Special Purpose Strollers

Clinical Rationale Document







Includes:

- Piper Comfort
- Corzino
- Multiroller
- Duro
- Kool Stride
- BINGO Evo Mini
- BINGO Evo
- BINGO Spex
- BINGO Switch

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Product Information

Special Purpose Strollers are strollers designed to meet the unique requirements of individuals with a disability or medical condition. This means they have additional features that do not exist in mainstream/standard strollers. For example:

- Additional postural support beyond what is provided in a mainstream/standard stroller: lateral trunk supports, head support, tilt in space, back recline, 2- or 4-point pelvic belt, anterior chest support, angle adjustable foot support, growth adjustable backrest height and seat depth.
- Reduced access buckles for 5-point harnesses and pelvic belts – this includes standard buckles covered by a fabric pouch, anti-escape buckles, and pen popper buckles.
- Capacity to store essential medical equipment on the stroller to facilitate community access – this includes medical device storage trays, IV poles and oxygen bottles.
- Forward or rearward facing seat unit – a rearward facing seat unit can be helpful for those users requiring a greater degree of supervision due to their disability related support needs (e.g. epilepsy or respiratory support needs).
- A higher weight capacity than a mainstream/standard stroller for users that require use of a stroller for community access beyond the size/weight accommodated in a mainstream/standard stroller.

Mainstream/standard strollers refer to strollers or prams that are purchased from baby supply stores (e.g. Baby Bunting in Australia/New Zealand, other department stores selling baby/infant goods).

Product Application

Individuals who may benefit from a Special Purpose Stroller include those who:

- Have impairment in head or trunk control and require additional postural support for function/health/comfort related goals.
- Have restriction or asymmetry in upper limb, lower limb or spinal range of movement who require specific seating configuration to match their body shape.
- Are at high risk of pressure injury development due to inability to change position and/or skin integrity concerns, requiring specialist functions and features to address this.
- Have respiratory compromise and require supplementary oxygen whilst in the community.
- Have ineffective cough or saliva management and require suction devices to be transported with them in the community.
- Have epilepsy or present with seizures which may require physical management in the community.
- Require feeding equipment or IV medication to be mounted to their mobility device.
- Are unable to walk long distances due to concerns of fatigue, low tone, pain management or falling.
- Have fluctuating mobility impairment and may be unable to walk independently on days of increased symptoms.
- Have reduced environmental/road safety awareness and require support to remain safe in the community and reduce risk of injury from vehicles and other environmental risks.

Functional Assessment

Assessment components to be completed for Special Purpose Strollers:

- Physical measurements (weight, posture assessment).
- Range of motion, gross motor function assessment (including trunk and head control).
- Identification of behavioural and sensory needs relating to the stroller request (if applicable to the client).
- Current method of transfer to/from current community mobility device, and consideration as to whether transfer method/s may change in the future.
- Identification of other user specific requirements – e.g. user requirement for lateral supports, hip belts/ harnesses including whether a reduced access buckle is required, tilt in space, back angle recline.
- Identification of whether user requires use of medical device accessories in the stroller – e.g. IV pole, ventilator or suction machine, oxygen bottle holder, access to communication device.
- Environmental assessment – e.g. consideration to what environments the stroller will be used in, size of vehicle boot if transporting the stroller into the community.

Links to Medifab assessment forms, or third party assessments:

- Medifab Stroller Pre-Assessment Form
- MAT (Page 2 of 'Client Assessment Form - Spex Wheelchair & Seating Clinic')

Assistive Technology (AT) Trial

Medifab recommends that all Special Purpose Strollers are trialled ahead of being prescribed to ensure they address the functional needs of the participant.

Checklist of what should be completed at a trial:

- Trial and functional outcomes: Evaluation of how well the identified stroller option/s meet the identified needs and objectives.
- Duration of trial: Minimum 60 minutes. Where stroller will be used across multiple environments (e.g. home and places in the community), more than one trial is likely to be beneficial to ensure compatibility across multiple environments. The duration and number of trial sessions may be extended, subject to the requirements of the applicable funding body, up to a maximum of one week.
- The participant's tolerance.
- Support required for transfer and using the stroller, including folding and lifting into vehicle boot.
- Risks or barriers identified (e.g. stroller does not fit in all vehicles used for community access, variability in ability of all caregivers to fold and lift the stroller into vehicle boot).
- Any other relevant information (e.g. ability to adapt to changing needs, possibility to hire the stroller while waiting on funding approval).

Examples of outcome measures that could be completed at a trial include:

- COPM (Canadian Occupational Performance Measure)
- Quebec User Evaluation of Satisfaction with Assistive Technology (QUEST)
- Functional Mobility Assessment
- Parent/carer feedback and logs

Risk Assessment

Risk	Risk Mitigation Strategies
Improper postural alignment during everyday activities and/or community access	Use of appropriate seating supports
Carer injury during user transfers or when transferring stroller in/out of vehicle boot	Correct training and safe transfer protocols
User self-removal or unsafe movement	Secure harnessing and accessories to prevent unsafe disengagement
Unable to transport the stroller in vehicle to use in the community	Pre-assessment and trial fitting in family vehicle
Stroller used for occupied transit when not safe to do so	Educate family on safer transport practices. Review user's safe transport requirements, including transfer and special purpose car seat or vehicle harness solutions to minimise occurrences of when user needs to use stroller for occupied transit. Consider/trial special purpose strollers suitable for occupied transit if instances where occupied transit is required are unavoidable. Educate carers on correct tie-down procedure for stroller and wheelchair accessible vehicle.

If a Special Purpose Stroller is not provided, potential risks to the individual/carer are:

- The person may experience deterioration in function of respiratory, bladder and/or bowel system due to postural deterioration.
- The person may be at increased risk of developing pressure injuries due to postural deterioration.
- The person may be unable to attend necessary services or school due to lack of suitable community mobility device.
- The person may be at increased risk of respiratory distress or death when in the community due to not having access to necessarily medical devices.
- The person may be at increased risk of injury or death due to interaction with the environment, particularly near open water, traffic and roads.
- The family may experience increased stress, isolation, or reduced community participation.
- Carers may be at increased risk of musculoskeletal injury due to unsafe transfers of the user or their current community mobility device into their vehicle.

Evaluation of Other Options

List of alternatives to Special Purpose Strollers and why they may not be suitable:

- Standard strollers
  - Often do not provide sufficient postural support for children with disabilities/medical conditions.
  - Standard strollers have smaller safe working loads than special purpose strollers, meaning that some users who require use of a stroller to access the community will be too big to continue using a standard stroller.
  - Minimal to no options for buckle covers or reduced access buckle to meet the needs of users requiring this feature for their community safety.
- Wheelchair
  - Some families prefer the look of a special purpose stroller over a wheelchair.
  - Depending on the make and model of wheelchair, a wheelchair may be more expensive than a special purpose stroller.
  - Some wheelchairs aren't compatible with certain medical device accessories.
  - Specific wheelchair models can be heavy and more difficult to fold to fit in the vehicle boot, limiting community participation opportunities compared to a suitable special purpose stroller.

Standards Compliance

Special Purpose Strollers commonly comply with relevant AT Standards (or ISO AT standards).
Click here to be taken to our standards compliance page.

AT Features

Special Purpose Strollers commonly require additional accessory components/features to make them suitable, usually above and beyond what is included within a base package or unit.

AT Feature	Functional Outcomes
Adjustable lateral supports	Maintains upright posture and reduces risk of adopting asymmetrical posture. More upright to enjoy and experience everyday activities.
Tilt and recline	Accommodates low tone or fatigue, improves comfort and safety. Accommodates limitation in range of movement allowing for functional sitting position.
Head support	Maintains head alignment and airway safety.
Height and angle adjustable foot support	Support surface for feet, providing greater stability to pelvis and trunk to manage posture and fatigue.
Upper limb supports	Support surface for upper limbs, provides greater stability for upper trunk and head to manage posture and fatigue.
Buckle cover or anti-escape buckle	Enhances safety and reduces self-removal by user.
Growth adjustable components	Allows for long-term use and reduces need for frequent replacements. Allows the user to have continued support to access the community.

AT Feature	Functional Outcomes
2- or 4-point pelvic belt	Provides directional and intentional support to the pelvis to promote alignment and reduce risk of postural deformities developing.
Anterior chest support	Provides directional and intentional support to the upper body to promote alignment and reduce risk of postural deformities developing.
Adjustable contouring in seat cushion and back support	Provides ability to customise cushion to influence pressure management, stability and immersion. Beneficial in promoting function, safety and comfort of user.
Mounting for essential medical equipment or communication device	Provides access to essential medical equipment (e.g. suction machine, IV poles, oxygen bottles) to enable user community access and participation opportunities that otherwise may not be possible. User can access their communication device when using the stroller.
Reversible and removable seat	Allows seat unit to be installed rearward or forward facing, depending on amount of supervision required. Allows seat unit to be removed and fitted to compatible indoor high-low base for use as a posturally supportive indoor seat.
Interchangeable front end (BINGO Switch and Multiroller only)	Allows the customer to swap the standard everyday front wheels for an alternative front-end accessory to suit their needs and lifestyle. One stroller covers both everyday footpath use and rougher, off-road terrain, eliminating the need for a second, purpose-built stroller. This is a more cost-effective and space-saving option than owning multiple strollers for different purposes.
Running Wheel Add On (Multiroller), Swivelling Front Wheel Attachment (BINGO Switch base only)	Interchangeable front-end accessories let one stroller base adapt to both everyday footpath use and rougher off-road terrain, removing the need for families to buy, store, and maintain two separate strollers. This reduces cost and equipment burden while supporting consistent participation across varied environments.
Sibling Seat Mount (BINGO Switch base only when used with the BINGO Mini, BINGO Evo, BINGO Spex)	The Sibling Seat Mount attaches to the BINGO Switch frame, allowing a toddler seat or capsule to sit alongside the client's seating system so one caregiver can transport both children together. Without it, the caregiver may need additional support or a second stroller to manage outings, limiting the client's community and family participation – making this a cost-effective solution that directly supports independent caregiving and ongoing participation.
Durable construction	Allows long-term use of stroller and reduces need for frequent replacement as provides durable support to match demands of users' presentation.
High safe working load and growth capacity	Proportionally higher safe working load to size ratio allows users to be supported who sit outside of standard distribution of weight to height ratios.
Transport tie-down points	Allows stroller to be used for occupied transit in a wheelchair accessible vehicle where suitably compatible anchorage points exist in the vehicle. The vehicle seat belt must always be used. The fitment and path of the vehicle seat belt should be suitably assessed to the specific mobility device and vehicle. Note – Occupied transit should only be considered where it is not possible for the client to travel sitting on the vehicle seat (using a mainstream or special purpose car seat when required). This is because the safest place to travel in a vehicle is on the vehicle seat due to the safety systems within a vehicle.

For further support or information please contact our customer support team at supportau@medifab.com