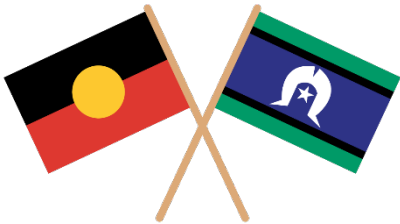


Measuring outcomes and comparative value in the NDIS

Dr Andy Goodall

Director Targeted Research and Strategic Evaluation



I would like to acknowledge the Traditional Owners and Custodians of the Country on which we meet today, the Gadigal people of the Eora Nation, and their continuing connection to land, sea, and community. I pay my respects to their Elders, past present and emerging.

I would like to extend that acknowledgement and respect to any First Nations peoples here today."

What I will talk about today



1. An overview of the NDIA's Research and Evaluation Branch.
2. How the NDIA measures outcomes for NDIS participants.
3. Developing new ways to analyse and report NDIS participant outcomes.
4. Development of a disability wellbeing index.
5. Working collaboratively on future NDIA research priorities.

The Research and Evaluation Branch

The Research and Evaluation Branch

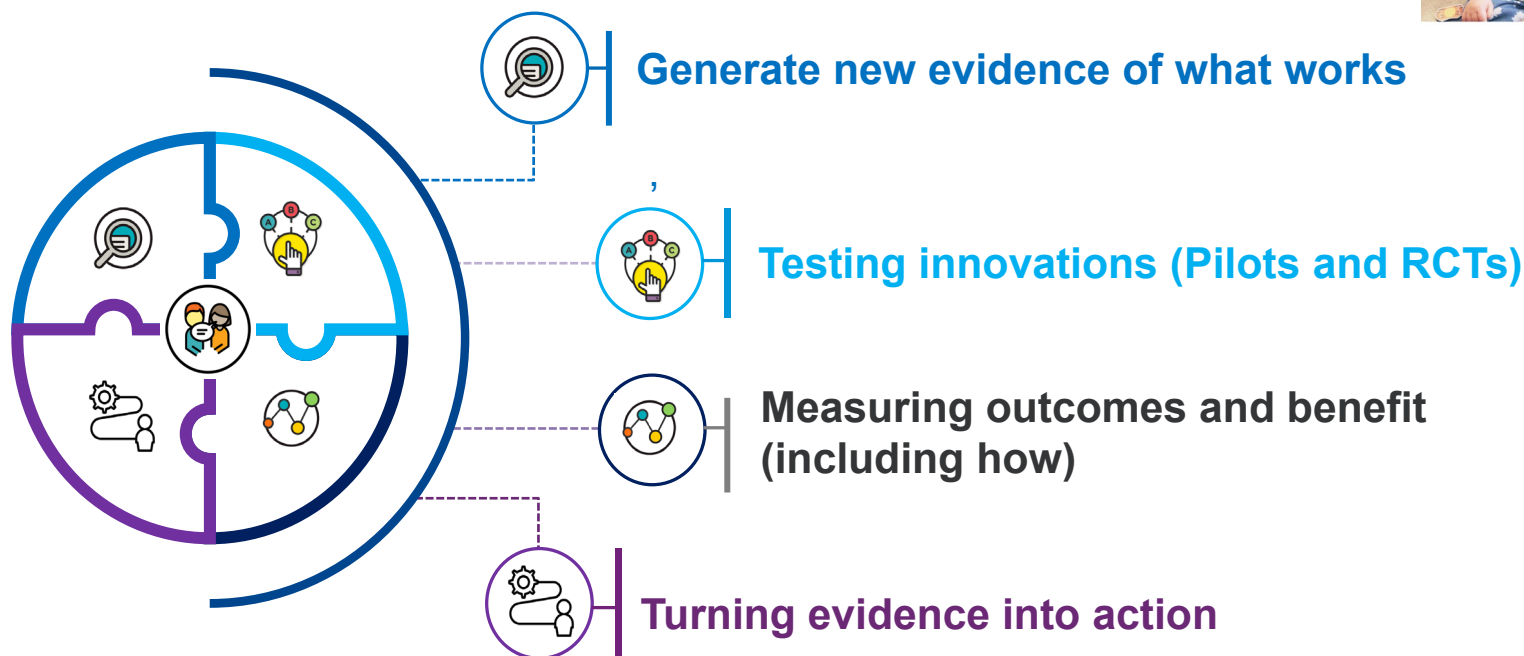
- Undertaking research and building an evidence base is contained within the NDIS Act 2013 and is integral to the insurance approach that underpins the NDIS (Insurance Principle 3).
- The Research & Evaluation Branch was established in 2019 with responsibility for ensuring that NDIA policies, practices and priorities are informed by trustworthy and robust evidence.
- Currently operating under a 5-year strategy.



ndis

NDIA Research and
Evaluation Strategy

2022-2027



The Research and Evaluation Strategy 2022-2027

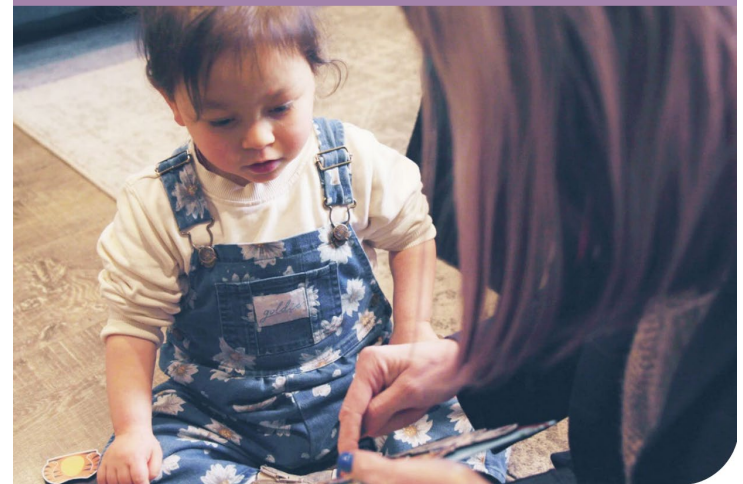
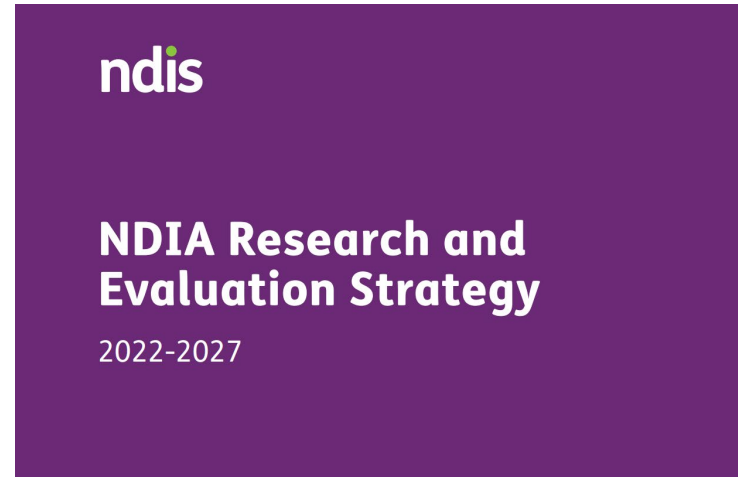


Four major streams of work

- 1) Information gathering for access and planning
- 2) Early Intervention and high volume cohorts
- 3) Home and living
- 4) Markets and employment

Available on our website:

[Research and Evaluation Strategy | NDIS](#)



Data analytics and outcome measurement

Use administrative data (NDIA and other government and external sources) to understand measure and monitor outcomes, benefits and costs of the NDIS on participant and Scheme outcomes.

Qualitative research

Collect and analyse non-numerical data (from participants, providers, service delivery staff) through in-depth interviews or focus groups to hear the unique stories, experiences and voices of people.

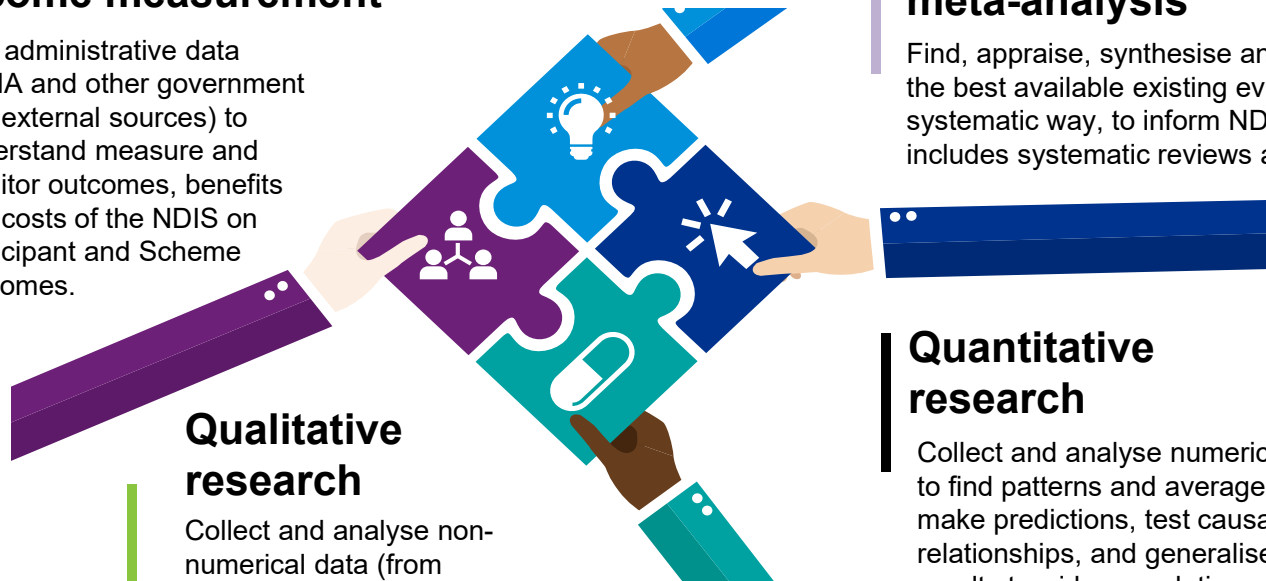
Synthesis and meta-analysis

Find, appraise, synthesise and communicate the best available existing evidence in a systematic way, to inform NDIA decisions. This includes systematic reviews and meta-analyses.

Quantitative research

Collect and analyse numerical data to find patterns and averages, make predictions, test causal relationships, and generalise results to wider populations.

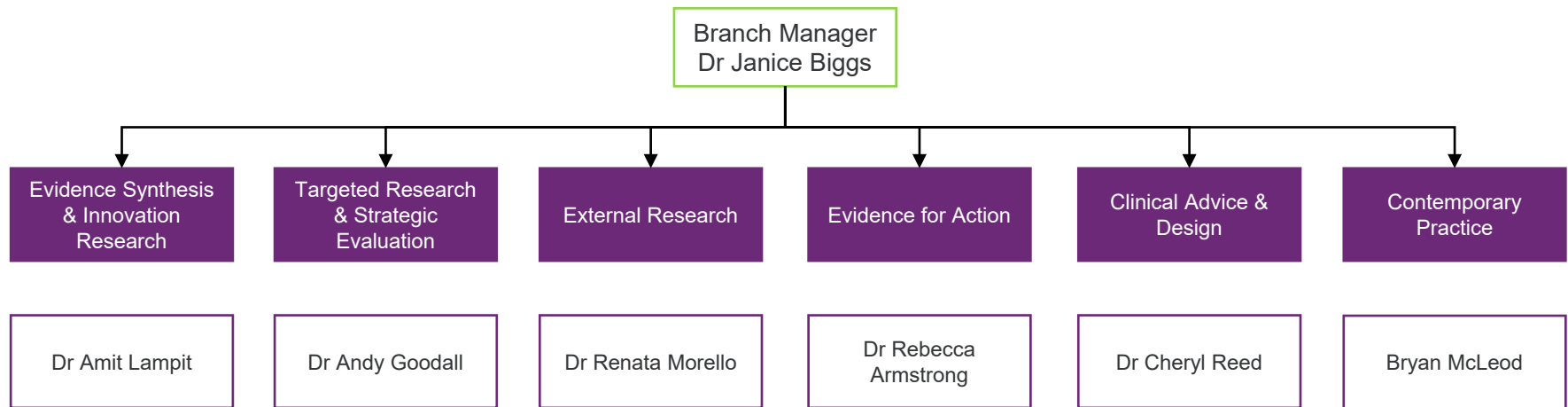
+ **capacity building** in research and evaluation methods & R&E governance across the Agency



Who we are



- ~ 27 FTE aligned to our main approaches



- Multidisciplinary mix of ex academic, public sector, commercial and clinical R&E experts.
- Currently working on 12 research and evaluation projects
- Partnering on 3 x tier 1 grants
- Involved in 17 external research projects (access to data, staff & NDIS participants)

Measuring NDIS participant outcomes

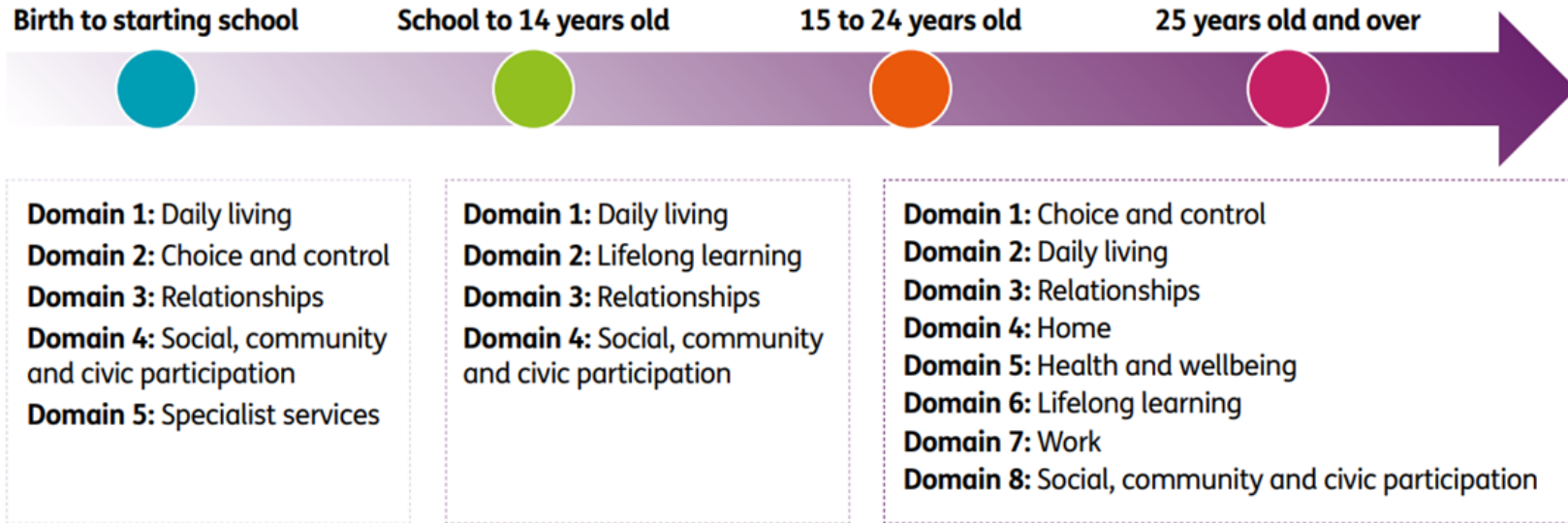
Outcome measurement in the NDIS



Since 2016, the NDIA has used a participant outcomes framework to take a long term view of the impacts of the NDIS on participants across **8 domains**.

The NDIA operationalises the outcomes framework through two surveys:

- 1) **A short form questionnaire** – administered to **all participants or their supporters** during the NDIS planning and plan review process (>30 indicators).
- 2) **A long form questionnaire** – administered annually to a **longitudinal sample** of participants (~50 indicators)



Outcome reporting



Participants aged 25 and over

Social and community participation



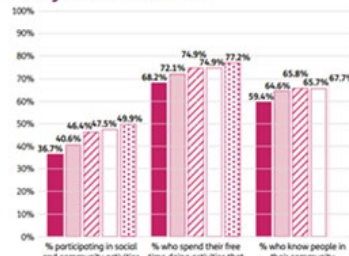
Social and community participation outcomes have improved over time across all cohorts.

Actively involved in a community, cultural or religious group in the last 12 months – for participants in the Scheme for four years, the percentage increased by 13.2 percentage points between baseline and fourth review.

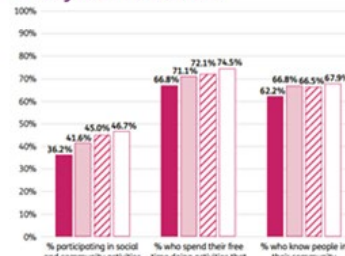
Spending free time on activities that interest them – a 9.0 percentage-point increase between baseline and fourth review for participants in the Scheme for four years.

Knowing people in their community – For participants who have been in the Scheme for four years, the percentage increased by 8.3 percentage points between baseline and fourth review.

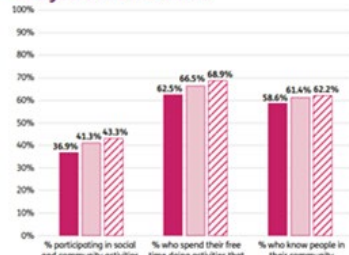
Four years in the Scheme



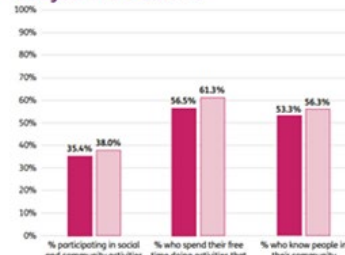
Three years in the Scheme



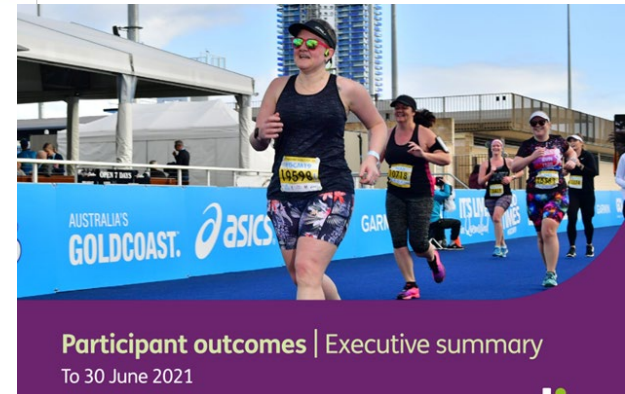
Two years in the Scheme



One year in the Scheme



■ Baseline ■ Review 1 ■ Review 2 ■ Review 3 ■ Review 4



Participant outcomes | Executive summary
To 30 June 2021

<https://data.ndis.gov.au/reports-and-analyses/outcomes-and-goals>

- A strength of the outcomes framework is that it is comprehensive across areas that are important for people with disability and government.
- ...but the complexity is a limitation for evaluating NDIS effectiveness and making investment decisions.



How can we reduce this complexity?

Measuring outcomes for participants with a psychosocial disability using latent transition analysis and growth mixture modelling

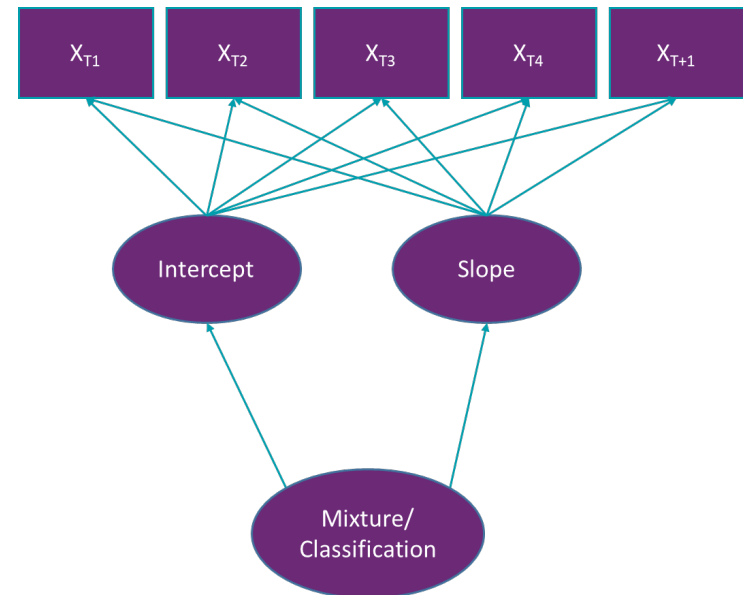
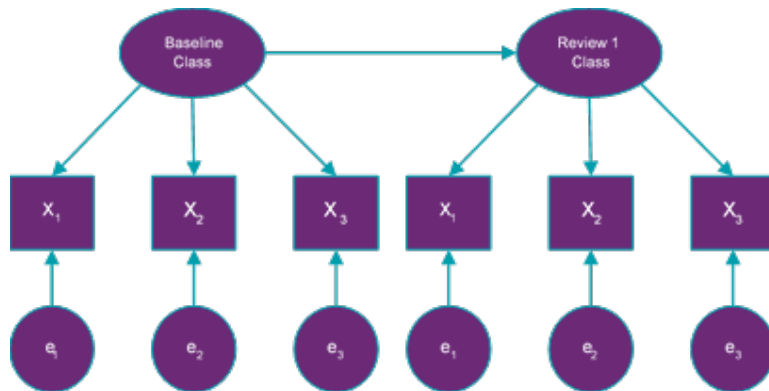
Dr Geoff Hammond



LTA and GMM approaches

- **LTA** identifies distinct (but unobservable) classes of individuals based on categorical or ordinal data about them (i.e. X_n) and then characterises transitions between classes over time.
- In our case, classes are based on the likelihood of participants giving certain responses to items in the NDIS short form outcomes questionnaire.

- **GMM** identifies cohorts of participants based on similarities in their longitudinal trajectories on a measure.
- In our case, trajectories are identified based on repeat WHODAS scores.



Example LTA solution (15-24 year age group)



Domain	Question	Response	Class 1 (29.5%)	Class 2 (25.0%)	Class 3 (21.0%)	Class 4 (24.4%)
Choice & Control	Who makes most decisions in your life?	I do	0.92	0.27^	0.04^	0.79
Choice & Control	Who makes most decisions in your life?	My family	0.06	0.33*	0.86*	0.14
Choice & Control	Have you ever participated in a self-advocacy group meeting, conference, or event?	Yes	0.07	0.02	0.04	0.12
Health & Wellbeing	Hospitalisation in the last 12 months?	Three or more	0.13	0.40*	0.11	0.13
Health & Wellbeing	Do you feel safe getting out and about in your community?	Yes	0.69	0.91*	0.81	0.43
Lifelong Learning	Do you currently participate in education, training or skill development?	Yes	0.77	0.87	0.60	0.68
Relationships	Are you happy with how often you see your family?	Yes	0.60	0.25^	0.73	0.67
Relationships	Are you happy with how often you see your family?	No, see them more	0.27	0.61*	0.26	0.26
Home	How do you feel in your home?	Very safe/Safe	0.69	0.30^	0.85	0.80
Home	How do you feel in your home?	Unsafe/ Very unsafe	0.09	0.37*	0.07	0.10
Social Community and Civic Participation	Do you spend time doing activities that interest you?	Yes	0.44	0.71*	0.31	0.19
Social Community and Civic Participation	Do you know people in your community?	Yes	0.93	0.71^	0.55^	0.01^
Social Community and Civic Participation	How often do you have a say in services provided to you?	All/Most of the time	0.58	0.12^	0.21^	0.63
Social Community and Civic Participation	How often do you have a say in services provided to you?	Some of the time	0.30	0.48	0.47	0.30

Most desirable

Class 1

Class 3

Class 2

Class 4

Least desirable

Class 1 are:

- Most likely to make decisions for themselves, know people in their community.
- Likely to participate in education and training.
- Likely to feel safe at home and in the community

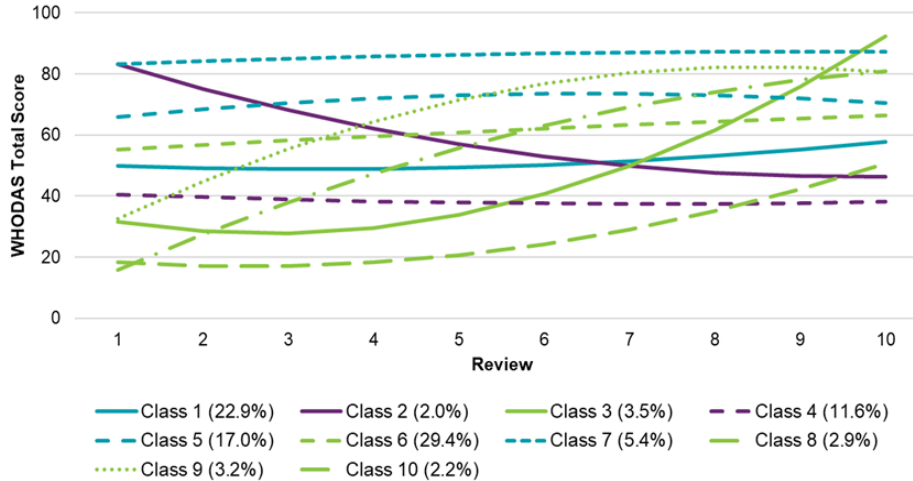
...but class ordering is subjective.

Which outcomes are **most important** to NDIS participants?

GMM trajectories are more objective

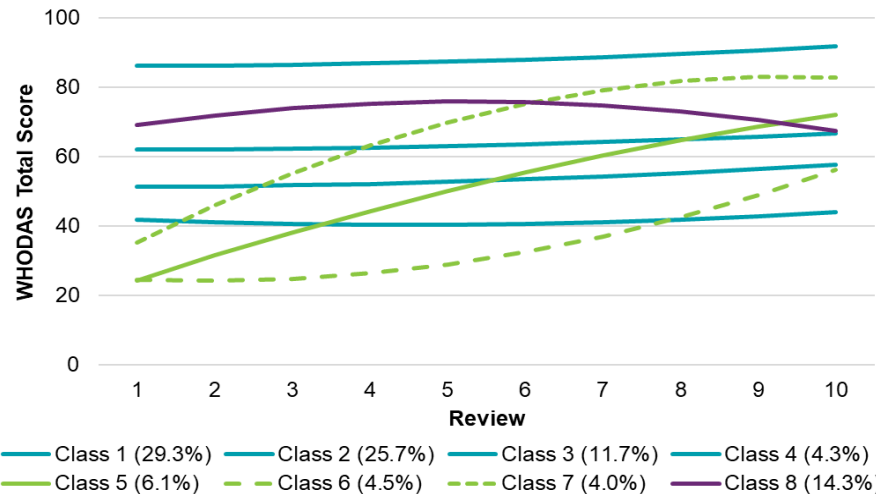


15 to 24 years



- Clearly some trajectories are better than others based on whether WHODAS scores decrease (i.e. function improves), increase (i.e. function deteriorates) or stay the same (i.e. function is maintained).

25 to 34 years

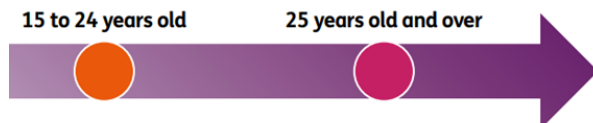


- WHODAS is also a widely used and validated measure of disability for people with a psychosocial disability (agnostic of assistive technology).

Optimal LTA & GMM solutions show greater life course heterogeneity than the NDIS outcomes framework conceptualises

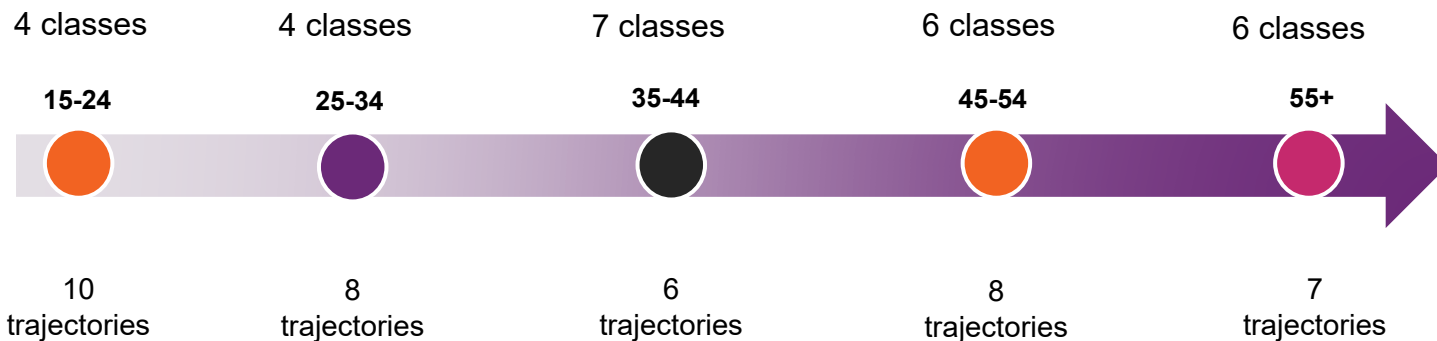


NDIS outcomes framework



- Domain 1: Choice and control
- Domain 2: Daily living
- Domain 3: Relationships
- Domain 4: Home
- Domain 5: Health and wellbeing
- Domain 6: Lifelong learning
- Domain 7: Work
- Domain 8: Social, community and civic participation

LTA



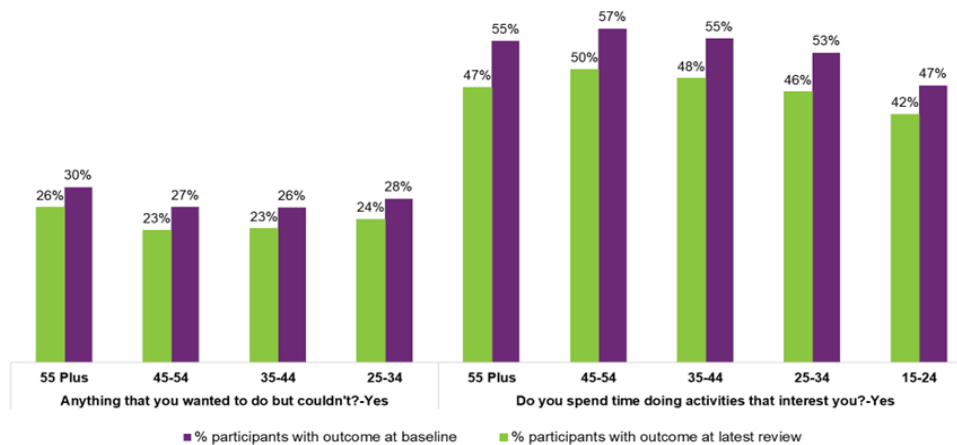
GMM

LTA and GMM improve the sensitivity and interoperability of outcome measurement



- A challenge with the NDIS outcome framework is that many items use binary scales and have low sensitivity to change (floor/ceiling effects).
- The NDIA reports longitudinal change in each individual indicator – typically we see a 5-8% change over time for participants with a PSD (generally backwards).
- But some outcomes improve and some deteriorate...so how do we know if the lives of NDIS participants are getting better overall?

Participants with a psychosocial disability (25+ years)



Short form outcomes questionnaire responses

	LTA	GMM
% move into a <u>more</u> favourable class/trajectory	5.0%	16.2%
% maintain class/trajectory	89.2%	52.2%
% move into a <u>less</u> favourable class/trajectory	5.8%	31.6%

GMM is attractive but different disability cohorts complete different assessment tools.

Can we predict trajectories to maximise the benefit of NDIS packages?



- The association between NDIS expenditure and the likelihood of attaining single outcomes typically range from 0 to +/-2% per \$1,000 per annum.
- Which outcomes are more important? Which funding mix maximises benefit?

ME of \$1,000 NDIS expenditure per annum on likelihood of class/trajectory transition (25+ years)

	Core	Capacity building
LTA		
Improvement	0%	-7.1%
Deterioration	-0.3%	+3.6%
GMM		
Improvement	+1.6%	-0.5%
Deterioration	+5.5%	+3.8%

- Clinical diagnosis, remoteness and age are all associated with the likelihood of improvement or deterioration.
- Interactions with expenditure? Life-stage specific NDIS packages?

Development of a disability wellbeing index



Centre for Health Economics



A/Professor Gang Chen



Professor Dennis Petrie



Professor Anthony Harris



THE UNIVERSITY OF
SYDNEY

Centre for Disability Research and Policy

Professor Emerita Gwynnyth Llewellyn
Dr Kym Bulkeley



Caring Futures Institute


Professor Julie Ratcliffe

Why does the NDIS need a wellbeing index?



NDIS participant costs in 2021-22 were \$29.2 bn and projected to be \$59.3 bn in 2029-30.

The current NDIS outcomes framework does not support equitable assessment of NDIS impacts and resource allocation:

- It **is complex** - >30 outcomes in the adult questionnaires
- The items have **different scales** and **cannot be aggregated into reliable and valid measures**
- Many items exhibit **floor or ceiling effects** A diagram showing two horizontal bars. The top bar is shorter than the bottom bar, representing a ceiling effect where a measure cannot reach higher values. The bottom bar is longer than the top bar, representing a floor effect where a measure cannot reach lower values.
- Some 'outcomes' are **not actually outcomes** that are realistic for NDIS participants (e.g. need for the NDIS in various aspects of function)
- All items and domains are **weighted equally** for all participants – invalid assumption.



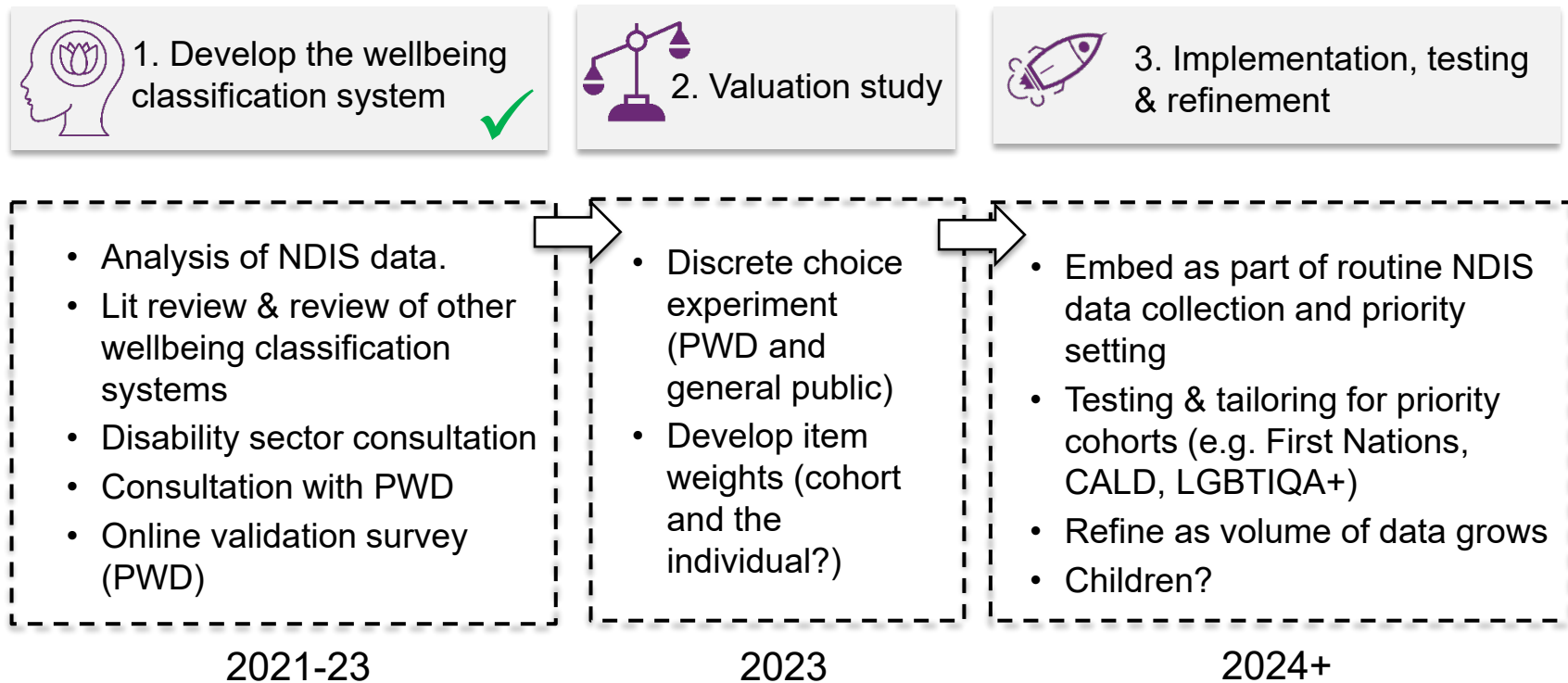
In 2017, a paper to the NDIA Executive recommended developing a validated summary wellbeing measure and weighting to assist the NDIA assess the comparative value for money of supportive technologies and services.

Project overview



Aim: Develop a composite preference-weighted index of wellbeing for people with disability to support priority setting in the NDIS and disability sector (15-24 years and 25+ years).

Must be capable of quantifying the holistic change in a person with disability's life from improved access to supports in a way that is comparable across the range of available supports and disability cohorts.



Principles for wellbeing domains and items

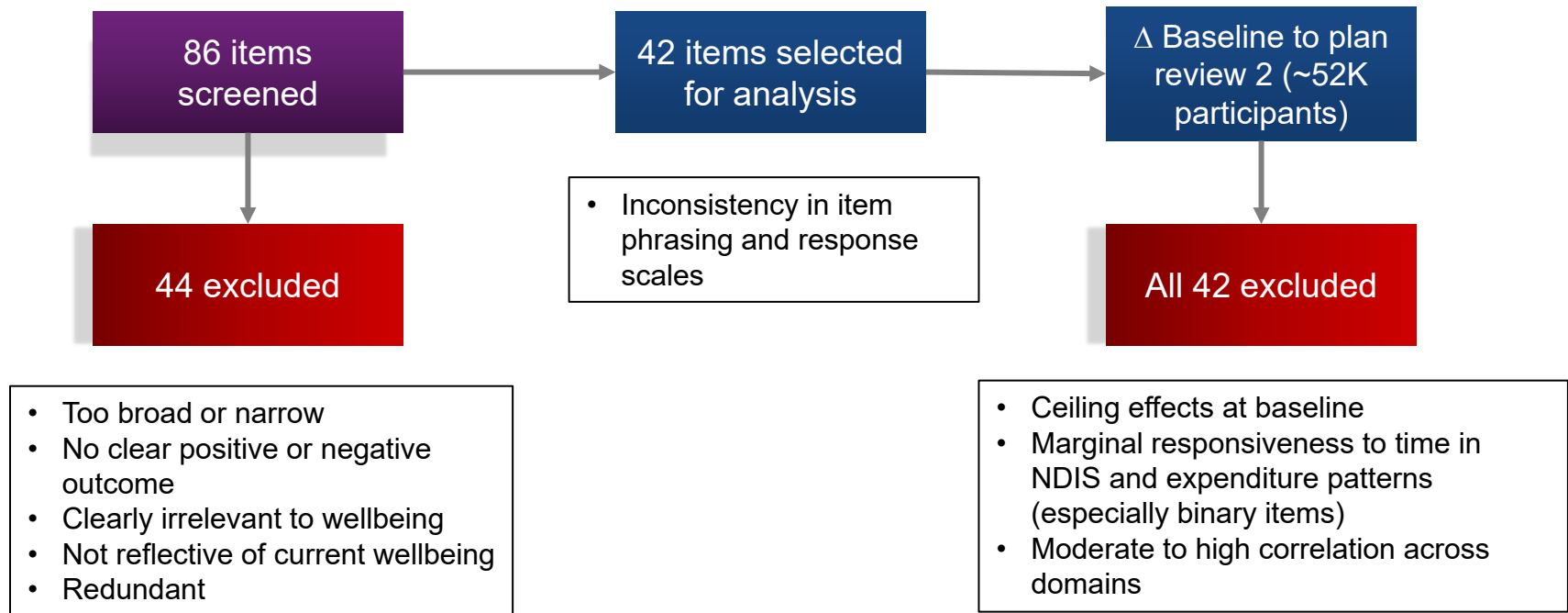


1. Reflective of outcomes that are important to people with different types of disabilities, different levels of functional capacity, and reside in different regions across Australia.
2. Representative of domains that are public policy relevant (i.e. Australia's Disability Strategy and NDIS Outcomes Framework).
3. Easy to understand.
4. Brief and practical to collect and report over time.
5. Psychometrically valid and reliable.
6. Responsive to wellbeing differences between individuals and the services and supports they receive.

Step 1: Identify existing NDIS outcomes framework items that are appropriate for the DWI



Rationale: Items are already collected from all participants (approximately annually) and would allow retrospective evaluation.



In practice, the NDIS outcome questionnaires are unlikely to be able to detect meaningful differences in important aspects of NDIS participants' wellbeing.

Step 2: Review other wellbeing classification systems



Rationale: To identify potentially relevant domains, preliminary items and response options to refine with people with disability and stakeholders.

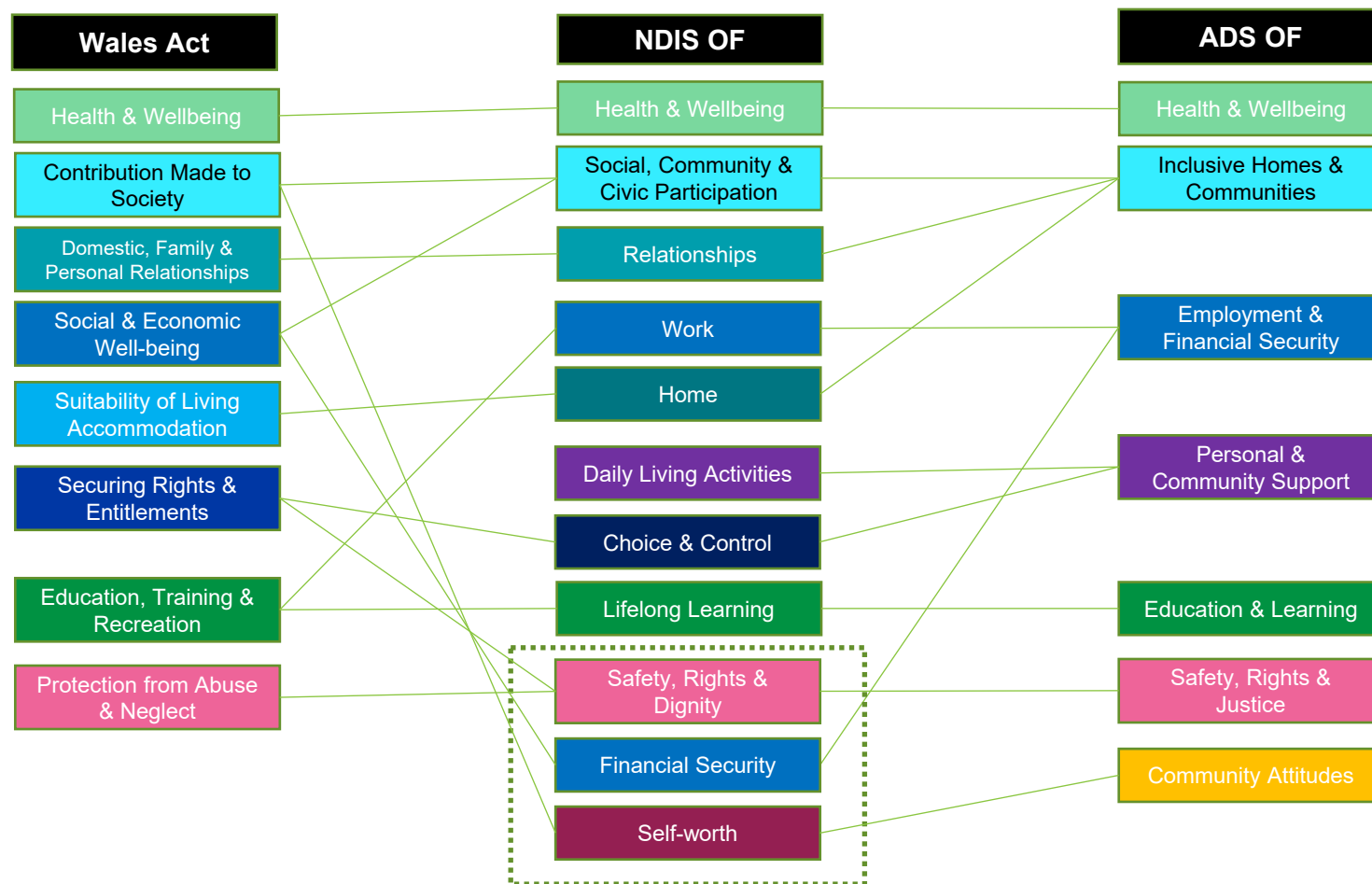
The starting point was **Australia's Disability Strategy** and the **NDIS Outcomes Framework** (considerable overlap)



- NZ Disability Strategy
- Social Services and Well-being Act (Wales)
- Canadian Index of Wellbeing
- Irish Outcomes for Disability Services
- US National Core Indicators

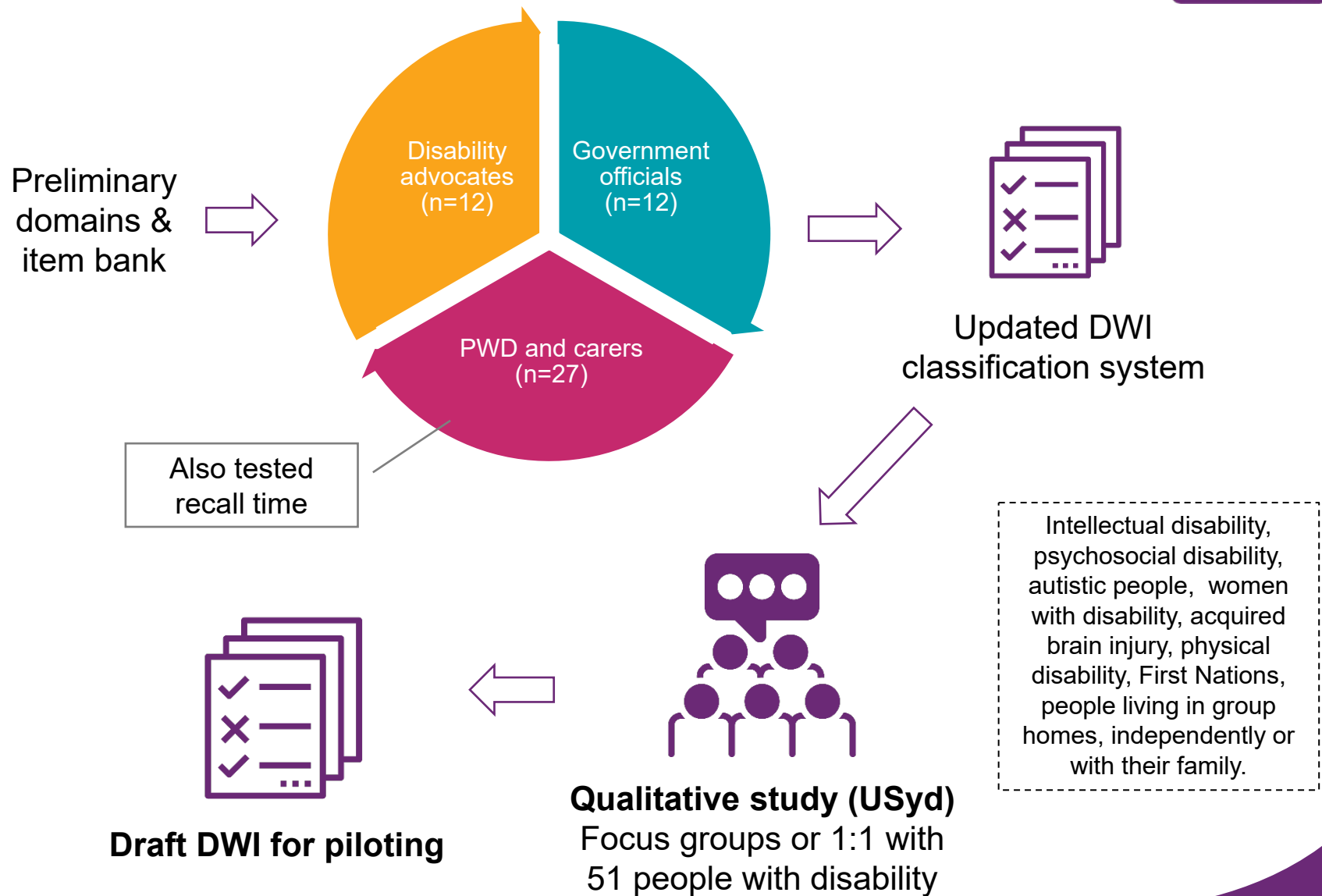
- Adult Social Care Outcomes Toolkit
- EQ-HWB-S
- SF-6Dv2
- PROMIS-Preference (PROPr)
- PWI-ID
- QLI
- Brunnsvikien Brief Quality of life scale
- EUROHIS-QoL-8

Example domain mapping

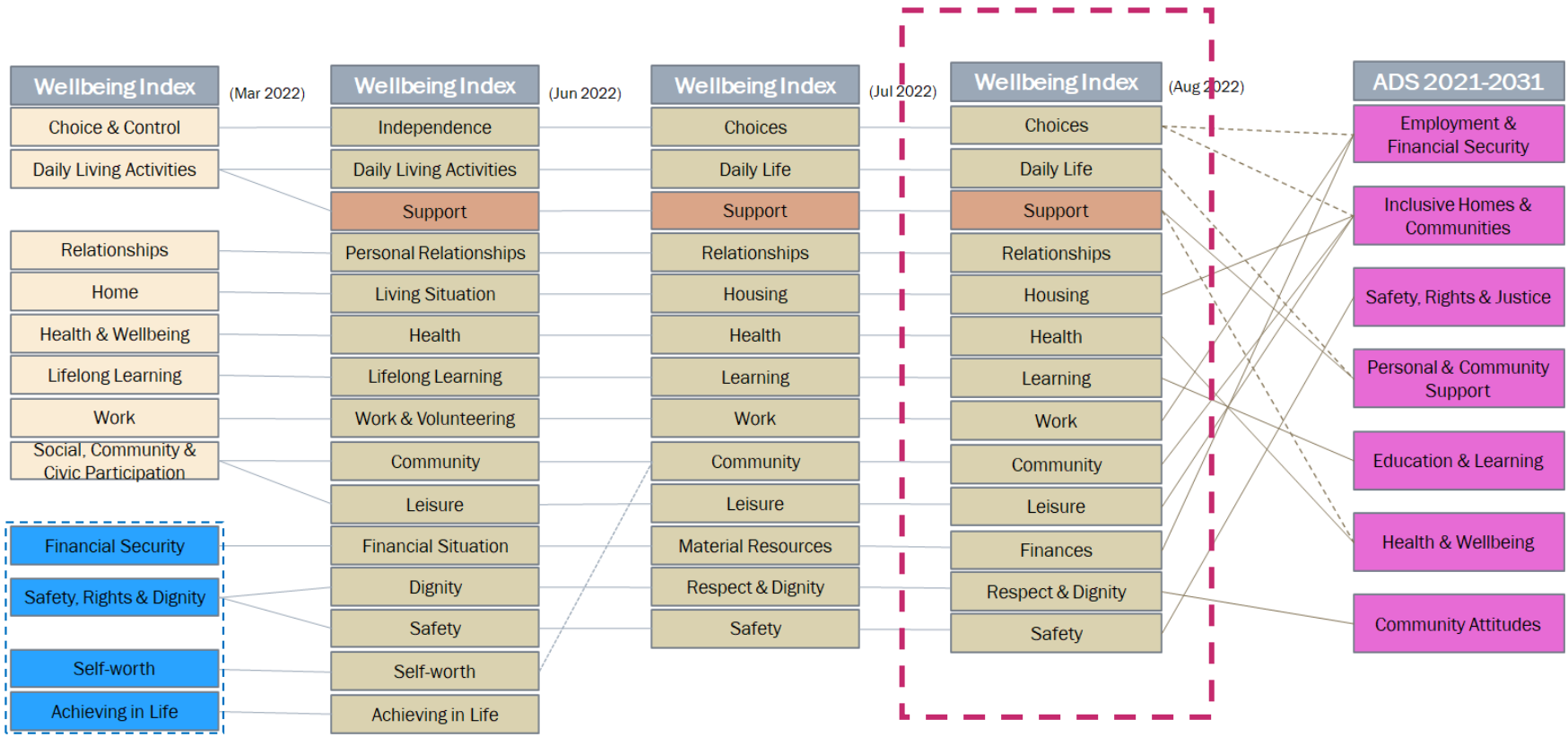


The domains of the ADS and NDIS outcomes frameworks are largely consistent with other relevant frameworks and wellbeing instruments with a few additions.

Step 3: Consultation and co-design



Wellbeing domain evolution



Example feedback on items from people with disability



(Example – potential items in the ‘Choice’ domain)

- Are the meaning and wordings of the proposed items clear and easy to understand?
- Which item(s) within each domain would you prefer?

(#1) I feel in control of my life.

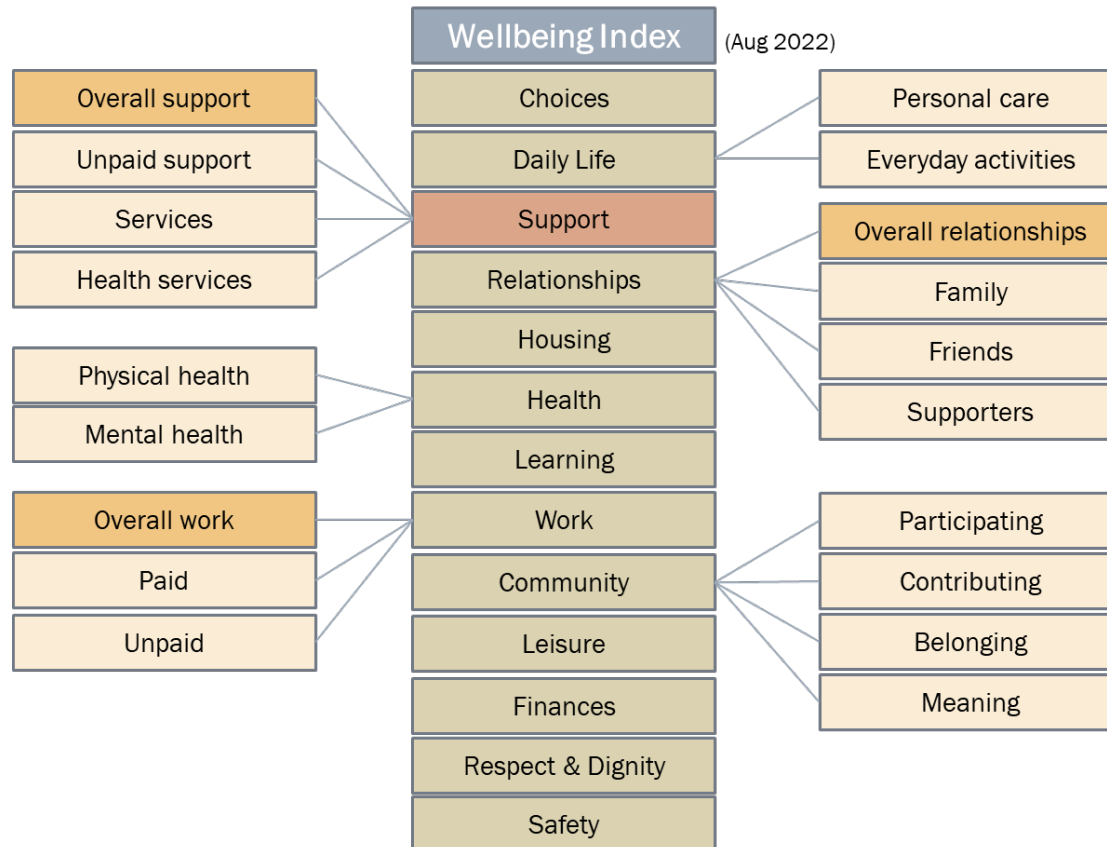
(‘Control of life’ means having the choice to do things or have things done for you as you like and when you want).

(#2) I make my own choices about my day-to-day life (e.g. where to go, what to do, what to eat).

(#3) “I **have** choices about **what I do each day** (e.g., where **I** go, what **I** do).” ✓

(#4) I make decisions about my life. ✓

Draft DWI structure for pilot survey validation



- 35 items (slight variation in some of the items for 25+ and 15-24 year olds).
- The items were piloted in an online survey with 28 NDIS participants and 13 sector reps for final item refinement and selection of response option.

DWI Domain	Items
Relationships	<p>I am satisfied with the way I get along with people (for example, friends, family, carers, support workers)</p> <p>I am satisfied with the way I get along with my family</p> <p>I am satisfied with my friendships</p> <p>I have the opportunity for intimate relationships</p> <p>I am satisfied with the way I get along with people who support me (for example, support workers, allied health, counsellors)</p>
Daily life	<p>I am satisfied with my personal care (for example, eating, washing, dressing, with or without the help of others)</p> <p>I am satisfied with my day-to-day activities (for example, cooking, shopping, sorting out problems, with or without the help of others)</p>
Community	<p>I take part in my community as much as I want to (for example, doing sports, going to music and cultural events, religious groups)</p> <p>I feel accepted and included in my communities, in person or online</p> <p>I do things in my life that are important to me</p>
Leisure time	<p>I spend my leisure time doing things I enjoy</p>
Health	<p>I am satisfied with my physical health</p> <p>I am satisfied with my mental health</p> <p>I am satisfied with the way my pain is managed</p>
Housing	<p>I am satisfied with my living situation</p> <p>I am satisfied with where I live</p> <p>I am satisfied with who I live with</p>
Work	<p>I am satisfied with the work I do (for example, paid employment, unpaid caring, volunteering)</p> <p>I am satisfied with the paid work I do</p> <p>I am satisfied with the unpaid activities that I do for others</p> <p>I am satisfied with the opportunity to follow my chosen career</p>
Learning	<p>I learn new things as much as I want to</p> <p>I am satisfied with my opportunities for education (for example, at school, vocational training, university)</p>
Respect and dignity	<p>I am satisfied with how people treat me</p> <p>I am satisfied with how people treat me at home</p> <p>I am satisfied with how people treat me in the community</p> <p>I am satisfied with how people treat me when I get services (for example, health services, education, employment, community services)</p> <p>I am able to speak up about the things that are important to me</p>
Choices	<p>I control how I live my life</p>
Safety	<p>I feel safe in my life</p> <p>I feel safe in my home</p> <p>I feel safe when I am out in the community</p>
Finances	<p>I have enough money to do things that are important to me (for example, going out with friends, buying food, buying medication)</p> <p>I have control over my money to do the things I want to do</p>
Support	<p>I am satisfied with the support I get (for example, services, unpaid support)</p>

Feedback on response options

Option 1 Never, Rarely, Sometimes, Mostly, Always

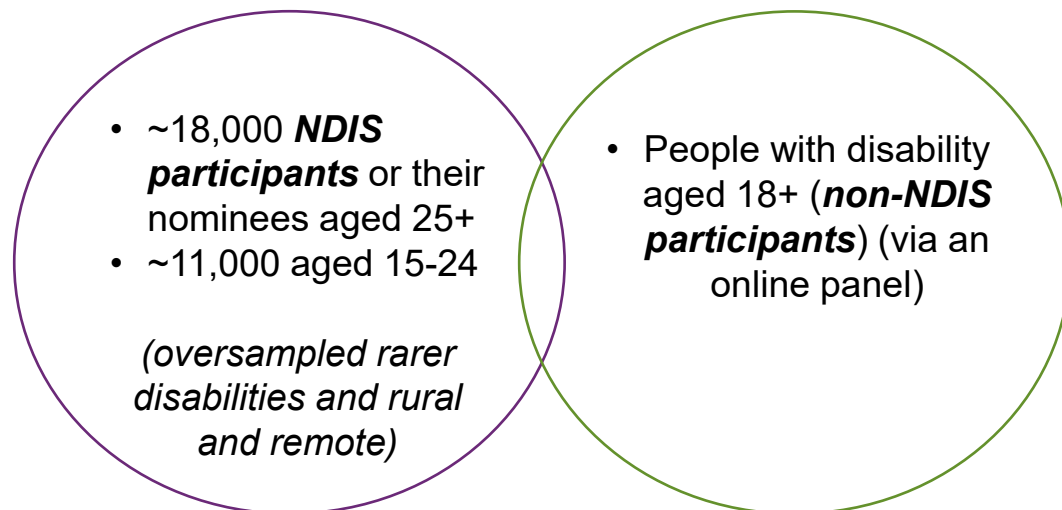
Option 2 None of the time, A little bit, Sometimes, Most of the time, All the time

Option 3 Not at all, A little, Moderately, Mostly, Completely

Which response option do you prefer for each life aspect?

Life Aspect	Option 1	Option2	Option3	None above
	%	%	%	%
Relationship	7.1	92.9	0.0	0.0
Daily Life	14.3	78.6	7.1	0.0
Community	7.1	78.6	7.1	7.1
Free Time	7.1	85.7	0.0	7.1
Health	7.1	78.6	7.1	7.1
Housing	14.3	64.3	14.3	7.1
Work	7.1	78.6	0.0	14.3
Learning	7.1	78.6	7.1	7.1
Respect and Dignity	7.1	85.7	0.0	7.1
Choices	7.1	85.7	0.0	7.1
Safety	7.1	85.7	0.0	7.1
Finances	14.3	71.4	7.1	7.1
Support	7.1	85.7	0.0	7.1

Step 4: Validation and psychometric analysis (online survey incl. Easy Read)



- ~18,000 **NDIS participants** or their nominees aged 25+
- ~11,000 aged 15-24

(oversampled rarer disabilities and rural and remote)



1,245 respondents representing participants aged 25+

397 respondents representing participants aged 15-24

(~70% proxy report but a good mix of disability types, ages and geography represented)

- People with disability aged 18+ (**non-NDIS participants**) (via an online panel)



501 respondents (all self-report)

- How difficult it was to answer each item.
- The importance of each life aspect to overall wellbeing.

+

- Satisfaction with Life Scale.
- Overall assessment of life.
- Personal Wellbeing Index.
- Demographic information including the respondent's disabilities and the impacts on their life.

Exploratory factor analysis (adults 25+)



Dimensions	Items	F1	F2	F3	F4	F5	F6	F7
Relationship	Overall Relationships	0.803*	0.023	0.089	0.005	0.052	-0.053	0.014
Relationship	Friendships	0.687*	0.119*	0.011	-0.039	0.040	0.045	0.045
Relationship	Family	0.649*	0.085	0.032	0.175*	0.044	-0.151*	-0.098*
Relationship	Intimate Opportunity	0.397*	0.080	-0.090	0.083	-0.047	0.321*	0.006
Health	Physical Health	-0.021	0.899*	0.024	0.007	-0.088	-0.411*	-0.021
Health	Mental Health	0.270*	0.569*	-0.001	0.002	0.023	-0.229*	0.083*
Health	Pain Management	-0.026	0.666*	-0.012	0.101*	0.139*	-0.356*	0.033
Community	Participating	0.077	0.709*	0.064	-0.097*	0.068	0.043	0.018
Community	Important Things	0.129*	0.675*	0.092	-0.029	0.002	0.093*	0.055
Daily Life	Personal Care	0.007	0.589*	-0.145*	0.201*	0.085	0.005	0.035
Daily Life	Everyday Activities	0.024	0.682*	-0.070	0.087*	0.039	0.021	0.078
Leisure Time	Leisure	0.046	0.651*	0.079	0.022	0.006	0.024	0.079*
Finances	Enough Money	-0.074	0.329*	0.106	0.203*	0.305*	-0.019	-0.027
Choices	Control	-0.063	0.239*	0.011	0.089	0.066	0.593*	0.129*
Finances	Control Money	-0.083	0.154	-0.019	0.158*	0.214*	0.514*	0.007
Respect & Dignity	Speak Up	0.087	-0.032	0.023	-0.034	0.308*	0.507*	0.091
Learning	New Things	0.033	0.379*	0.292*	0.018	-0.047	0.432*	-0.056
Learning	Education Opportunity	0.011	0.438*	0.379*	-0.028	-0.001	0.454*	-0.144*
Support	Support	0.096*	0.198*	-0.062	0.202*	0.429*	0.031	0.081
Respect & Dignity	Overall Treatment	0.148*	-0.013	0.085	0.032	0.700*	-0.030	0.019
Respect & Dignity	Community	0.068	0.008	0.016	-0.076	0.840*	0.008	0.030
Respect & Dignity	Service	-0.009	0.054	-0.015	0.098	0.821*	-0.036	-0.124*
Community	Belonging	0.185*	0.370*	0.105*	-0.173*	0.389*	0.111*	0.010
Relationship	Support Team	0.376*	-0.033	0.007	0.146*	0.382*	0.050	0.030
Work	Overall Work	0.022	0.034	0.891*	0.016	0.040	-0.005	0.057
Work	Paid Work	-0.054	-0.062	0.959*	0.031	0.062	-0.049	0.115
Work	Unpaid Activities	0.076	0.172*	0.571*	0.063	0.040	0.045	0.046
Work	Career Opportunity	0.072	0.134	0.715*	0.005	-0.045	0.134*	0.002
Housing	Overall Living	0.004	0.083	0.185*	0.794*	0.052	-0.010	0.021
Housing	Where I Live	0.013	0.059	0.246*	0.813*	0.017	-0.025	-0.003
Housing	Who I Live With	0.266*	-0.070	0.054	0.685*	-0.082	0.209*	0.000
Respect & Dignity	Home	0.309*	-0.022	-0.049	0.419*	0.170*	0.124*	0.119*
Safety	Overall Safety	0.082*	-0.002	0.021	0.127	0.034	0.038	0.849*
Safety	Home	0.037	0.124*	0.003	0.309*	-0.040	-0.023	0.629*
Safety	Community	-0.052	0.105*	0.075	-0.094	0.318*	-0.024	0.594*

Final item inclusion considered:

- Ceiling/floor effects (>40%)
- % NA/missing/unsure (>40%)
- Respondent rating of importance (>50% extremely/very important)
- Correlation with overall QoL rating (>0.3)
- Within factor explained variation on SWLS and PWI (lowest within each factor)
- Re-test reliability (>40% agreement & ICC >0.5)
- IRT (response disorder, poor fit)

Then (qualitative considerations):

- DWI domain coverage
- Concept overlap/parsimony
- Policy relevance
- Outcome profiling

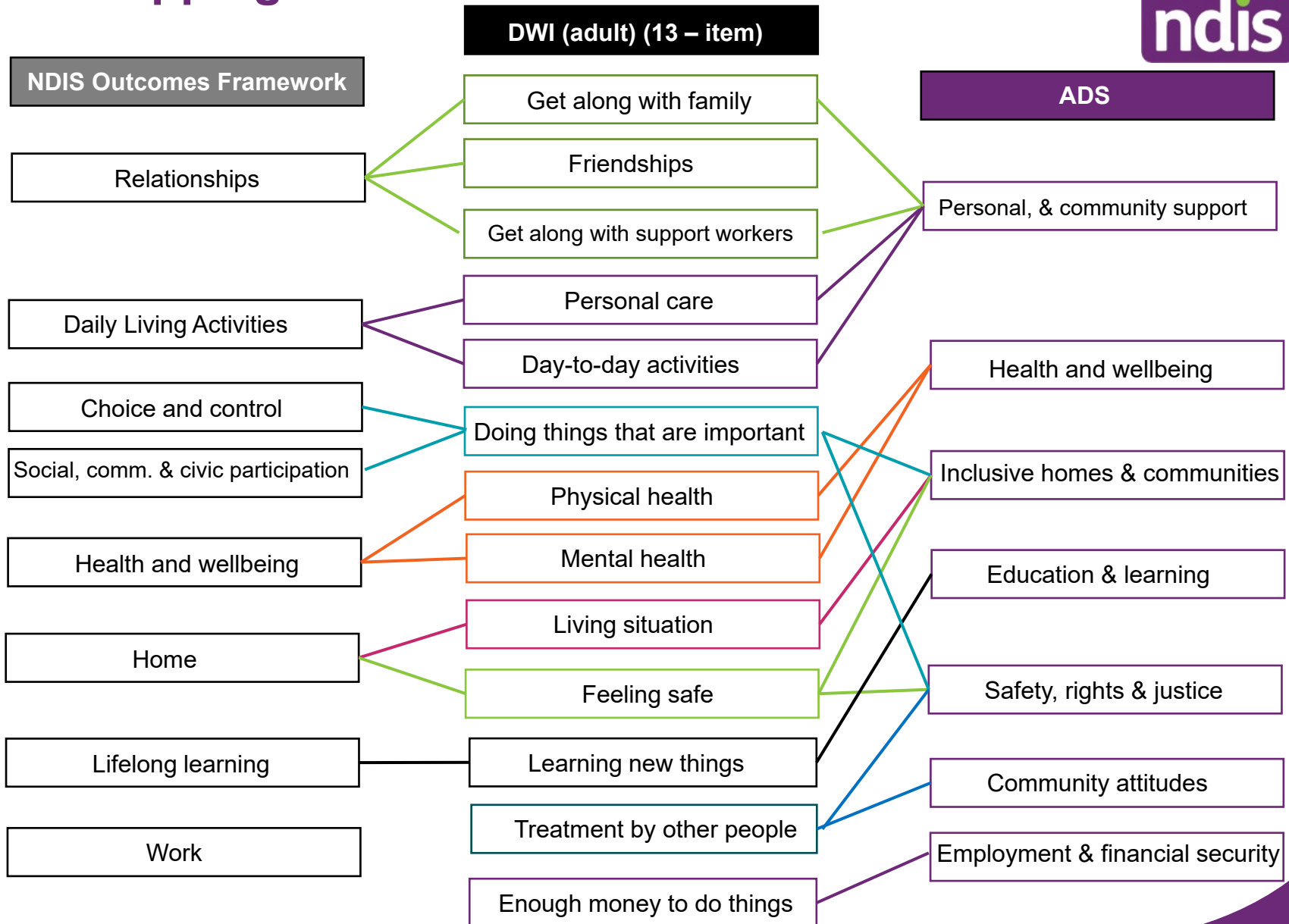
Summary item performance by latent factor



Summary of DWI item performance by latent factors (Adults)

#	DWI DOMAINS	DWI ITEMS	Baseline						Correlati on with QOL	% Explained variation of SWL55	% Explained variation of SWSL3	% Explained variation of QOL	Re-test reliability*		Item Response Theory (IRT)			Included	
			% All the time	% None of the time	%N.A.	% N.A., Unsure; Missing	% Extremely/ Very important	% Not important					% Agreement ^a	ICC ^b	Response disorder?	INFit MNSQ	OUTFit MNSQ		
FACTOR 1 - RELATIONSHIP									0.231	0.221	0.214								
D11	Relationship	Overall Relationships	16.5%	1.1%	1.2%	9.0%	72.0%	2.8%	0.35	0.067	0.066	0.054	0.57	0.57	No	0.811	0.837		
D13	Relationship	Friendships	15.2%	4.4%	7.6%	18.2%	58.3%	6.6%	0.39	0.105	0.096	0.090	0.56	0.78	No	1.157	1.214	1	
D12	Relationship	Family	30.5%	1.8%	1.8%	9.9%	80.1%	3.9%	0.31	0.032	0.033	0.045	0.65	0.70	No	0.822	0.845	1	
D14	Relationship	Intimate Opportunity	8.0%	33.5%	22.3%	34.5%	28.8%	39.9%	0.23	0.027	0.027	0.025	0.66	0.82	Yes	1.152	1.560		
FACTOR 2 - HEALTH & ACTIVITIES									0.478	0.492	0.491								
D51	Health	Physical Health	7.0%	16.9%	1.9%	11.9%	69.5%	4.8%	0.55	0.077	0.082	0.092	0.62	0.77	No	1.069	1.057	1	
D31	Community	Participating	10.2%	12.4%	4.9%	14.7%	51.6%	11.2%	0.52	0.060	0.058	0.061	0.54	0.71	No	0.923	0.912		
D22	Daily Life	Everyday Activities	13.1%	3.3%	4.6%	14.0%	67.4%	4.3%	0.47	0.037	0.038	0.042	0.53	0.61	No	0.924	0.903	1	
D33	Community	Important Things	13.2%	3.3%	1.9%	12.4%	75.4%	3.9%	0.53	0.086	0.087	0.067	0.58	0.68	No	0.777	0.767	1	
D53	Health	Pain Management	11.1%	7.8%	18.2%	28.9%	69.3%	10.9%	0.47	0.031	0.035	0.035	0.55	0.72	No	1.062	1.075		
D41	Leisure Time	Leisure	10.3%	4.5%	2.7%	11.0%	70.5%	3.7%	0.53	0.074	0.075	0.071	0.58	0.53	No	0.856	0.853		
D21	Daily Life	Personal Care	27.1%	1.8%	2.0%	10.9%	77.8%	2.2%	0.38	0.026	0.028	0.027	0.68	0.62	No	1.072	1.047	1	
D52	Health	Mental Health	8.0%	11.2%	3.3%	16.2%	72.4%	4.9%	0.51	0.051	0.055	0.054	0.60	0.71	No	1.010	0.996	1	
D121	Finances	Enough Money	25.2%	6.0%	3.2%	11.7%	77.4%	5.0%	0.43	0.037	0.034	0.043	0.64	0.83	No	1.258	1.433	1	
FACTOR 3 - WORK									0.188	0.184	0.142								
D72	Work	Paid Work	5.7%	4.3%	65.4%	73.7%	28.9%	55.6%	0.51	0.034	0.032	0.026	0.59	0.79	No	0.757	0.756		
D71	Work	Overall Work	8.0%	5.1%	51.3%	59.4%	36.5%	43.4%	0.48	0.073	0.070	0.055	0.66	0.86	No	0.651	0.618		
D74	Work	Career Opportunity	3.8%	11.3%	59.0%	69.9%	28.3%	54.3%	0.49	0.052	0.050	0.031	0.66	0.84	No	1.202	1.493		
D73	Work	Unpaid Activities	6.8%	3.9%	52.0%	61.4%	28.6%	45.0%	0.41	0.030	0.032	0.030	0.55	0.77	No	1.239	1.286		
FACTOR 4 - HOME									0.238	0.238	0.221								
D62	Housing	Where I Live	43.9%	4.1%	0.8%	9.0%	86.5%	1.8%	0.38	0.066	0.069	0.064	0.70	0.82	No	0.746	0.709		
D61	Housing	Overall Living	38.2%	3.9%	0.7%	8.6%	87.8%	1.8%	0.41	0.097	0.095	0.087	0.64	0.72	No	0.706	0.699	1	
D63	Housing	Who I Live With	40.6%	2.9%	10.0%	17.8%	84.4%	5.0%	0.24	0.034	0.031	0.022	0.67	0.79	No	1.007	0.951		
D92	Respect & Dignity	Home	32.8%	0.9%	3.8%	13.0%	89.2%	2.0%	0.31	0.041	0.042	0.048	0.68	0.70	No	1.512	1.480		
FACTOR 5 - RESPECT & SUPPORT									0.306	0.300	0.294								
D93	Respect & Dignity	Community	8.8%	1.8%	2.2%	11.7%	76.2%	2.8%	0.36	0.034	0.034	0.040	0.60	0.59	No	0.813	0.773		
D94	Respect & Dignity	Service	14.7%	2.0%	3.1%	12.4%	85.6%	1.6%	0.32	0.024	0.022	0.032	0.55	0.44	No	0.952	0.937		
D91	Respect & Dignity	Overall Treatment	10.5%	1.5%	1.2%	10.4%	84.4%	1.8%	0.37	0.055	0.051	0.041	0.63	0.52	No	0.846	0.815	1	
D131	Support	Support	19.0%	2.9%	2.4%	11.8%	82.7%	3.3%	0.35	0.055	0.051	0.046	0.58	0.64	No	1.134	1.163		
D32	Community	Belonging	10.5%	7.2%	5.4%	17.1%	53.9%	10.2%	0.47	0.095	0.099	0.103	0.48	0.73	No	1.091	1.113		
D15	Relationship	Support Team	19.9%	0.6%	2.4%	10.9%	76.4%	2.0%	0.31	0.044	0.042	0.032	0.64	0.52	No	1.120	1.109	1	
FACTOR 6 - CHOICES									0.203	0.205	0.220								
D101	Choices	Control	14.9%	8.3%	3.4%	12.2%	73.0%	6.5%	0.31	0.048	0.046	0.054	0.55	0.70	No	0.839	0.825		
D122	Finances	Control Money	26.5%	8.6%	9.4%	17.8%	64.4%	11.3%	0.23	0.013	0.011	0.018	0.61	0.67	Yes	1.101	1.103		
D95	Respect & Dignity	Speak Up	14.9%	7.8%	7.8%	17.5%	76.7%	7.4%	0.22	0.015	0.019	0.018	0.54	0.73	No	1.156	1.168		
D82	Learning	Education Opportunity	6.9%	10.9%	37.9%	49.7%	28.3%	40.8%	0.45	0.065	0.059	0.056	0.35	0.66	Yes	0.925	0.896		
D81	Learning	New Things	11.2%	6.7%	8.1%	18.6%	45.3%	13.9%	0.38	0.061	0.069	0.074	0.46	0.53	No	0.916	0.897	1	
FACTOR 7 - SAFETY									0.232	0.234	0.251								
D111	Safety	Overall Safety	28.0%	1.8%	1.0%	10.3%	89.6%	1.8%	0.46	0.090	0.091	0.100	0.58	0.65	No	0.636	0.632	1	
D112	Safety	Home	46.3%	1.3%	1.4%	10.0%	92.1%	1.8%	0.39	0.071	0.074	0.074	0.72	0.74	No	1.077	0.905		
D113	Safety	Community	14.7%	2.6%	1.3%	10.7%	85.7%	1.6%	0.41	0.070	0.069	0.077	0.65	0.74	No	1.174	1.456		

DWI mapping



Next steps

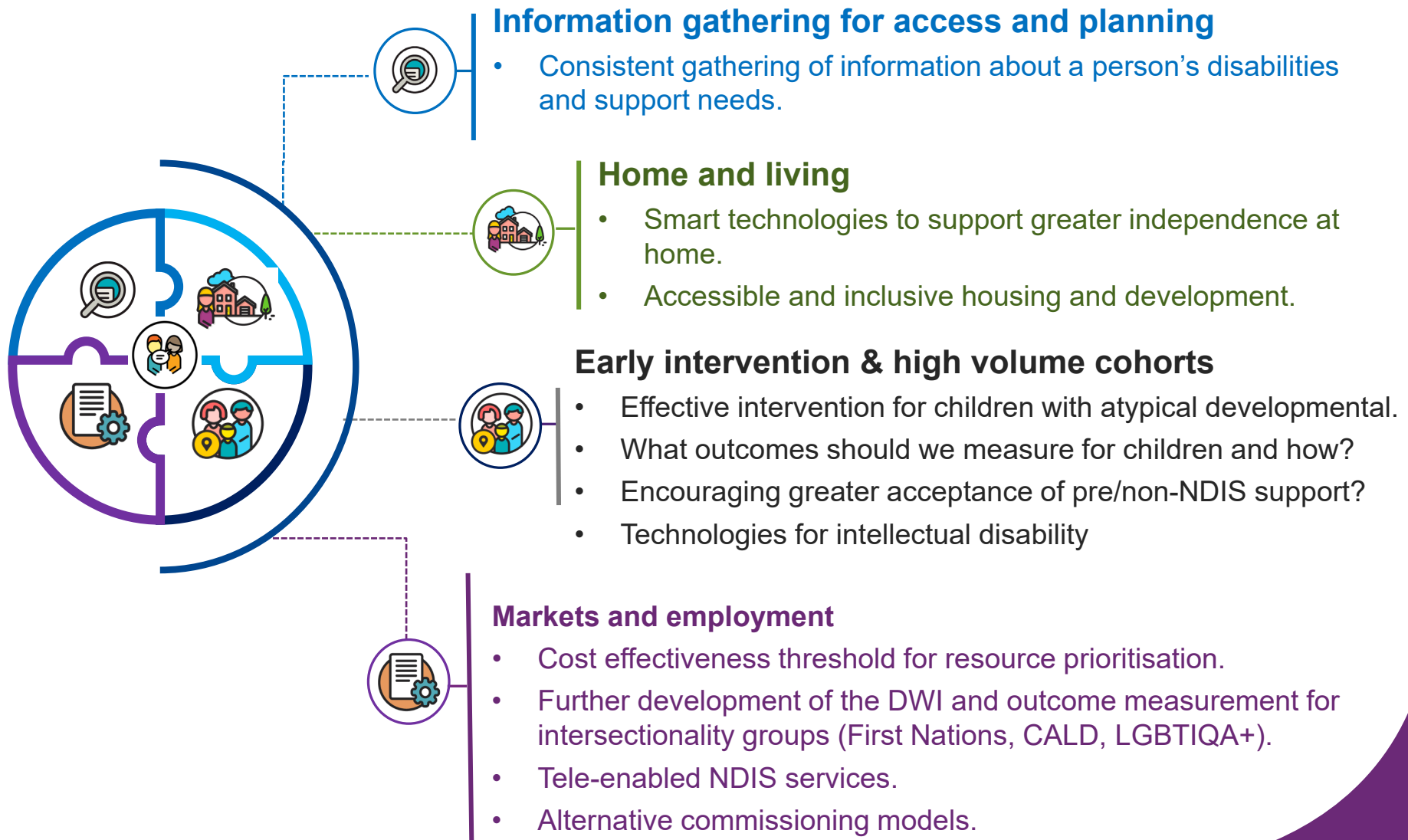


1. Final acceptability testing with people with disability and policy makers.
2. **Valuation study** to elicit population and individual preference weights for the items from both people with disability and the general public.
 - Stated preference approach (discrete choice experiment) to elicit population preference weights.
 - Individual preferences will be elicited using either a rating or ranking task (will be determined during piloting).

The aim is to trial the final DWI in late 2023 and then systemically incorporate implement in 2024-25.

Working collaboratively on future NDIA research priorities

Future priorities to transform the NDIS



How we support researchers



We help researchers and the disability sector carry out work that benefits participants and relates to our corporate plan and priorities.

We support researchers through:

- Access to publicly available data
- Access tailored NDIS data (summary or individual-level data)
- Access NDIA staff (employees, contractors, and volunteers) as study subjects in research project team members, steering committee experts, working parties or similar
- Collaboration or partnering with the Agency on research or evaluation

For more information head to our website [Research partnerships | NDIS](#)

Accessing NDIA publicly available data



- The NDIA has made a large amount of data publicly available.
- Data includes downloadable cubes on participants, providers, plans and budgets.
- This data can be found on our "data and insights" page of our website [National Disability Insurance Scheme \(NDIS\)](#)
- [Quarterly Reports | NDIS](#) also contain publicly available data and are very useful resources.
- More features are being added all the time, including data visualisation tools which will make it easier to use the data available.
- You can explore this data and also register for notifications for when new data is released.
- [Explore data | NDIS](#) is an interactive tool to help you find information you need. The data can be filtered or sorted by participant type, reporting period, location or support class and category.

Thankyou for listening

Questions?

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