

Australian Autism Alliance and Australian X & Y Spectrum Support (AXYS)

Submission to NDIS EAC Consultation September 2025

Assistance Animals, Exercise Physiology and Smart Home Appliances

National Expert Advisory Committee
Via email - disabilityevidence@health.gov.au

Dear National Expert Advisory Committee,

The Australian Autism Alliance (Alliance) and Australian X & Y Spectrum Support (AXYS) welcomes the opportunity to make this submission to the NDIS Expert Advisory Committee (EAC) consultation on Assistance Animals, Exercise Physiology and Smart Home Appliances.

ABOUT AUSTRALIAN X & Y SPECTRUM SUPPORT

[Australian X & Y Spectrum Support \(AXYS\)](#) is the peak organisation representing individuals in Australia with Sex Chromosome Variations, specifically Klinefelter's Syndrome (XXY), Jacob's Syndrome (XYY), Trisomy X (XXX), and related variants. Our community includes individuals with these variations, their families, carers, healthcare providers, and allies. AXYS works to educate the health and education sectors, as well as the broader public, about the nature of X and Y Sex Chromosome Variations and their impact on individuals and their families. The disabilities associated with Sex Chromosome Variations can be extensive and multi-systemic, affecting several areas of an individual's life. Common impairments include musculoskeletal issues, neurological problems, motor coordination difficulties, speech and language disorders, cognitive and intellectual challenges, specific learning disabilities, sensory processing differences, and a higher prevalence of neurodevelopmental disorders.

Many individuals within our community have Autism Spectrum Disorder (ASD) (1:2), with the majority experiencing neuromotor difficulties (80%), while a smaller proportion (approximately 10%) have Intellectual Disability. This highlights the varied and complex needs of this population, emphasising the need for tailored support.

It is important to recognise that the impact of these variations is not uniform; it varies widely from person to person. However, collectively, the range of impairments associated with Sex

Chromosome Variations requires a comprehensive, coordinated approach to care and support. AXYS advocates for increased awareness, improved access to healthcare services, and better-targeted interventions to help individuals with Sex Chromosome Variations reach their full potential.



Australian X & Y Spectrum is a member of a consortium of organisations that provides systemic advocacy for people with Down Syndrome and similar Chromosomal Variations. This consortium is recognised by the Australian Government as a Disability Representative Organisation – Down Syndrome Australia.

ABOUT THE AUSTRALIAN AUTISM ALLIANCE

www.australianautismalliance.org.au

The [Australian Autism Alliance](#) (the Alliance) welcomes the Committee’s Inquiry and thanks you for your time and dedication to securing thriving futures for all citizens.

The Alliance was established in 2016 and aims to improve the life chances of Autistic people and facilitate collaboration within the autism community. The members represent a cohesive national network of key organisations with a diverse focus on autism – that is led by Autistic people, advocacy groups, peak bodies, service providers, and researchers.

We reach over half a million people through our communication channels and provide support to people with autism across the lifespan. Most importantly, our work is informed by Autistic people and the Australian Autism community.

The Alliance is a funded Disability Representative Organisation (DRO) advocating for a Strong Voice for Autism, and supports Australian government (at all levels) in various roles and representations, including: DSS Disability, Representative Organisation, the NDIA Autism Advisory Group, the NDIA DRCO Co-Design Advisory and Reform groups, NDIS Commission Disability Sector Consultative group, National Autism Strategy Oversight Council member, and National Health and Mental Health Roadmap for Autistic people.



ACKNOWLEDGMENTS

We acknowledge the First Nations and Traditional Owners of the land, sea and waterways and pay respects to Elders past, and present and recognise those whose ongoing effort to protect and promote Aboriginal and Torres Strait Islander cultures will leave a lasting legacy for future Elders and leaders. We recognise the enduring connection that First Nations peoples have to land, waters, culture, and community. This land was, is, and always will be Aboriginal land.

We acknowledge the individual and collective expertise of those with a living or lived experience of disability, as well as the lived experience of people who have been carers. We recognise their vital contribution at all levels and value the courage of those who share their unique perspective for the purpose of learning and growing together to achieve better outcomes for all.

1 OVERVIEW

We recognise that the first round of assessments to be considered by the EAC, are for the following supports:

- Active passive trainers
- Assistance animals for Autistic people or people with intellectual disability
- Psychiatric assistance dogs
- Seizure alert dogs
- Exercise physiology
- Smart home appliances (for cooking, cleaning and gardening).

Approach

This submission covers:

- 1) Assistance Animals for Autistic people or people with intellectual disability (covers specifically the series of questions as outlined in the NDIS EAC online survey plus other recommendations);
- 2) Exercise Physiology (with consideration of the questions outlined in the NDIS EAC online survey but does not specifically address each question); and
- 3) Smart Home Appliances (with consideration of the questions outlined in the NDIS EAC online survey but does not specifically address each question).

Our response is provided in the context of the consultation context provided, which is to make sure the NDIS provides safe, effective and high-quality supports that maximise the benefits for people with disability. It is understood that the topics chosen are based on efficacy, safety and value for money considerations, with a focus on areas where the evidence base is contested, mixed, or emerging.

2 Summary of Recommendations

GENERAL - APPLIES TO ALL 3 SUPPORT AREAS

Recommendation 1: The expert research groups assessing the consultation submissions are to provide a summary of each support that is produced for presentation to the EAC, first to be validated by disability representative organisations and the community, to ensure that they accurately capture what was communicated.

Recommendation 2: Each of the recommendations in this document, despite the Support Area it appears under should be considered for applicability to the each of the support areas given the high prevalence of co-occurring conditions and multiple and overlapping forms of disadvantage and discrimination (intersectionality)

Recommendation 3: The 3 support areas addressed in this submission are complex and should be considered in the context of any applicable best practice guidelines that exist and not just the NDIS Operational Guidelines. Given this specialised nature, only those with the relevant clinical scope of practice (qualifications and competency) should be assessing the applicability.

Recommendation 4: The Agency and the EAC should refer to impairments, or categories of impairments to consider supports, rather than on a rigid diagnostic label or refer to diagnosis or categorise supports by diagnosis in assessing supports, as implied by the consultation questions, and need to consider Recommendation 2 and 3 as they are correlated.

Recommendation 5: The NDIA to interface with the relevant Federal Departments responsible for the implementation of the National Autism Strategy and National Health and Mental Health Roadmap for autism that were both launched at the commencement of 2025.

ASSISTANCE ANIMALS

Recommendation 6: The description for Assistance Animal should be aligned with the Disability Discrimination Act 1992 (Cth) s9.

Recommendation 7: The listed trained tasks must include mobility (brace & stability) tasks, emergency egress/wayfinding, and public-space skills (e.g., body-blocking for safety) and medical alert/response tasks (e.g., diabetes, epilepsy).

Recommendation 8: To have needs-based (not diagnosis-led) assessment so decisions are anchored in functional impairment and goals, and not primary diagnosis. This will allow access where an assistance animal is reasonable and necessary for any impairment-related functional need.

Recommendation 9: Recognise co-occurrence as standard.

Recommendation 10: Explicitly include the following:

- Safety medical alert) & risk reduction (falls prevention, elopement prevention, medical risk mitigation).
- Mobility & physical functioning (brace/stability, balance, transfers, gait).
- Emergency egress & wayfinding during shutdown/overload.
- Access to housing, education & emergency/shelter services (practical inclusion outcomes).
- Carer/handler independence (task substitution reducing paid-support hours)

Recommendation 11: Comparisons to be evaluated against goal-based (not category-based) and hard outcomes (falls, ED visits, hypoglycaemia events)

Recommendation 12: Environmental factors are included when considering and comparing other factors, such as the availability of the support and alternatives, such as in remote locations, or the suitability of the support for different disability groups including intersectional issues.

ASSISTANCE ANIMALS

Recommendation 13: Assistance animals typically provide daily, integrated, continuous support across home, school/work, and community), with off-duty periods for rest and welfare. Frequency varies as it is task dependent :

- Mobility: during transfers/ambulation and environmental negotiation (crowding, stairs, uneven terrain).
- Medical alert: event-driven, with continuous background monitoring/response.
- Sensory regulation/overload & egress/ wayfinding: as needed for regulation and safe exit.

Recommendation 14: Acquisition and training pathways should be flexible. Allow owner-trainer, specialist trainer, or blended pathways, contingent on passing independent public-access assessment against a nationally consistent PAT.

Recommendation 15: Having National standards (PAT + identity card/logo + assessor accreditation), handler education, and animal-welfare requirements (workload, rest, retirement) reduce risk.

Recommendation 16: Remove key barriers of:

- Jurisdictional gaps (e.g., NSW/VIC/TAS/NT lacking legislated schemes create PAT access inequity).
- Rules that create inequity: the “three isolated tasks” threshold and “behavioural supports first” precondition functionally discriminate against mobility/medical-alert needs.
- Scheme rules (e.g., funding only PTSD dogs when PTSD is the sole diagnosis),
- Cost misclassification of essential costs as “pet costs”: essential ongoing costs (insurance incl. public liability, veterinary care, replacement at retirement) are sometimes treated as “pet costs” despite being integral to the support.
- Access barriers in housing/shelters/schools: inconsistent acceptance in shelters/housing/schools can force unsafe choices; national ID and access standards are needed.
- Victim-survivor access: limited access to trauma-informed clinicians
- Data gaps: record animal role/tasks/outcomes, not only diagnoses.

Recommendation 17: Provide Whole-of-life funding clarity by listing funded costs items when an assistance animal is in plan to prevent misclassification as “pet” costs and avoid “pet cost” disputes : training (initial & ongoing), handler training, insurance (including public liability), veterinary care, specialist diets, equipment, travel, maintenance, and replacement at retirement— Note: The NDIS site already recognises extra maintenance costs but practice is inconsistent.

Recommendation 18: Guarantee trauma- and neuro-informed access by prioritising safe-exit pathways with nationally recognised ID and complaint pathways for victim-survivors with assistance animals (emergency accommodation with AA access) and require public systems (schools/hospitals/shelters) to comply with AA access laws. Note: consider **US/UK/NZ** access practice.

Recommendation 19: Ensure cultural safety and accessible complaints/education pathways.

Recommendation 20: More than 12 months and until specific outcomes are achieved/maintained (e.g., “no injurious falls for 12 months,” “reduced emergency presentations for hypoglycaemia,” “sustained community participation at target frequency”).

Recommendation 21: Daily baseline support with task-driven variability; include scheduled rest and retirement planning with welfare consistent with animal-welfare standards.

Recommendation 22: Recommend assistance animals where function-matched goals are unmet by alternatives (e.g., persistent falls despite aids; recurrent hypoglycaemia unawareness despite CGM; trauma symptoms limiting community access).

Recommendation 23: Do not recommend assistance animals where 1) handler capacity/welfare cannot be ensured as the risks outweigh the benefits, or goals are better met by simpler/safer alternatives. Use of a multidisciplinary assessment is required.

ASSISTANCE ANIMALS

Recommendation 24:

- **Provide:** either person-supplied or provider-supplied so long as the team meets national standards and passes an independent PAT.
- **Train:** owner-trainer, specialist trainer, or blended and the assessment, must be independent and nationally consistent
- **Ongoing Management:** the person where possible, with carers/ support workers/specialist trainers as needed.
- **Qualifications/Regulation:** nationally consistent training organisations, national PAT assessors, and
- a national identity card/logo.
- **Safety (observed/adverse events)**

Recommendation 25: Consistent National welfare standards and regulation as key controls to reduce complaints and improve predictability.

Recommendation 26: Select alternative supports only where function-matched alternatives are as effective in terms of long-term sustainability. Use blended packages where optimal.

Recommendation 27: Refer jurisdictional materials (e.g., QLD GHAD Act), DRO submissions, DDA guidance, and technical/clinical documents on medical-alert reliability, mobility outcomes, and DCD participation-oriented interventions.

OTHER RECOMMENDATIONS

The following are specific policy points the consultation should address so as to ensure an integrated and accountable ecosystem.

Recommendation 28: Adopt and fund the National Assistance Animal Framework (implementation vehicle).

The draft National Principles identify what is needed (national trainer accreditation, single national PAT, identity card), but not how to implement and fund a coherent framework across jurisdictions and the NDIS. A framework should include:

Nationally recognised independent PAT and assessor accreditation.

Mutual recognition across states/territories (solve NSW/VIC/TAS/NT gaps).

National identity card/logo and uniform evidence standards for frontline staff.

NDIA data standards (to capture animal type/role and tasks, and outcomes).

Recommendation 29:

Fund Australian studies as a research priority on mobility outcomes for brace/stability dogs and medical alert reliability using device benchmarks (e.g., CGM), and on Autistic/ID cohorts with PTSD where assistance dogs may be enabling supports.

Recommendation 30: Undertake an assessment to have international alignment with US ADA (dogs + reasonable accommodation for miniature horses), UK Equality Act treatment of assistance dogs as auxiliary aids, and NZ Disability Assist Dog certification (authorised organisations with national public-access rights).

Recommendation 31: Commitment to the review of this policy position on a regular basis given some areas are emerging.

EXERCISE PHYSIOLOGY

Recommendation 1: Provide EP services based on the specific functional impairments an individual experiences (e.g., motor coordination, sensory issues), rather than relying on a formal diagnostic label like autism or DCD.

Recommendation 2: Create a process that ensures that there is not bias and eliminates assumptions. (For example, do not assume that an individual's inability to participate in activities is solely due to behavioural or cognitive issues, especially when there are underlying physical or sensory impairments).

Recommendation 3: Apply International Clinical Practice Guidelines to ensure interventions reflect the individual's unique needs, in line with the most relevant International Best-Practice Guidelines, such as those for DCD, focusing on a holistic, person-centred approach in neurodiverse cohorts.

Recommendation 4: Recognise non-linear prognostic trajectory in neurodiverse people.

Recommendation 5: Base outcomes on both standardised, and non-standardised measures.

Recommendation 6: Understanding of, and Implementation of PDA-informed guidelines for the unique needs of Autistic people with Pathological Demand Avoidance.

Recommendation 7: Acknowledge that Autistic children, adolescents and adults have the same right to participate in activities involving risk as able-bodied persons.

SMART HOME TECHNOLOGIES

Recommendation 1: Recognition of smart appliances (with controllers/apps) as legitimate disability supports when they provide safety, autonomy, or reduced support dependence.

Recommendation 2: Align definition of 'standard' for NDIA's Operational Guidelines to the Australian Oxford Dictionary ordinary meaning, which denotes "*the ordinary quality or design of a product without added or novel features,*" or "*a benchmark that others conform to*". Therefore basic appliances without added features that do not address the individual's impairments are not funded, while universally designed goods with additional features that reduce disability are.

Recommendation 3: Procurement Standards – Require vendors to meet IEC 60335, ETSI EN 303 645, and APP compliance.

Recommendation 4: Funding & Implementation – Support purchase/lease, installation, training, integration, and annual safety/ cyber checks, within Home & Living supports. Also include sustainability: require reparability, spare-parts access, and e-waste plans.

Recommendation 5: Interoperability & Accessibility – Mandate open-standard (Matter-compatible) and accessible control (voice, switch, screen-reader, AAC).

Recommendation 6: Outcome Tracking – Measure independence, reduction in care hours, participant-rated quality of life, safety incidents, and energy use.

Recommendation 7: Evidence Framework – Weight lived experience alongside clinical and technical evidence; include neuro-affirming, trauma-informed evaluation criteria.

Recommendation 8: Environmental Responsibility – Promote reparability, recycling, and minimal energy rebound effects.

Recommendation 9: Broaden the definition to include the full smart-appliance ecosystem.

Recommendation 10: Adopt minimum safety/cyber/privacy baselines.

Recommendation 11: Embed lived experience in evidence evaluation.

Recommendation 12: Acknowledge 'Sensory' has multiple definitions to Autistic people.

3 ASSISTANCE ANIMALS FOR AUTISTIC PEOPLE OR PEOPLE WITH INTELLECTUAL DISABILITY

3.1 Overall Sentiment and Context

NDIA decisions must be:

- a) needs-based, not diagnosis-led;
- b) retire the “three-tasks” and “behaviour-first” hurdles;
- c) explicitly include brace & stability and medical alert/response roles;
- d) fund whole-of-life costs;
- e) guarantee access across public systems (with a fast-track complaints pathway); and
- f) collect the right data on animal role/tasks and outcomes.

We also support a co-produced National Assistance Animal Framework that makes the National Principles real. This includes:

- a) a single national PAT;
- b) national assessor/trainer accreditation;
- c) national identity card; and
- d) jurisdictional mutual recognition.

This will enable rights-consistent, practical, and outcome-driven outcomes.

There is concern that there is a bias in the way the consultation questions were presented. For instance:

- a) **Diagnosis framing and Distortion of Clinical Rationale:** There appeared to be a repeated focus on “Autistic or ID” risks diagnostic-label bias and under-recognition of co-occurring needs (e.g., mobility, epilepsy/diabetes).

FOI 19/20-1423 identified that NDIA grouped participants by diagnosis (e.g., Autism, ID, ABI, psychosocial), not by animal role/task.

FOI 21/22-0426: NDIA confirmed it does not record assistance-animal type, only an overall category.

The implication is that the current data and assessment approach perpetuate diagnostic-label bias and distort clinical rationale.

- b) **Comparator bias:** Comparing to pets/emotional support animals downplays the task-trained nature and public-access standards of assistance animals.
- c) **Three-tasks threshold:** The “three isolated tasks” rule misrepresents the holistic function of brace & stability dogs (continuous support for ambulation, balance, environmental negotiation, recovery), which prevent deconditioning and maintain independence.

- d) **Behaviour-first pre-condition:** This assumption wrongly presumes all Autistic people's needs are behavioural, resulting in refusals for mobility dogs even where there are no behaviours of concern.
- e) **Provider pathway bias:** Wording implies only “accredited provider-trained” animals are valid, which conflicts with **DDA s9** and disadvantages owner-trainers in states with no accreditation scheme.
- f) **Utilisation assumptions:** “We assume people use an assistance animal every day” may be true generally, but **task-driven variability** matters for evaluation and funding (e.g., event-driven alerts). QLD PAT materials show standards focus on **capability and behaviour**, not constant working.

It is recognised that we are all learning and evolving. To counter any interpretation bias, it is recommended that the summary reports be provided to disability organisations and the community for validation of the interpretation.

Recommendation 1 (General - Applies to all 3 Support Areas): The expert research groups assessing the consultation submissions are to provide a summary of each support that is produced for presentation to the EAC first to be validated by disability representative organisations and the community (that is, prior to being provided to the Expert Advisory Committee), to ensure that they accurately capture what was communicated..

Recommendation 2 (General - Applies to all 3 Support Areas): Each of the recommendations in this document, despite the Support Area it appears under should be considered for applicability to the each of the support areas given the high prevalence of co-occurring conditions and multiple and overlapping forms of disadvantage and discrimination (intersectionality).

Recommendation 3 (General - Applies to all 3 Support Areas): The 3 support areas addressed in this submission are complex and should be considered in the context of any applicable best practice guidelines that exist and not just the NDIS Operational Guidelines. Given this specialised nature, only those with the relevant clinical scope of practice (qualifications and competency) should be assessing the applicability.

Recommendation 4 (General - Applies to all 3 Support Areas): The Agency and the EAC should refer to impairments, or categories of impairments to consider supports, rather than on a rigid diagnostic label or refer to diagnosis or categorise supports by diagnosis in assessing supports, as implied by the consultation questions, and need to consider Recommendation 2 and 3 as they are correlated.

Recommendation 5 (General) - Applies to all 3 Support Areas): For the NDIA to interface with the relevant Federal Departments responsible for the implementation of the National Autism Strategy and National Health and Mental Health Roadmap for autism that were both launched at the commencement of 2025.

3.2 Response to Specific Questions Raised in the EAC Survey

Q1 – Support (definition)

This assessment will consider assistance animals for Autistic people or people with intellectual disability. These animals can be dogs or other animals.

An assistance animal is trained to do tasks that ease the effects of a disability. They usually live with the person they support. Tasks might include:

- Keeping the person safe (for example, stopping running off or bolting)
- Providing a calm presence
- Using touch to help with sensory needs
- Interrupting repetitive behaviours.

These animals are different from companion animals or pets. They need to:

- Have the right accreditation
- Be trained to perform specific tasks
- Meet public access, hygiene and behaviour standards.

Does the description above accurately describe what an assistance animal for Autistic people or people with intellectual disability is and how they are used?

Response: No – We want to change something.

The description should be aligned with the Disability Discrimination Act 1992 (Cth) s9. This recognises an assistance animal as a *dog or other animal* that is accredited under state/territory law OR by a prescribed organisation OR *trained to alleviate the effects of disability and to meet public access hygiene/behaviour standards*.

Adopting this legislative definition verbatim avoids scheme policy narrowing or contradicting the law. The policy should not require training by a specific type of “accredited provider”; the lawful test concerns the animal’s training and assessed public-access standard, not who provided the training.

Mobility (brace & stability¹) tasks, emergency egress/wayfinding, and public-space skills (e.g., body-blocking for safety) and medical alert/response tasks (e.g., diabetes, epilepsy) are real-world needs of Autistic/ID cohorts and international practice².

Klinefelter’s syndrome (XXY), of which there is a high prevalence among Autistic people, is associated with reduced muscle mass, hypermobility, poor balance and ataxic gait; walkers can worsen gait and increase fracture risk, especially in young adulthood. Brace & stability dogs are often the least-restrictive, most effective option to maintain mobility and prevent deterioration.

Evidence is also evolving so policy should not pre-emptively exclude them.

Recommendation 6: The description for Assistance Animal should be aligned with the Disability Discrimination Act 1992 (Cth) s9.

¹ <https://www.sciencedirect.com/science/article/pii/S0272735825000881>

² <https://www.ada.gov/resources/service-animals-2010-requirements>

Recommendation 7: The listed trained tasks must include mobility (brace & stability) tasks, emergency egress/wayfinding, and public-space skills (e.g., body-blocking for safety) and medical alert/response tasks (e.g., diabetes, epilepsy).

Q2 – Disability group

Based on what we know so far, we think the people who might use this support are:

- Autistic people
- People with an Intellectual Disability
- Autistic people with an Intellectual Disability.

Both children and adults might use these assistance animals.

Do these groups cover all the people who might use assistance animals for Autistic people or people with Intellectual Disability?

Response: No – We want to change something.

Assessment should be needs-based rather than diagnosis-led. Freedom of Information (FOI) responses show the NDIA records assistance animals as a single category or by diagnostic labels (e.g., Autism, ID, ABI, psychosocial) rather than animal type or task, entrenching diagnostic-label bias. Senate Committee submissions and Federal Court rulings have criticised single-diagnosis decision-making.

These decisions include p118 of [NDIA v Davis, 2022 FCA](#), confirming the [Tribunal was correct](#) at p32-33 and [Mulligan v NDIA, 2015 FCA](#). Annual Report No.1 of the 48th Parliament Submission 3, by Dr Stevie Lang Howson further identifies these statements.

Limitations based on *diagnostic labels* risk excluding people with real support needs. A diagnosis category (e.g., “Autism”) does not determine the support required. Many Autistic people require mobility (brace & stability) or medical alert dogs; excluding these because the primary review lens is “psychiatric/seizure dogs” is inappropriate and unsafe. Policy must recognise co-occurrence (psychosocial + neuromotor + metabolic) and focus on functional needs and goals. Given that co-occurrence is the norm, anything else is exclusion and arbitrary.

Recommendation 8: To have needs-based (not diagnosis-led) assessment so decisions are anchored in functional impairment and goals, and not primary diagnosis. This will allow access where an assistance animal is reasonable and necessary for any impairment-related functional need.

Recommendation 9: Recognise co-occurrence as standard.

Q3 – Outcomes

Supports are used to achieve certain outcomes. These outcomes can be to improve people's life (provide benefit) or to reduce harm. We want to make sure the assessment examines outcomes that are important to people.

Based on what we know so far, we think assistance animals for Autistic people or people with Intellectual disability aim to help with the following outcomes:

- Physical health
- Mental health (including anxiety and stress)
- Emotional regulation or self-regulation
- Restrictive and repetitive behaviours
- Daily living skills
- Sensory overload
- Communication skills and social functioning
- Social connection
- Family or carer outcomes
- Quality of life.

Are these the most important outcomes for the people using this type of assistance animal?

Response: No – We want to change the list.

There are a number of areas that need to be added. This would then reflect the broader evidence and international practice (US ADA, NZ Disability Assist Dog framework) and better match Autistic/ID cohorts with co-occurring trauma, medical, and mobility needs.

Recommendation 10: Explicitly include the following:

- **Safety medical alert) & risk reduction** (falls prevention, elopement prevention, medical risk mitigation).
- **Mobility & physical functioning** (brace/stability, balance, transfers, gait).
- **Emergency egress & wayfinding** during shutdown/overload.
- **Access to housing, education & emergency/shelter services** (practical inclusion outcomes).
- **Carer/handler independence** (task substitution reducing paid-support hours).

These outcomes enable objective evaluation and reflect the full range of assistance-animal roles for Autistic/ID cohorts, including those with DCD, Klinefelter's syndrome, epilepsy, diabetes, PTSD and complex trauma.

Q4 – Comparator

We will need to compare how effective assistance animals for Autistic people or people with Intellectual Disability are at achieving their goals, compared to other supports which might help with the same things. Based on what we know so far, we think the most relevant supports to compare these types of assistance animals to are:

- Companion animals (for example, pets and emotional support animals)
- Behavioural interventions (e.g. psychology and other therapies).

We chose these supports to compare to these types of assistance animals because they aim to help with similar outcomes. If you have used or suggested something other than this type of assistance animal to achieve similar outcomes, that is not included in this list, please add it below. Are these the best supports to compare assistance animals for Autistic people or people with Intellectual Disability to?

Response: No – We want to change something.

Pets/emotional-support animals are not appropriate comparators because:

1) Under UNCRPD Article 19, assistance animals are legitimate community and in-home supports enabling independent living and participation. They are not “pets” but essential supports equivalent to wheelchairs or augmented and alternative communications (AAC).

2) they lack task training and public-access standards. Better comparators are function-matched supports. For example

- For **mobility**: mobility aids (canes, walkers), home mods, orthotics, support workers, exercise physiology programs targeting participation.
- For **medical alert**: CGM/medical devices and clinical response plans.
- For **PTSD/psychosocial**: trauma-informed therapies and the DVA Psychiatric Assistance Dog program as a system comparator.

Comparisons should be goal-based/ outcomes (e.g., falls rate reduction, emergency department/ urgent care, hypoglycaemic detection/ events, community participation/ frequency), not category-based.

Recommendation 11: Comparisons to be evaluated against goal-based (not category-based) and hard outcomes (falls, ED visits, hypoglycaemia events)

Recommendation 12: Environmental factors are included when considering and comparing other factors, such as the availability of the support and alternatives, such as in remote locations, or the suitability of the support for different disability groups including intersectional issues.

Q5 Branching: lived-experience/carers/ provider sections

Use frequency?

Recommendation 13: Assistance animals typically provide daily, integrated, continuous support across home, school/work, and community), with off-duty periods for rest and welfare. Frequency varies as it is task dependent :

- **Mobility**: during transfers/ambulation and environmental negotiation (crowding, stairs, uneven terrain).
- **Medical alert**: event-driven, with continuous background monitoring/response.
- **Sensory regulation/overload & egress/ wayfinding**: as needed for regulation and safe exit.

This aligns with public-access standards used in QLD’s PAT framework.

Who provides/assists?

Recommendation 14: Acquisition and training pathways should be flexible. Allow owner-trainer, specialist trainer, or blended pathways, contingent on passing independent public-access assessment against a nationally consistent PAT.

This mirrors the DDA³ and state roles (e.g., QLD GHAD Act). This ensures equity for people in jurisdictions without legislated accreditation schemes.

Safety

Primary risks arise from inconsistent accreditation and access disputes, not from well-trained teams. Absence of national accreditation disproportionately harms users in states without certification pathways (e.g., NSW, VIC, TAS, NT).

Recommendation 15: Having National standards (PAT + identity card/logo + assessor accreditation), handler education, and animal-welfare requirements (workload, rest, retirement) reduce risk.

General context (barriers/enablers)

International frameworks (US ADA; NZ certification) show feasible national models.

Recommendation 16: Remove key barriers of:

- Jurisdictional gaps ⁴(e.g., NSW/VIC/TAS/NT lacking legislated schemes create PAT access inequity.
- Rules that create inequity: the “three isolated tasks” threshold and “behavioural supports first” precondition functionally discriminate against mobility/medical-alert needs.
- Scheme rules (e.g., funding only PTSD dogs when PTSD is the sole diagnosis⁵),
- Cost misclassification of essential costs as “pet costs”: essential ongoing costs (insurance incl. public liability, veterinary care, replacement at retirement) are sometimes treated as “pet costs” despite being integral to the support.
- Access barriers in housing/shelters/schools: inconsistent acceptance in shelters/housing/schools can force unsafe choices; national ID and access standards are needed.
- Victim-survivor access: limited access to trauma-informed clinicians
- Data gaps: record animal role/tasks/outcomes, not only diagnoses.

Recommendation 17: Provide Whole-of-life funding clarity by listing funded costs items when an assistance animal is in plan to prevent misclassification as “pet” costs and avoid “pet cost” disputes : training (initial & ongoing), handler training, insurance (including public liability), veterinary care, specialist diets, equipment, travel, maintenance, and replacement at retirement—
Note: The NDIS site already recognises extra maintenance costs but practice is inconsistent.

Recommendation 18: Guarantee trauma- and neuro-informed access by prioritising safe-exit pathways with nationally recognised ID and complaint pathways for victim-survivors with assistance animals (emergency accommodation with AA access) and require public systems

³ https://www5.austlii.edu.au/au/legis/cth/consol_act/dda1992264/s9.html

⁴ <https://assistanceanimalsdisabilityrights.wordpress.com/differences-across-australia>

⁵ <https://www.sciencedirect.com/science/article/pii/S0272735825000881>

(schools/hospitals/shelters) to comply with AA access laws. Note: consider **US/UK/NZ** access practice.

Recommendation 19: Ensure cultural safety and accessible complaints/education pathways.

Provider/Clinician/Researcher prompts

Length of use?

Recommendation 20: More than 12 months and until specific outcomes are achieved/maintained (e.g., “no injurious falls for 12 months,” “reduced emergency presentations for hypoglycaemia,” “sustained community participation at target frequency”).

Long working partnerships are typical internationally (ADA/NZ)⁶.

How often?

Recommendation 21: Daily baseline support with task-driven variability; include scheduled rest and retirement planning with welfare consistent with animal-welfare standards.

Recommendation 22: Recommend assistance animals where function-matched goals are unmet by alternatives (e.g., persistent falls despite aids; recurrent hypoglycaemia unawareness despite CGM; trauma symptoms limiting community access).

Recommendation 23: Do not recommend assistance animals where 1) handler capacity/welfare cannot be ensured as the risks outweigh the benefits, or goals are better met by simpler/safer alternatives. Use of a multidisciplinary assessment is required.

Who should provide/train/manage and qualifications?

Recommendation 24:

- **Provide:** either person-supplied or provider-supplied so long as the team meets national standards and passes an independent PAT.
- **Train:** owner-trainer, specialist trainer, or blended and the assessment, must be independent and nationally consistent.
- **Ongoing Management:** the person where possible, with carers/ support workers/specialist trainers as needed.
- **Qualifications/Regulation:** nationally consistent training organisations, national PAT assessors, and a national identity card/logo.

⁶ <https://www.ada.gov/resources/service-animals-2010-requirements>

Safety (observed/adverse events)

Primary issues are access disputes, jurisdictional certification gaps, and service exclusion rather than animal behaviour where PAT standards are met.

Recommendation 25: Consistent National welfare standards and regulation as key controls to reduce complaints and improve predictability.

Alternative supports

Recommendation 26: Select alternative supports only where function-matched alternatives are as effective in terms of long-term sustainability. Use blended packages where optimal.

Grey literature to consider

Recommendation 27: Refer jurisdictional materials (e.g., QLD GHAD Act), DRO submissions, DDA guidance, and technical/clinical documents on medical-alert reliability, mobility outcomes, and DCD participation-oriented interventions.

OTHER RECOMMENDATIONS

The following are specific policy points the consultation should address so as to ensure an integrated and accountable ecosystem.

Recommendation 28: Adopt and fund the National Assistance Animal Framework (implementation vehicle)

The draft National Principles⁷ identify what is needed (national trainer accreditation, **single national PAT**, identity card), but not how to **implement and fund** a coherent framework across jurisdictions and the NDIS. A framework should include:

- Nationally recognised independent PAT and assessor accreditation.
- Mutual recognition across states/territories (solve NSW/VIC/TAS/NT gaps).
- National identity card/logo and uniform evidence standards for frontline staff.
- NDIA data standards (to capture animal type/role and tasks, and outcomes).

Recommendation 29:

Fund Australian studies as a research priority on **mobility outcomes** for brace/stability dogs and **medical alert reliability** using device benchmarks (e.g., CGM), and on **Autistic/ID cohorts with PTSD** where assistance dogs may be enabling supports.

⁷ <https://engage.dss.gov.au/assistance-animal-national-principles>

Recommendation 30: Undertake an assessment to have international alignment with US ADA (dogs + reasonable accommodation for miniature horses), UK Equality Act treatment of assistance dogs as auxiliary aids, and NZ Disability Assist Dog certification (authorised organisations with national public-access rights).

Recommendation 31: Commitment to the review of this policy position on a regular basis given some areas are emerging.

4 EXERCISE PHYSIOLOGY

4.1 Overall Sentiment and Context

Exercise Physiology (EP) is a tertiary-qualified allied-health support that delivers graded, clinically supervised programs addressing neuromotor, musculoskeletal, cardiometabolic and sensorimotor impairments to improve activity and participation. For Autistic people and people with Intellectual Disability—especially where Developmental Coordination Disorder (DCD) and Klinefelter’s syndrome (XXY) co-occur—EP prevents deconditioning, reduces falls and injury, and enables sustained participation in daily life and community activities. Consistent with the NDIS Act and Federal Court guidance, eligibility must be impairment-based, not diagnosis-gated. “Wait-and-see” approaches risk regression (Damiano, 2021).

Context

De Roubaix (2024) reported that **90% of Autistic children** met the diagnostic criteria for Developmental Coordination Disorder (DCD) (DSM-V), an underrecognised motor coordination disorder which is the result of abnormal neurological maturation and alterations in brain activation leading to poor motor performance and difficulty with motor skill mastery (Castellucci & Singla, 2024).

According to longitudinal prenatal studies, individuals with Klinefelter’s Syndrome have a genetic predisposition to Developmental Coordination Disorder with Verri et al., 2010 identify that up to 80% have Developmental Coordination Disorder (DSM-V), and balance difficulties.

In addition, there are co-morbidity factors that need to be considered, especially during and post-puberty as Verri et al., stated:

“as the complexity of motor action increases, difficulties in motor planning become evident. The association of poor coordination and motor slowness, together with a reduced muscle mass and elongation of the limbs, results in poor athletic ability, more evident during adolescence”.

In Ross et al. 2009, the authors state that those with Klinefelter’s Syndrome on average have greater motor impairment in gross motor function and coordination, especially in running speed, bilateral coordination, and strength. They continued by stating that those with Klinefelter’s experience greater pervasive motor impairment than typically developing boys (46XY), and boys with other Sex Chromosome Variations (47XYY, Jacob’s Syndrome). Verri et al, found that for boys with Klinefelter’s, motor incoordination appears to resemble a more severe form of Developmental Coordination Disorder, with younger children’s motor deficits more pronounced, similar in terms of a typically developed older adolescent with DCD. Given the high prevalence of

Autistic people, particularly children with this condition or with similar dual diagnostic presentations, are more likely to be denied support for motor functioning due to assumptions that their difficulties with exercise stem from sensory issues, cognitive rigidity, behavioural challenges, or social difficulties attributed to autism, rather than being caused by underlying anatomical or physiological impairments.

It is imperative that the Agency and the EAC assess supports based on the six impairment types outlined in the NDIS Act, rather than relying on a singular diagnosis to deny support to individuals with multiple impairments. DCD involves neurological, physical, and sensory (proprioceptive) impairments, and as such, anyone with this diagnosis should be entitled to support that addresses these impairments and their comorbidities, rather than being restricted based on the presence of Autism.

The identification of diagnoses remains important for guiding therapeutic intervention planning and tailoring approaches to individual needs. However, it should not be the sole determining factor in accessing support, especially when multiple impairments are present, as in cases of DCD and Autism.

4.2 International best-practice guidelines

The International Clinical Practice Recommendations on Developmental Coordination Disorder (CPR-DCD) highlight a shift in the effectiveness of intervention strategies. Historically, early interventions for DCD primarily focused on reducing impairment and improving **body function and structure**, which were categorised as **process-oriented** or **task-oriented** approaches. These approaches aimed to address the underlying performance problems by improving basic motor skills, strength, and coordination. While such interventions have shown some benefit in reducing impairments, research indicates that they tend to be less effective when applied in isolation.

More recent studies have demonstrated that integrating **task-oriented** approaches with **activity-oriented** and **participation-oriented** interventions leads to better outcomes. In these newer approaches, the primary focus shifts from merely improving body function to also enhancing **performance** in specific activities and increasing **participation** in everyday life situations.

This more holistic approach addresses not only the impairment itself but also the practical implications of motor difficulties, helping individuals with DCD better engage in their daily routines and activities.

The CPR-DCD now categorises interventions based on the primary level of focus, in line with the **International Classification of Functioning, Disability, and Health (ICF)** framework:

1. **Body function and structure-oriented** interventions aim to improve foundational physical and neurological functions.

2. **Activity-oriented** interventions focus on improving specific performance skills needed for functional tasks.
3. **Participation-oriented** interventions work to increase participation in life activities, supporting independence and inclusion.

This shift in intervention philosophy underscores the importance of a comprehensive, individualised approach to supporting DCD. Interventions that address not just the physical impairments but also the functional skills and social participation of the individual are essential for long-term success and meaningful improvement in quality of life.

Evidence highlights the ‘wait and see’ approach has been demonstrated to not work with DCD and Cerebral Palsy, and can result in decline when consistency of support is reduced (Damiano, 2021).

Tal-Saban & Kirby (2018) **Adulthood in Developmental Coordination Disorder (DCD): a Review of Current Literature Based on ICF Perspective** recommended as part of an interdisciplinary model of practice for DCD intervention should include sports coaching and the prescription of exercise targeting these participation needs, while accounting for an individual's motor and non-motor aspects. This, while understanding the pathophysiology of how these conditions impact the bodies function are essential and more beneficial in these cohorts.

Hence substituting a tertiary qualified professional who has completed a 4-year degree for a personal trainer or support worker does not understand the complexity of the neuromotor difficulties in DCD will lead to stagnation or regression. In addition, once factoring the co-morbidity in Klinefelter's it is essential to ensure this professional oversight.

This further reinforces the need to focus on the **impairments** rather than the *diagnoses*, which is in alignment with NDIA's focus on needs assessments.

A diagnosis is made after assessing the severity and pattern of specific symptoms. Impairments do not arise because a diagnostic label is applied, and conversely, the absence of a diagnosis does not invalidate a person's disability. Each diagnosis reflects a distinct and functionally significant impairment.

However, it is the cumulative effect of the underlying co-occurring symptoms and their overarching impairment that results in profound motor difficulties and barriers to an individuals' participation in everyday activities in DCD.

Impairments interact collectively, and symptoms or diagnoses within the one impairment interact synergistically, not independently, meaning the presence of one exacerbates the impact of the others.

As outlined in *Mulligan v NDIA* (2015) FCA, disability is the overall effect of impairments on an individual's ability to participate in personal and community life. In *NDIA v Davis* (2022) FCA, the Court ruled: “*While the decision-maker may take into consideration medical diagnoses that have been made in respect of the person as an indicator that they might have certain impairments, this does not complete the decision-maker’s task” and it is not helpful or necessary “about precisely which ‘conditions’ a participant “has, or those which should be taken into consideration.”*

While diagnoses are being used to ensure that supports are targeted, therapeutic, and beneficial, as required under **s34(1)(c)** of the NDIS Act, they must not be the sole basis for determining applicability in a needs assessment. When motor impairments are multifactorial and interdependent, diagnostic clarity is critical for health professionals in designing holistic and effective support plans that facilitate participation, reduce risk, and promote independence.

However, the focus for the EAC must be on the category, or categories of impairments that necessitate support recommendations, rather than on a rigid diagnostic label. The narrow list of diagnoses accessing NDIS forgets other participants, such as people with Sex Chromosome Variations and people with other diagnoses that aren't listed in a drop-down list who have physical disability. This is why the Parliament legislated and the Federal Court ruled that impairment be the determining factor, not diagnosis.

As a result, the interpretation of Question 2 of the Exercise Physiology consultation appears unlawful, with the consultation's emphasis on diagnosis, rather than impairment. It is critical that an emphasis on diagnosis does not occur due to the risk of precluding timely necessary and reasonable supports.

4.3 Case Study: Impact of Diagnostic Bias on Access to Exercise Physiology

A current case before the Administrative Review Tribunal highlights the detrimental effects of diagnostic bias on access to exercise physiology under the NDIS. The child in question, a 12-year-old with multiple co-occurring diagnoses, including **Severe DCD, hypotonia, hypertonia, spasticity, joint hypermobility, muscle weakness**, and Autism, requires 2:1 support due to severe mobility and muscle strength issues. The child is unable to swim independently and, despite years of persistence, has trialled 27 different sporting activities, none of which addressed the multi-systemic challenges arising from their physical, neurological and sensory (proprioceptive) impairments.

Despite attempting personal training, gym programs, strength coaching, and therapies (physiotherapy and occupational therapy), none have been effective in addressing their complex needs. The child's request for exercise physiology was denied solely due to their autism diagnosis, ignoring the broader impairments involved.

This decision has led to social isolation, physical deconditioning, and regression in motor skills. Ultimately this not only causes harm to the participant but impacts the sustainability of the NDIS as it will cost more in the long-run - the very thing the NDIA is attempting to address with the new planning framework.

When the child had access to exercise physiology as part of a multi-disciplinary approach consistent with CPR-DCD guidelines, they showed significant progress. This case underscores the need to focus on impairments, not diagnostic labels, and to ensure individuals receive the appropriate support based on their functional needs, rather than restrictive, label-based criteria.

The Exercise Physiology in this case is a delegated model of care under the paediatric physiotherapist because of the complexity and inability to master skills.

4.4 The Role of Exercise Physiology in DCD Intervention

For children like this case example, exercise physiology plays an essential role in identifying appropriate, sequentially taught, participation-oriented activities that they can engage in. However, the primary barrier to an individual with DCD's capacity to participate in field and court sports lies in the design of these activities. Many sports, such as soccer, tennis, Auskick, and OzTag, require participants to meet baseline physical capacity demands before skill acquisition can occur.

For instance, if a child struggles with balance or has atypical ambulatory capabilities (such as difficulty generating the necessary power through their lower limbs to jump, land, or stabilise a leg while the other swings), there is an inherent barrier to effective participation. This means they're often denied the opportunity for motor learning across a variety of activities—critical for skill development. This is the clinical understanding that an exercise physiologist brings to the table.

As a result, children with DCD often experience significantly reduced participation in these sequentially-taught sporting activities, which, as best practice guidelines identify, is not effective for motor learning and retention. Without this expertise, many children with DCD miss out on learning opportunities that would enhance their physical abilities and increase their overall participation in physical activities. This lack of engagement leads to long-term sedentary-related health complications, lower independence, greater motor impairment, and social isolation.

4.5 Why Standardised Measures Fall Short in DCD

The non-linear progression of DCD means that both improvement and regression in motor skills are common, and this variability requires a nuanced, individualised approach to intervention. Given that DCD affects approximately 90% of Autistic individuals and around 5% of the general population, measuring the effectiveness of interventions requires a nuanced, individualised approach.

The **International CPR-DCD** specifically cautions against relying solely on standardised measures to assess effectiveness, as these tools do not account for the complexity and variability of the impairment. They emphasise the necessity of clinical input and family-reports to ensure that interventions are tailored to each individual's specific impairments and needs, allowing for a more accurate and functional assessment of progress and outcomes.

For instance, Tan et al. (2022), in their Arvo Ylppö longitudinal study, concluded that standardised measures such as the Beery VMI lacked the sensitivity required to assess DCD. Their findings align with the International CPR-DCD, which states that such tests "*may not capture the transfer of skills to complex situations and the level of automaticity needed in everyday life.*" These assessments often fail to reflect the dynamic nature of motor coordination impairments that individuals with DCD experience as they navigate different environments and contexts.

International CPR-DCD Recommendation 33:

"We recommend that formal standardised outcome measures are used for assessment, and are repeated at the end of intervention or at least every 3 months if intervention is longer, to evaluate the effects of an intervention programme and goal attainment and to determine whether further intervention is required.

We recommend to evaluate intervention effects using psychometrically sound outcome assessment tools that capture the levels of both activities and participation.

We also recommend other evaluation sources including clinical examination, the child's self-report, family report, teacher/kindergarten reports, questionnaire information, activity monitoring, etc."

Therefore, exercise physiology, distinct from physiotherapy, is considered a crucial element of best-practice DCD intervention in ameliorating the impact of this motor impairment. This is particularly critical for children with severe DCD (with a Movement ABC composite score below the 0.5th percentile) (Poulsen et al., 2007), where specialised and consistent intervention is necessary to address the multifaceted nature of the diagnosis and to improve functional outcomes in everyday activities. Integrating exercise physiology into the intervention offers a tailored, holistic approach that not only targets neurological, physical, and sensory (proprioception) impairments but also enhances participation and overall quality of life. This comprehensive model of care is in line with the International CPR-DCD guidelines, which advocate for participation-oriented interventions and multi-disciplinary collaboration to achieve the best results.

This support should be available to any participant whose impairment results in difficulties participating in physical activity, as this encompasses a broad range of conditions that cannot be fully captured by a diagnostic label alone.

The complex, multifaceted nature of many impairments, whether neurological, musculoskeletal, or a combination of factors, such as sensori-motor integration impairments means that the focus of the EAC should be on the specific impairments and functional limitations that impact a participant's ability to engage in physical activity. Relying solely on diagnostic categories risks overlooking the nuanced needs of individuals, which is why the EAC must prioritise impairments as the determining factor for access to support, ensuring that interventions are tailored to each participant's unique functional requirements, not just one of their diagnoses and assumed limitations or behavioural traits.

4.6 Choice & Control to Participate in Activities Involving Risk

Section 118 of the NDIS Act specifically states the Agency must “*ensure that a reasonable balance is achieved between safety and the right of people with disability to choose to participate in activities involving risk.*” All activities inherently carry some level of risk. Simply denying a support because it may cause harm goes against the legislated core functions of the Agency. The statutory threshold for intervention is whether harm is **likely** to occur, and equally important, whether that harm is **unreasonable** in the context of the individuals' right to make choices about their participation.

In the context of DCD and or SCV in Autistic individuals, or anyone with a dual diagnosis of these conditions, the risk of not including interventions like exercise physiology or other tailored support far outweighs the potential risks of participation. Denying access to physical activity or exercise interventions tailored to their needs can exacerbate the motor coordination difficulties, physical health issues, and neurological impairments these individuals face, potentially leading to greater long-term harm. Therefore, it is crucial that such interventions be included as part of a holistic approach to care and support.

"I applied for a weighted blanket, only to be told it was likely to harm me, despite the fact that deaths related to its use were attributed to misuse, not the product itself. When I lodged a Freedom of Information request to understand the decision, I learned that the NDIA had applied the same risk matrix to me as they would to a toddler, except I'm a middle-aged adult. The assumption that I am incapable of reading safety instructions or determining my own best interests, simply because I'm Autistic, is deeply troubling. This decision dismisses not only my ability to make informed choices, but also my right to autonomy and safety in the face of a well-researched, widely used product. It also raises concerns as to why the NDIA felt they were better placed to make a decision than both a practitioner with scope of practice and the person with lived experience" Lived Experience, Adult.

In summary, the key takeaways are:

- **Prevalence/under-recognition:** High rates of DCD in Autistic cohorts; XXY (Klinefelter's) and XYY (Jacob's Syndrome) cohorts also show pronounced motor impairment and balance issues.

- **Why mobility dogs matter:** For severe DCD/XXY presentations, brace & stability dogs can maintain safe ambulation, reduce falls and prevent deconditioning—benefits that single-task checklists miss. Hence some supports are “*as well as*” rather than “*either/ or*”.
- **Best-practice approach (ICF-aligned):** Shift from impairment-only to activity- and participation-oriented interventions; combine task-oriented training with exercise physiology programs targeting real-life participation.
- **Measurement cadence:** Use psychometrically sound outcomes focused on activities/participation, repeated at end of intervention or at least every 3 months for longer programs; complement with clinical observation, self/family/teacher reports, and activity monitoring.
- **Workforce point:** Accredited exercise physiologists for DCD/XXY neuromotor complexity should not be substituted by generic fitness services; professional oversight is essential.

4.7 Recommendations

Recommendation 1: Provide EP services based on the specific functional impairments an individual experiences (e.g., motor coordination, sensory issues), rather than relying on a formal diagnostic label like autism or DCD.

Recommendation 2: Create a process that ensures that there is not bias and eliminates assumptions. (For example, do not assume that an individual’s inability to participate in activities is solely due to behavioural or cognitive issues, especially when there are underlying physical or sensory impairments).

Recommendation 3: Apply International Clinical Practice Guidelines to ensure interventions reflect the individual’s unique needs, in line with the most relevant International Best-Practice Guidelines, such as those for DCD, focusing on a holistic, person-centred approach in neurodiverse cohorts.

Recommendation 4: Recognise non-linear prognostic trajectory in neurodiverse people.

Recommendation 5: Base outcomes on both standardised, and non-standardised measures.

Recommendation 6: Understanding of, and Implementation of PDA-informed guidelines for the unique needs of Autistic people with Pathological Demand Avoidance.

Recommendation 7: Acknowledge that Autistic children, adolescents and adults have the same right to participate in activities involving risk as able-bodied persons.

4.8 References

- Blank R, Barnett AL, Cairney J, Green D, Kirby A, Polatajko H, Rosenblum S, Smits-Engelsman B, Sugden D, Wilson P, Vinçon S. International clinical practice recommendations on the definition, diagnosis, assessment, intervention, and psychosocial aspects of developmental coordination disorder. *Dev Med Child Neurol*. 2019 Mar;61(3):242-285. doi: 10.1111/dmcn.14132. Epub 2019 Jan 22. PMID: 30671947; PMCID: PMC6850610.
- Castellucci G, Singla R. Developmental Coordination Disorder (Dyspraxia). 2024 Feb 24. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. PMID: 38753903.
- Damiano DL. Early identification and intervention in developmental coordination disorder: lessons for and from cerebral palsy. *Dev Med Child Neurol*. 2021 Jun;63(6):630. doi: 10.1111/dmcn.14829. Epub 2021 Mar 8. PMID: 33686677.
- De Roubaix A, Roeyers H, Van Waelvelde H, Bar-On L. Social responsiveness in children with developmental coordination disorder. *Braz J Phys Ther*. 2024 Jan-Feb;28(1):100591. doi: 10.1016/j.bjpt.2024.100591. Epub 2024 Feb 9. PMID: 38394720; PMCID: PMC10899025.
- Poulsen AA, Ziviani JM, Cuskelly M, Smith R. Boys with developmental coordination disorder: loneliness and team sports participation. *Am J Occup Ther*. 2007 Jul-Aug;61(4):451-62. doi: 10.5014/ajot.61.4.451. PMID: 17685178.
- Ross, J., Zeger, M., Kushner, H., Zinn, A., Roeltgen, D. (2009). An Extra X or Y Chromosome: Contrasting the Cognitive Phenotypes in Childhood Boys in Boys with 47,XXX Syndrome or 47,XXY Syndrome. *Developmental Disabilities Research Reviews*,
- Tan JLK, Ylä-Kojola AM, Eriksson JG, Salonen MK, Wasenius N, Hart NH, Chivers P, Rantalainen T, Lano A, Piitulainen H. Effect of childhood developmental coordination disorder on adulthood physical activity; Arvo Ylppö longitudinal study. *Scand J Med Sci Sports*. 2022 Jun;32(6):1050-1063. doi: 10.1111/sms.14144. Epub 2022 Feb 24. PMID: 35178792; PMCID: PMC9306991.
- Verri, A., Cremante, A., Clercici, F., Destefani, V., & Radicioni, A. (2010). Klinefelter's Syndrome and the psychoneurological function. *Molecular Human Reproduction*, 16(6).

5. SMART HOME APPLIANCES (cooking, cleaning, gardening)

5.1 Overall Sentiment and Context

Smart home appliances can transform independence for people with disability—especially Autistic people and others with cognitive, sensory, or physical access needs.

They are not luxuries but assistive technologies that reduce cognitive load, sensory distress, physical effort, and reliance on paid supports.

A neuro-affirming, trauma-informed, and technically robust approach is essential; success should be measured by lived outcomes (independence, safety, dignity) as well as standards compliance. This will become more prevalent as technology evolves where it can be a human partner.

Hence the Evidence Advisory Committee (EAC) should recognise these devices as *reasonable and necessary supports* under the NDIS when they demonstrably enable a person to live safely, independently, or with reduced support.

In summary, smart home appliances exemplify low-cost, high-impact supports that enhance autonomy, dignity, and participation—especially for Autistic people. When combined with robust safety, privacy, and accessibility standards, they deliver outcomes that are both human-centred and fiscally responsible.

Some of the consultation bias and omissions that are evident for further consideration are:

1. Too narrow a scope: excludes controllers/apps integral to accessibility.
2. No cybersecurity/privacy lens: add explicit questions on update policies and data handling.
3. Physical-safety bias: expand to include *digital* safety (hacking, surveillance).
4. No sustainability focus: require durability and repairability metrics.
5. Limited equity lens: include questions on digital literacy, remote access, language, and socioeconomic factors.
6. Lack of consideration of CRPD Article 4 (universal design: minimum adaptation, least cost, wide availability).

Article 4; State parties shall:

“undertake or promote research and development of universally designed goods, services, equipment and facilities, as defined in Article 2 of the present Convention, which should require the minimum possible adaptation and the least cost to meet the specific needs of a person with disabilities, to promote their availability and use, and to promote universal design in the development of standards and guidelines”.

Hence Article 4 promotes the use of universally designed assistive technologies to support disabled persons. The rationale of universal design according to the United Nations, is that universally designed supports promote availability, access and reduce cost, rather than generally relying on support specifically designed for disabled persons, unless there is no alternative.

5.2 Scope Clarification

The consultation’s definition should explicitly include:

- Cooking, cleaning, and gardening appliances *and* their controllers and access pathways (voice assistants, smart displays, apps, switches, automations).
- Interoperability standards (e.g. *Matter 1.4*) to ensure devices work locally and reliably, not only via the cloud.
- Safety and cybersecurity baselines, aligning with
 - *IEC 60335-2-107* (robotic lawn mowers) and *IEC 60335-2-2* (robot vacuums)
 - *ETSI EN 303 645 (2024)* – consumer-IoT security
 - Australian Privacy Principles (APP 1, 5, 6, 11).

Without these frameworks, participants risk unusable, unsafe, or insecure devices.

5.3 Benefits and Outcomes

1. Functional & Psychological Benefits

- Executive-function support: task sequencing, reminders, time management.
- Sensory regulation: quieter, predictable, automated environments reduce overload.
- Safety: auto-shutoff, reduced falls, burns, and fatigue.
- Trauma-informed autonomy: automation allows privacy and control, minimising intrusion from external helpers.
- Family and carer wellbeing: reduced carer stress, more consistent household routines.

2. Economic & Systemic Benefits

- Once-off appliance costs (\$400–\$800) can replace multiple weekly hours of domestic assistance, yielding significant NDIS savings.
- Prevents escalation into crisis or higher-cost residential supports.
- Smart gardening and hygiene tools maintain health and home safety between service visits.

3. Environmental and Sustainability Outcomes

- Track energy and e-waste impacts to ensure net benefit.
- Mandate repairability and spare-parts access to extend lifespan.

5.3 Barriers and Evidence Gaps

1. Funding misconception: devices wrongly labelled “standard household items.” Function—not form—determines disability relevance.
2. Digital inequity: rural connectivity, app inaccessibility, language barriers, and rental restrictions.
3. Data & cybersecurity: camera-mapping vacuums, cloud-linked ovens, and mowers with GPS require privacy safeguards.
4. Wildlife/pet safety: ensure daylight operation, pivoting blades, animal-detection systems per IEC 60335-2-107.
5. Lived-experience evidence undervalued: participant testimony often discounted compared with clinical literature.

5.4 Suitability

When are these suitable? *(as per the consultation survey question):*

- Clear **disability nexus** (executive function, sensory regulation, fatigue/mobility, safety). For instance, recommend smart appliances when:
 - **Executive-function** barriers (initiation, sequencing, time blindness).
 - **Sensory** sensitivities (quieter/predictable routines reduce overload).
 - **Motor/fatigue** limits (reduced physical effort; safer handling).
 - **Trauma-informed autonomy** (less intrusive support).
 - **Hygiene/home safety** maintenance between visits.
 - They demonstrably **substitute/reduce** paid domestic support while **improving safety**.
- **Interoperability** (e.g., **Matter**) and **local control** for reliability/privacy.
- **Accessible interfaces** (voice, switch, AAC, screen-reader).
- **Rural/remote** or limited supports: automation sustains hygiene/safety **between visits**.
- Prioritise **adaptation** over exclusion (e.g., local-control models, physical zoning).
- Creates independence, enables dignity of risk and provides privacy.

When are these not suitable / risks *(as per the consultation survey question):*

- No daylight window for heavy risky equipment such as mowers;
- No secure network: devices without update commitments and are unachievable with best endeavours;
- Where a simpler adaptation **fully** achieves goals without unreasonable risk and does not compromise sustainability of long-term outcomes).

Qualifications/regulation *(as per the consultation survey question):*

Assessors/prescribers should be **AT-competent allied health** (e.g., OT), with vendors required to declare **safety standard compliance, security update lifecycles, local-control capability, and repairability/spare parts** access.

Safety

Yes: Issues typically arise with **non-compliant** devices, **poorly secured** networks, or lack of training. Mitigations: **baseline standards, local-first control, strong authentication, no-go zones**, and annual checks.

Alternative supports

Manual appliances with **supervision, timers/checklists, home-mods, and support-worker assistance**. These can complement but often **do not substitute** automation for executive-function, safety and fatigue outcomes.

Accessibility:

- **Access:** rural supply and service constraints; include **telehealth** advice and **travel loadings**.

- **Costs:** fund **purchase/lease**, installation, training, **integration**, **annual safety/cyber checks**, and repairs.
- **Package fit:** Home & Living with measurable **outcomes** (incidents, paid hours, QoL, energy).
- **Equity:** language options, culturally safe training, rental-safe installs.

Grey literature / technical sources

- **Professional journals:** Disability & Rehabilitation: Assistive Technology; ACM CHI (accessibility); IEEE Pervasive Computing.
- **Conference publications:** AAATE, RESNA, CSUN Assistive Tech, CHI (accessibility tracks).
- **Technical documents:** IEC 60335-2-107 (robot mowers), IEC 60335-2-2 (robot vacuums), ETSI EN 303 645 (consumer-IoT security), Matter interoperability specs.
- **Policy/guidelines:** Australian Privacy Principles (APP 1,5,6,11); CRPD Art. 4 (universal design); state consumer-device security guidance.
- **Other:** IDDSI for dysphagia texture safety in kitchen use cases.

5.5 Special Topic - Kitchen Appliances & Oromusculature/Dysphagia Safety

Context. ARFID often co-occurs with autism; DCD and Klinefelter's (XXY) cohorts show higher oropharyngeal dysphagia due to motor incoordination, reduced muscle mass and lower oromotor strength. Historically, feeding difficulties have been misattributed solely to sensory factors, masking motor-based impairments. In individuals with SCV, many first receive an autism diagnosis, causing their oromotor difficulties to go undetected. This diagnostic-label bias and the assumption that feeding issues are due to sensory avoidance in all Autistic people undervalues the need for life-critical support in those with these co-morbidities, delaying timely and essential kitchen appliances essential for feeding and swallowing safety.

Smart kitchen appliances as AT.

- **Food processors/blenders:** High-quality, durable appliances that ensure repeatable, precise accuracy in creating IDDSI-compliant textures reducing the risk of aspiration and choking, and promoting safe, reliable home nutrition.
- **Programmable/induction cooking:** precise temperatures, timers, **auto-shutoff** to prevent burns/boil-over/over-cooking.
- **Carbonation devices:** when clinically appropriate, **sensory-rheology** properties can improve swallow efficiency for some users.
 - Turkington L, Ward EC, Farrell A, Porter L, Wall LR. Impact of carbonation on neurogenic dysphagia and an exploration of the clinical predictors of a response to carbonation. Int J Lang Commun Disord. 2019 May;54(3):499-513. doi: 10.1111/1460-6984.12458. Epub 2019 Feb 7. PMID: 30729616.

Refer Appendix 1 for more information.

5.6 Recommendations

Recommendation 1: Recognition of smart appliances (with controllers/apps) as legitimate disability supports when they provide safety, autonomy, or reduced support dependence.

Recommendation 2: Align definition of ‘standard’ for NDIA’s Operational Guidelines to the Australian Oxford Dictionary ordinary meaning, which denotes *“the ordinary quality or design of a product without added or novel features,”* or *“a benchmark that others conform to”*. Therefore basic appliances without added features that do not address the individual’s impairments are not funded, while universally designed goods with additional features that reduce disability are.

Recommendation 3: Procurement Standards – Require vendors to meet IEC 60335, ETSI EN 303 645, and APP compliance.

Recommendation 4: Funding & Implementation – Support purchase/lease, installation, training, integration, and annual safety/ cyber checks, within Home & Living supports. Also include sustainability: require repairability, spare-parts access, and e-waste plans.

Recommendation 5: Interoperability & Accessibility – Mandate open-standard (Matter-compatible) and accessible control (voice, switch, screen-reader, AAC).

Recommendation 6: Outcome Tracking – Measure independence, reduction in care hours, participant-rated quality of life, safety incidents, and energy use.

Recommendation 7: Evidence Framework – Weight lived experience alongside clinical and technical evidence; include neuro-affirming, trauma-informed evaluation criteria.

Recommendation 8: Environmental Responsibility – Promote repairability, recycling, and minimal energy rebound effects.

Recommendation 9: Broaden the definition to include the full smart-appliance ecosystem.

Recommendation 10: Adopt minimum safety/cyber/privacy baselines.

Recommendation 11: Embed lived experience in evidence evaluation.

Recommendation 12: Acknowledge ‘Sensory’ has multiple definitions to Autistic people.

6 CONCLUSION

We thank you for the opportunity to respond and amplify the voices of Autistic and Autism community stakeholders in this consultation.

We trust that the insights and recommendations presented in this submission will inform the development of policies and practices that prioritise the well-being and success of people with disability. We are committed to working with the Australian Government to achieve this outcome.

With the changing policy landscape and a more integrated and interconnected government system emerging we encourage the EAC to remain open to facilitating any additional related matters that may arise during the course of investigation that are outside of their current scope.

We also encourage with the continuously evolving landscape, including the Implementation Phase of the National Autism Strategy and the National Health and Mental Health Roadmap on Autism due to commence shortly that there is an assessment as to opportunities to interface and also a continuous improvement evaluation to occur, with emerging research and evolving practices shaping the field.

We welcome any invitation to speak further with the NDIS EAC.

Please do not hesitate to contact us with any queries or requests for further information.

Contact:

Jenny Karavolos (she/her), Co-chair, Australian Autism Alliance

E: chair@australianautismalliance.org.au | jenkaravolos@outlook.com

Richard Bradley (he/him), Australian X & Y Spectrum Support

E: contact@axys.org.au

APPENDIX 1: Smart kitchen appliances as AT.

In the past, texture modification strategies, such as thickening foods or liquids, were used to slow the swallow process, giving the body more time to respond and reduce the risk of choking. However, advances in food rheology (the study of how food and fluids break down during swallowing) have led to a deeper understanding of how food sensory properties can influence swallowing. Modern research suggests that increasing the sensory perceptible properties of food (such as its texture, temperature, and consistency) can enhance **neuromotor responses**, such as in the case of carbonation ultimately improving the efficiency of the swallowing process, and reducing the risks associated with dysphagia.

A letter from the NDIS CEO, confirms that a carbonation device is an eligible NDIS support, while clarifying that carbonation devices are distinct from water aerators—the latter being primarily used in aquariums, where they infuse a mix of gases but do not alter the texture of water. In contrast, a carbonation device infuses carbon dioxide (CO₂) into the water, which changes its texture and makes it suitable for safe swallowing.

These smart kitchen appliances can therefore enhance **independence, safety**, and overall **quality of life**, particularly for individuals who face physical, neurological, and sensory (proprioceptive) challenges related to swallowing and feeding.

Because accuracy and daily duty cycles matter, higher-grade food processors/blenders—offering durability, precision, and serviceability—are essential, particularly in regional and rural areas where meal-prep services may be unavailable. Even with support workers, device precision is crucial to sustain life and ensure safety. While these devices reduce the risk of aspiration and choking, supervision is still required. The precision necessary to create IDDSI-compliant, texture-modified diets cannot be reliably achieved without automated devices.

People with dysphagia do not typically rely on basic models of kitchen appliances but instead use advanced, high-grade devices that are designed to withstand daily use and provide superior accuracy in food preparation. This is essential because the International Dysphagia Diet Standardisation Initiative (IDDSI) outlines strict guidelines for food preparation, ensuring it meets very specific requirements to support safe swallowing. These requirements were established based on extensive research, including international autopsy reports documenting preventable deaths from choking. The advanced appliances used by individuals with dysphagia are specifically engineered to meet these rigorous standards and to ensure that food is prepared in a way that minimises the risks of aspiration and choking.

AXYS members in regional and rural Australia report they cannot access IDDSI food delivery or food preparation services due to location. Therefore, being able to prepare these foods at home is essential. Even if a support worker was there this assistive technology and its higher accuracy is essential in sustaining life.

Universal Design and Safety as a Primary Outcome

The current Smart Home Devices assessment framework narrowly defines the outcomes of such devices, primarily focusing on independence. While independence is important, safety should be considered a primary outcome—not merely an ancillary benefit.

For example, a Zip Hydrotap (carbonation device), like food processors and blenders, automates the preparation of texture-modified foods and fluids, which is critical for safe swallowing.

The current questioning in the Smart Home Devices assessment does not adequately capture safety as an essential outcome, which is fundamental for people with dysphagia and other complex impairments. Universally mass-produced kitchen appliances with novel or additional features reduce costs, ameliorate disability and in some cases save lives.