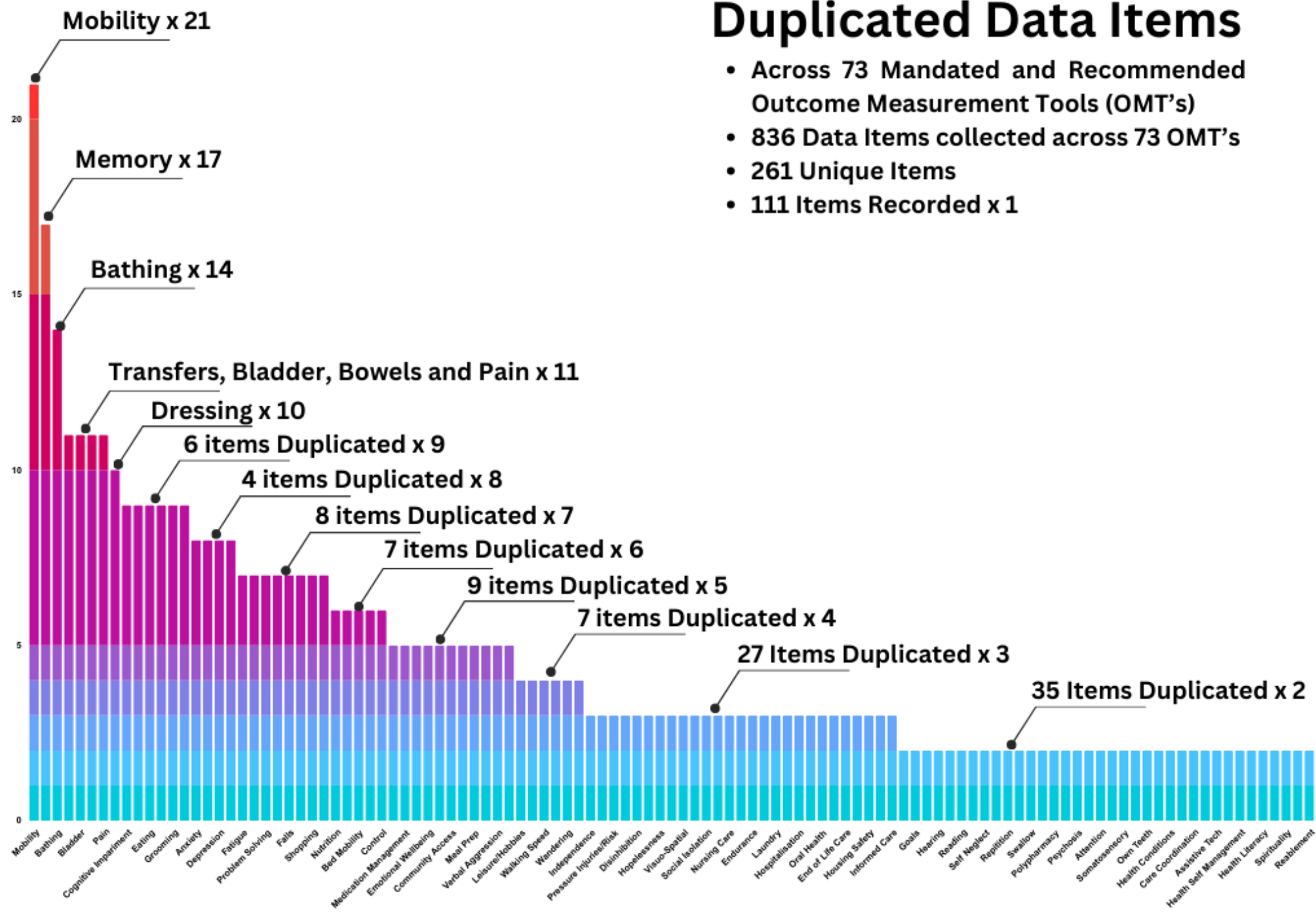


Results:
Desktop
Research

Mapping
Duplication
Across
Mandated and
Recommended
Measurement
Tools

Duplicated Data Items

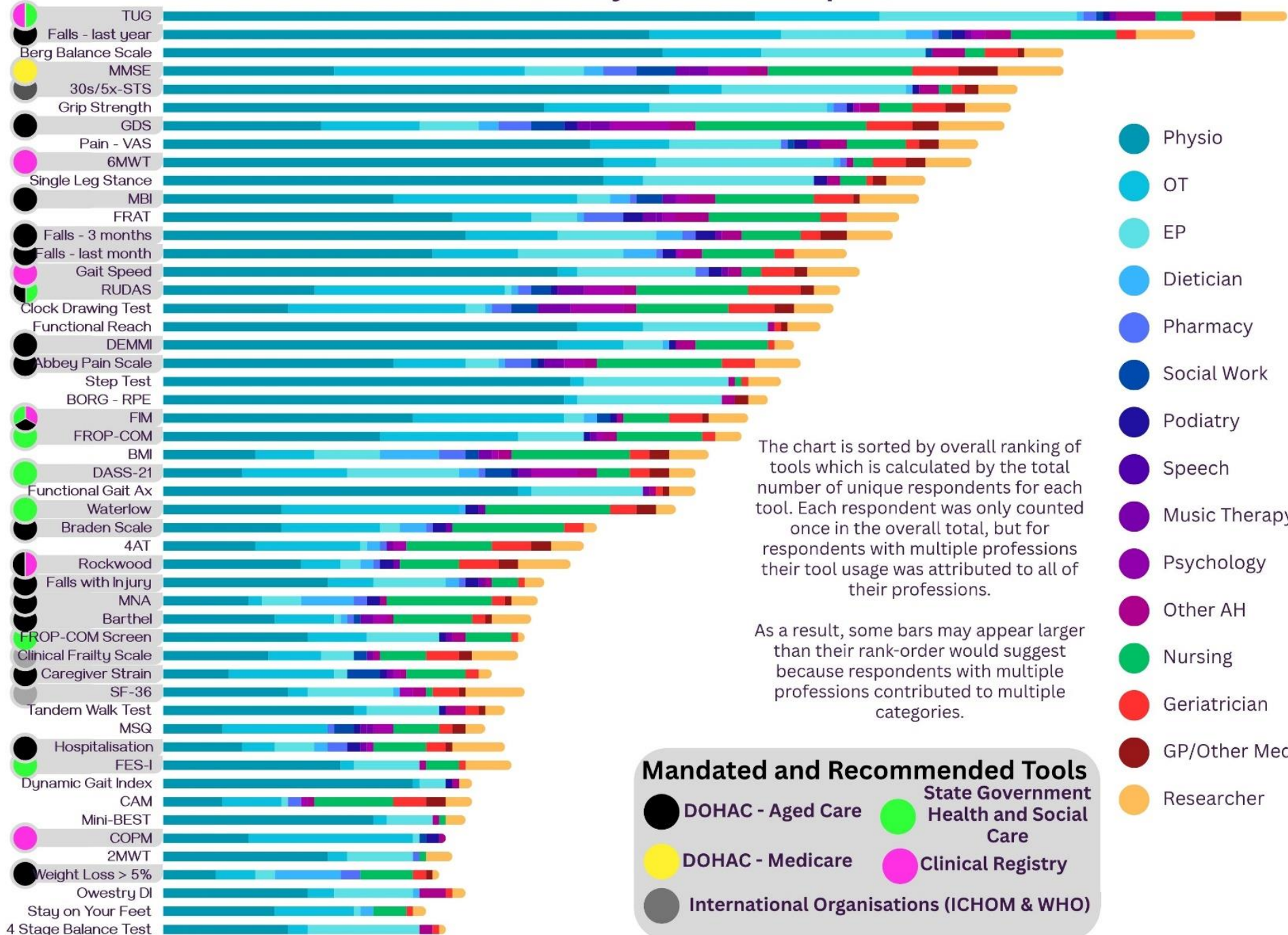
- Across 73 Mandated and Recommended Outcome Measurement Tools (OMT's)
- 836 Data Items collected across 73 OMT's
- 261 Unique Items
- 111 Items Recorded x 1



Results:
Surveys

Most Used
Measurement
Tools among
survey participants

Most Commonly Used Tools (Top 50)





HOW do we model Functional Status?

Assessing Function – what is it?

Assessing independence to
perform an activity

Assessing body function

Assessing independence to
perform an activity

THE BARTHEL INDEX

Patient Name: _____

Rater Name: _____

Date: _____

Activity	Score
----------	-------

FEEDING

0 = unable
5 = needs help cutting, spreading butter, etc., or requires modified diet
10 = independent

BATHING

0 = dependent
5 = independent (or in shower)

GROOMING

0 = needs to help with personal care
5 = independent face/hair/teeth/shaving (implements provided)

DRESSING

0 = dependent
5 = needs help but can do about half-undressed
10 = independent (including buttons, zips, laces, etc.)

BOWELS

0 = incontinent (or needs to be given enemas)
5 = occasional accident
10 = continent

BLADDER

0 = incontinent, or catheterized and unable to manage alone
5 = occasional accident
10 = continent

TOILET USE

0 = dependent
5 = needs some help, but can do something alone
10 = independent (on and off, dressing, wiping)

TRANSFERS (BED TO CHAIR AND BACK)

0 = unable, no sitting balance
5 = major help (one or two people, physical), can sit
10 = minor help (verbal or physical)
15 = independent

MOBILITY (ON LEVEL SURFACES)

0 = immobile or < 50 yards
5 = wheelchair independent, including corners, > 50 yards
10 = walks with help of one person (verbal or physical) > 50 yards
15 = independent (but may use any aid; for example, stick) > 50 yards

STAIRS

0 = unable
5 = needs help (verbal, physical, carrying aid)
10 = independent

TOTAL (0–100): _____



'Functional status' – its really complex!

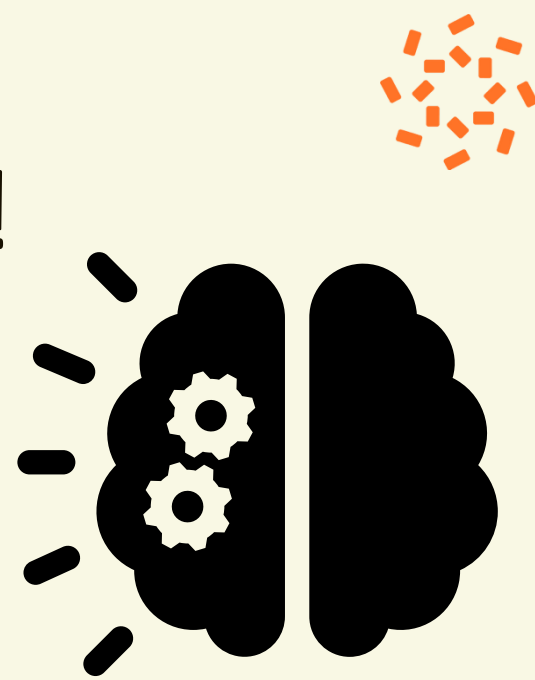
In clinical practice: how can we record this information?

Deconstructing clinical practice into concepts:

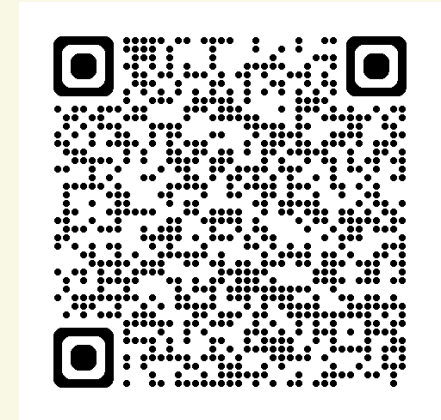
1. Level of independence in performing an activity

- *Capacity*
- *Difficulty*
- *What assistive technologies or human assistance does the individual need?*

2. Impairment - how does disability impact the individual independence?



Research & explore : Design process of the clinical concept



AUCDI Design Principles

1. International Classification of Functioning, Disability and Health:

1. Body function – which measures level of impairment
2. Activities & Participation – measured in performance and capacity

Body function:

***Body functions** are the physiological functions of body systems (including psychological functions).*

***Impairments** are problems in body function or structure as a significant deviation or loss*

Activities and participation:

Activity is the execution of a task or action by an individual. Participation is involvement in a life situation.

***Activity limitations** are difficulties an individual may have in executing activities.*

***Participation restrictions** are problems an individual may experience in involvement in life situations.*

2. Functional Independence Measure (FIM): level of independence

- **No helper**
 - Complete Independence (Timely, Safety)
 - Modified Independence (Device)
- **Helper: Modified dependence**
 - Supervision (Subject = 100%)
 - Minimal Assistance (Subject = 75% or more)
 - Moderate Assistance (Subject = 50% or more)
- **Helper: Complete dependence**
 - Maximal Assistance (Subject = 25% or more)
 - Total Assistance or not Testable (Subject less than 25%)



Modelling assumption:

Level of independence in performing the activity (performance & capacity) and body functional impairment (or level of impairment) are separate clinical concepts.

So, let's focus on Activities first!!



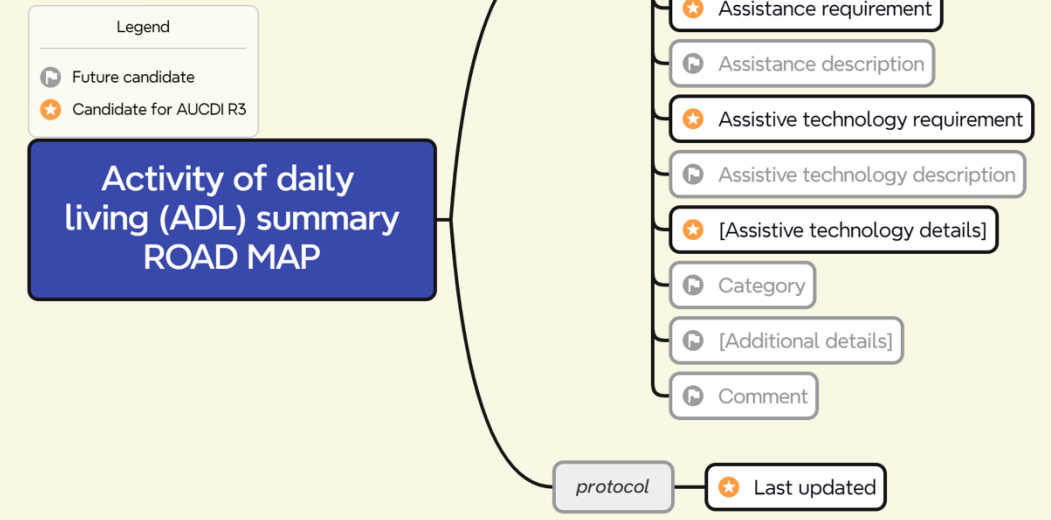
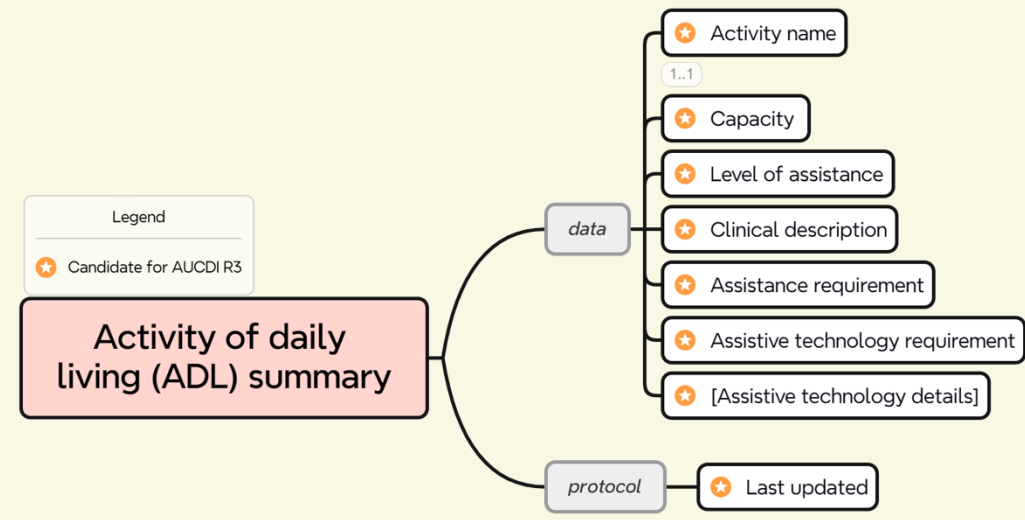
Aspects of functional status – examples

Activity & Participation	Body Impairment	Problem/Diagnosis
Regulating urination	Urinary continence	Stress incontinence
Walking	Mobility of a single joint	Knee osteoarthritis
Doing housework	Stability of shoulder	Dislocation of shoulder
Informal relationships with friends	Hearing functions	Age-related hearing loss Tinnitus
Drinking	Swallowing	Stroke Cleft palate
Driving Shopping	Short-term memory	Dementia



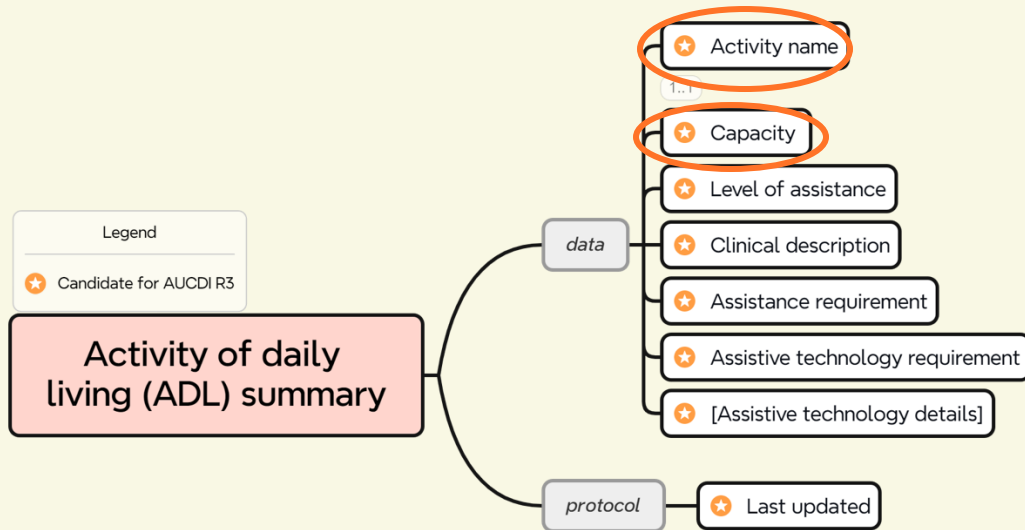
New data group: Activity of daily living (ADL) summary

- **Concept description:** Summary information about an individual's capacity to independently perform everyday tasks or actions, including participation in daily life situations.
- **Purpose:** To record summary information about an individual's capacity to independently perform a single activity of daily living (ADL), including participation in life situations.
- **Representation:** Record one instance of this data group within a health record; any changes or updates over time are captured as revisions to the original entry rather than creating a new entry.





Activity of daily living (ADL) summary



- **Activity name:** The name of a specific task or action by an individual, including participation or involvement in a life situation.
 - *For example: dressing, walking, shopping, doing housework, sports, socialising, pre-school, or full-time employment.*
- **Capacity:** Classification of the individual's level of ability to perform the specified activity.

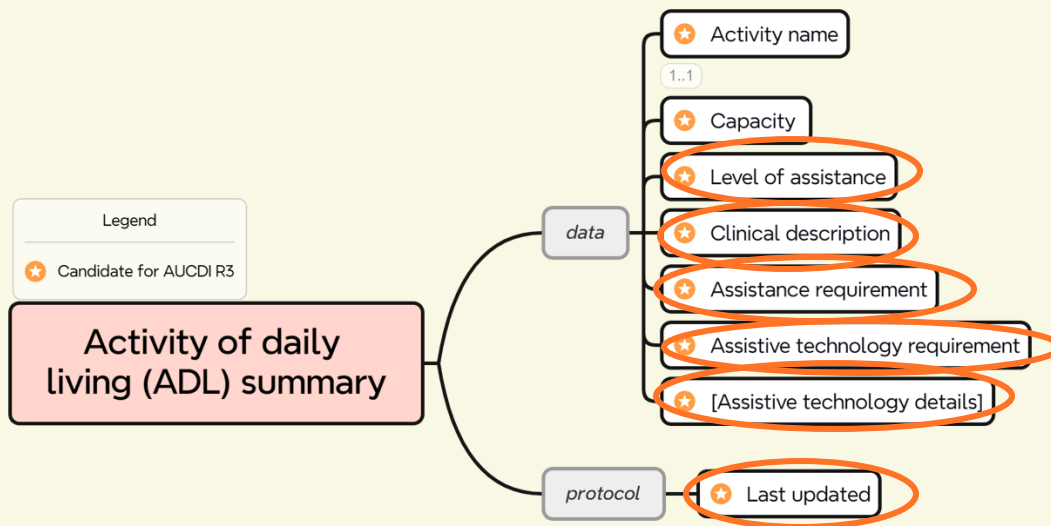
Value set:

 - **Complete independence**
 - **Modified independence**
 - **Supervision**
 - **Minimal assistance**
 - **Moderate assistance**
 - **Maximal assistance**
 - **Complete dependence**
 - **Not applicable**
 - **Unknown**



Activity of daily living (ADL) summary

Questions?



Level of assistance: Identification of the number of people required to assist the individual with the activity, including set-up, physical and verbal assistance.

Value set

- **None** [No assistance by a person is required.]
- **1 helper** [Assistance by one helper is required.]
- **More than 1 helper** [Assistance by more than one helper is required.]

Clinical description: Narrative description about the individual's ability to perform the specified activity. *For example: "Moves around in a wheelchair, can walk a couple of steps only."*

• **Assistance requirement:** Identification of the human assistance required to enable an individual to perform activities of daily living. *For example: supervision, physical assistance, or verbal prompting.*

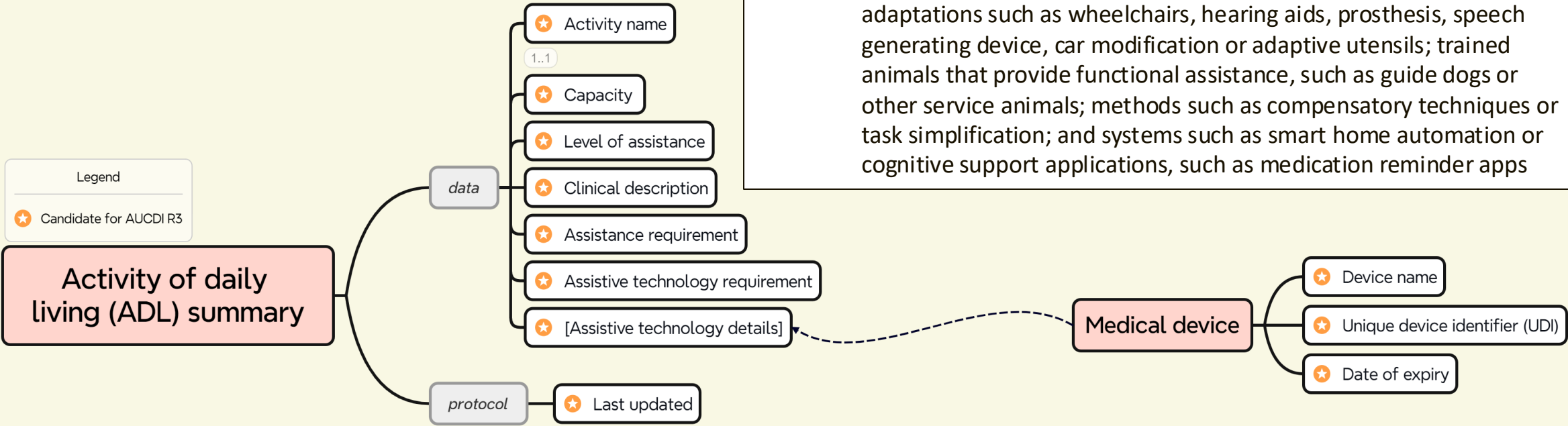
Assistive technology requirement: Identification of a tool, method, or system used to enable an individual to perform an activity of daily living.

- **Note:** Assistive technology includes devices, equipment, or adaptations such as wheelchairs, hearing aids, prosthesis, speech generating device, car modification or adaptive utensils; trained animals that provide functional assistance, such as guide dogs or other service animals; methods such as compensatory techniques or task simplification; and systems such as smart home automation or cognitive support applications, such as medication reminder apps

• **[Assistive technology details]:** Structured details about tool, method, or system used to enable an individual to perform an activity of daily living

Last updated: The date/time this ADL summary was last updated.

Broader ecosystem: Activity of daily living (ADL) summary & medical device

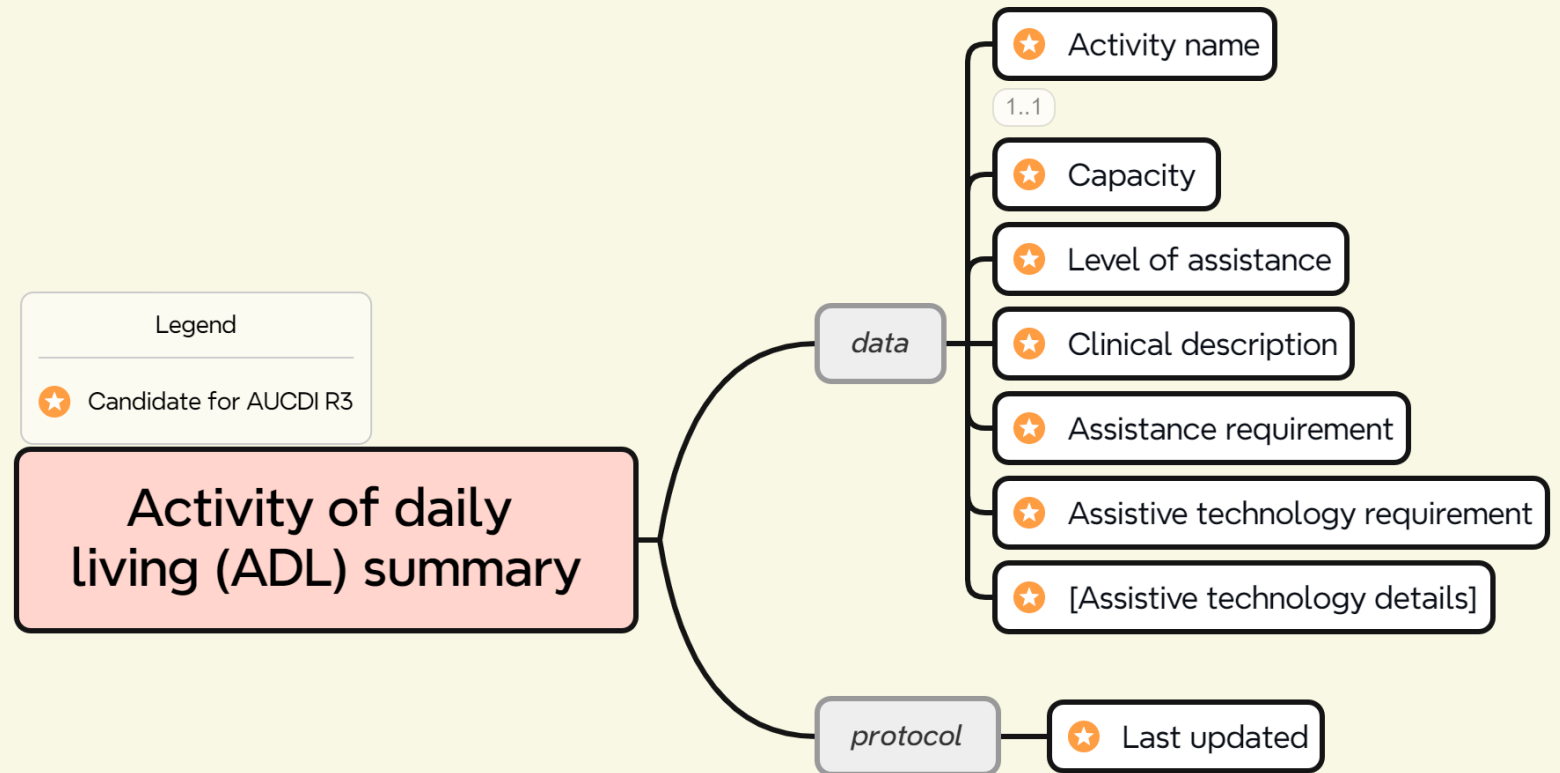


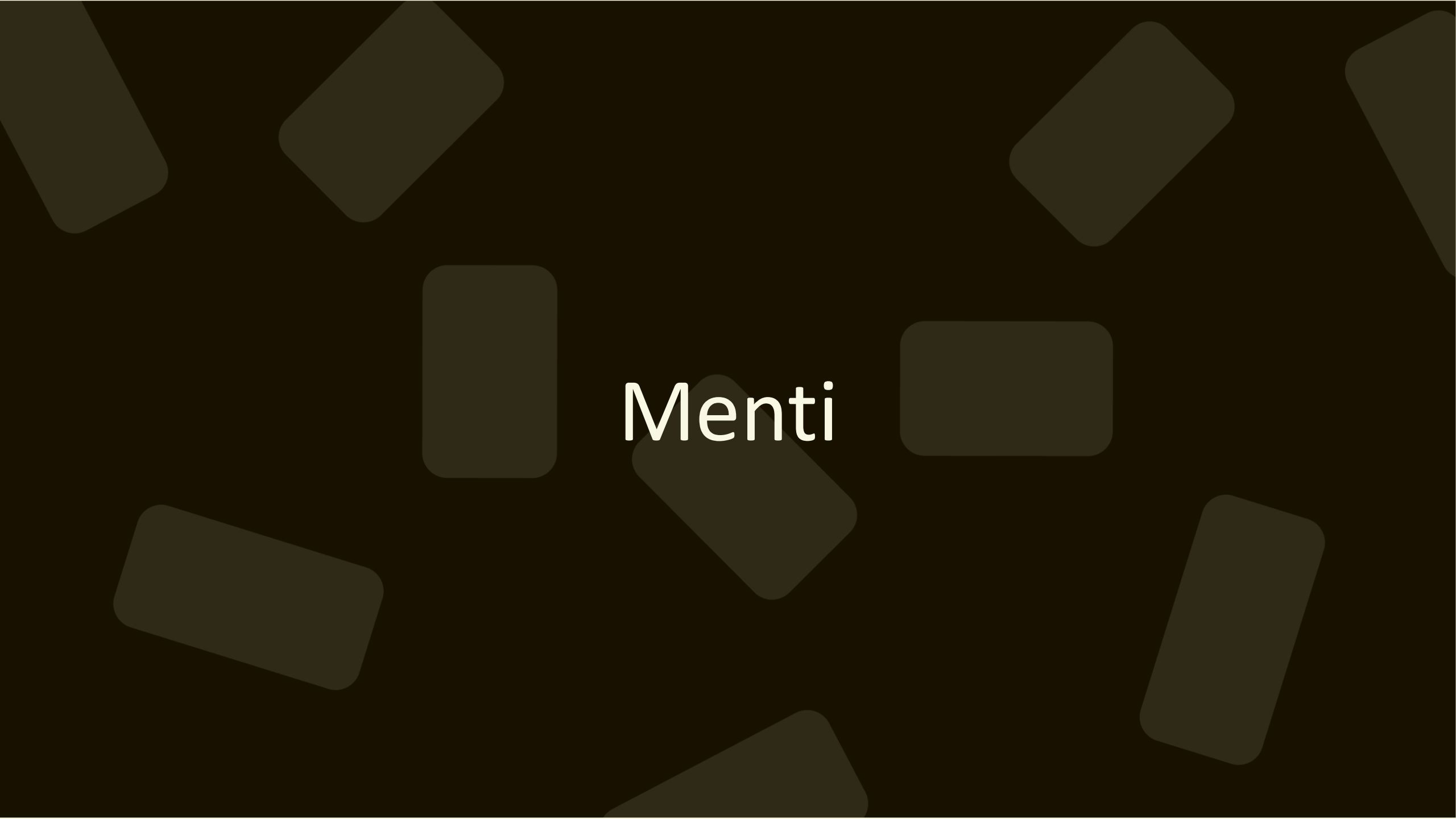
Proposal #1

New data group: Activity of daily living (ADL) summary



- **Concept description:** Summary information about an individual's capacity to independently perform everyday tasks or actions, including participation in daily life situations.
- **Purpose:** To record summary information about an individual's capacity to independently perform a single activity of daily living (ADL), including participation in life situations.
- **Representation:** Record one instance of this data group within a health record; any changes or updates over time are captured as revisions to the original entry rather than creating a new entry.





Menti



Next steps

- Next CDG F2F – Canberra 12 November 2025 tickets available now
 - Encounter record data MVP
 - GP CCMP MVP update
- **Save the Date!**
Sparked is coming to Hobart in February 2026!
 - Community Co-Design Workshops 25 & 26 February 2026
 - CDG 25 February
 - Evening event 24 February (TBC)
 - More information will be available on the Sparked website soon



Sparked Community Co-Design Workshops

Join the Sparked Community Co-Design Workshops in November to dive into Encounter Records, GP Plans, AU Patient Summary, and AU Core R3.

 12 & 13 November 2025

 Canberra

 Limited tickets available



Scan the QR code to secure your ticket before they run out!





Thank you!



Bibliography & references

- International Classification of Functioning, Disability, and Health : ICF. Geneva :World Health Organization. Available from: <https://icd.who.int/dev11/l-icf/en>
- No authorship indicated. (1979). Functional Independence Measure (FIM) [Database record]. APA PsycTests.<https://doi.org/10.1037/t02229-000>
- Mahoney FI, Barthel D. "Functional evaluation: the Barthel Index." Maryland State Med Journal 1965;14:56-61.
- <https://www.sralab.org/sites/default/files/2017-07/barthel.pdf> accessed 7th October 2025
- Australian Health Services Research Institute; University of Wollongong: Palliative Care Outcomes Collaboration (PCOC) :Original reference for AKPS:Abernethy, A. P., Shelby-James, T., Fazekas, B. S., Woods, D. Currow, D. C. (2005). The Australia-modified Karnofsky Performance Status (AKPS) Scale: A
- https://cogsclub.org.uk/professionals/files/gpcog_scale.pdf original reference: Brodaty, H., et al, (2002) The GPCOG: a new screening test for dementia designed for general practice. Journal of the American Geriatrics Society, 50, 530 -