#### ASPREX Fact Sheet

# Mobile commode shower chair

Chair which enables users to shower / engage in a hygiene routine when seated. Consists of a tubular frame, four legs, seat and backrest, with wheels for self-propulsion or castors for assistant propulsion; brakes and a removable waste collection receptacle (pan or bucket) beneath the seat, armrests which may be adjustable and flip up footplates or a sliding footrest. Materials are waterproof, such as rustproof metal, rigid plastic, plastic webbing or padded polyurethane. Additional features are: tilt in space seat mechanism for users with complex positioning needs; seat opening (aperture) options to enable perineal hygiene (open front or closed front or side aperture); padded (upholstered) seats to provide pressure care and some postural support; back and head supports to assist users with sitting balance and postural support (head rest; high or low back rest options; back rest extension). It comes in various sizes to fit individual users.

### Product Classification

- o APL (WHO Assistive Product Priority List): 6 (Chairs for shower/bath/toilet)
- o ISO 9999:2022: 091203 (Commode chairs)

### Possible configuration variants

- Attendant-propelled versions (fitted with push handles for assistant propulsion with either four castor wheels and brakes mounted on the seat canes, or small rear wheels with brakes accessible to the assistant).
- Travel mobile shower commode chair (lightweight and folding, able to fit into a sedan vehicle or be transported on public transport).

## Possible accessories or optional components

- o Amputee footrests.
- o Postural supports (head support and related safety belts).
- o Frame variations (tilt in space or elevating footplates / reclining backrest).

### Product goals

Activities or functions the product is mainly intended to support, according to WHO ICF Classification:

- o Toileting [d530].
- o Washing oneself [d510].

# Indicated impairments

Difficulties the product is mainly intended to address, according to the WHO ICF Classification:

- Muscle power functions [b730].
- o Washing oneself [d510].

#### Contraindicated impairments

Difficulties for which the product may be inappropriate: None specified.

#### Indicated environments

Specific environments in which the product should be used:

o Indoors.

### Contraindicated environments

Environments in which the product may be inappropriate:

o Shower recesses with raised edging, steps into the bathroom, high toilets or toilets without sufficient clearance from the wall.

### Other indicated factors

Other factors or situations the product is intended to address:

- o Going to the toilet by wheeling into position over a plumbed toilet or voiding into commode.
- O Showering from a seated base, by wheeling into the shower.
- Need to complete showering and related personal care activities from a seated base, without transferring to bath or toilet.:
  - O Use by children. Only if used with variants: Pediatric size.
  - O Use by people with obesity. Only if used with variants: Bariatric size.

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#### Other contraindicated factors

Other factors or situations in which the product may be inappropriate: None specified.

### Points to be considered in product selection

- Mobile shower commode chairs are sized to fit over a western-style toilet or a roll-in shower. Preferably, the environment has toilet and shower in close proximity enabling the user to toilet then move into the shower for optimal perineal hygiene management. Alternately, users may choose to use a pan for toileting whilst in the shower area. A further consideration within the environment is an area for drying and dressing and transfers off the mobile shower commode chair.
- Ensure there is an area within the environment for drying and dressing and transfers off the mobile shower commode chair.
- The product should be able to withstand conditions expected in a domestic bathroom such as warm water, humidity. It should be used on a smooth floor surface. If used in a shower there should be no lip between the bathroom floor and shower floor (i.e. a roll-in shower). The product should have enough clearance to slide over the top of the toilet.
- The combination of features must be determined based on the user goals; pan (and waste disposal method) is required if toileting will occur away from the toilet; pan not required if user wishes to wheel the mobile shower commode over a plumbed toilet; large rear wheels for self-propelling are indicated even if user can only self-propel for minimal distances (this is a safety feature when the product is rolled into a shower, enabling the user to move themselves if water temperature is too hot/ cold).
- o Mobile commode shower chairs come in a range of sizes (bariatric, paediatric).

## Points to be considered in product fitting

- Seat width: the seat should fit the user comfortably, ensuring clearance to the perineal area for hygiene purposes, but ensuring sufficient surface area of the remaining seat to support the user without pressure points to prevent skin breakdown.
- Seat depth: the seat should be sufficiently deep to fully support thighs but ensure there is a space of two to three finger-widths between the front seat edge and the popliteal fossa (back of the knees). This enables enable even weight distribution across the sitting surfaces of the body but also protects the skin and important vessels behind the knee.
- Seat height: when seated, the knees should be approximately level with the hips. This can be achieved by adjusting the footrest.
- o Footrest should be adjusted to comfortably suit leg length and support the feet; ensure the feet are approximately at right angles and there is clearance between the footrest and the ground.

#### Points to be considered in product use

- These products are effectively wheelchairs for use in wet areas and during hygiene activities, and therefore the same precautions apply as in any wheelchair.
- Seat aperture and frame too wide: causes unstable sitting base.
- Seat aperture and frame too narrow: encourages pelvic obliquity and instability, and difficulty accessing perineal area for hygiene.
- Seat aperture and frame too long: pulls person forward in chair, increases slumping and instability, compromises lower limb circulation.
- Seat aperture and frame too short: may cause instability by reducing base of support, increases pressure on thighs and supporting area, causing pressure ulcer development, unstable sitting base impacts use of hands and dynamic balance.
- o Armrests too high: may elevate shoulders resulting in discomfort

- o Armrests too low: encourages slumping forward or sideways to reach support, may lead to instability and impact on ability to use arms for hygiene.
- o Footplates too high: may cause discomfort in hips and knees can lead to abduction of hips or adduction and internal rotation of hips reducing base of support.
- o Footplates too low: pulls pelvis forward and encourages slumping and poor sitting stability.
- o Seat height too high or low: unsafe transfers.

## Points to be considered in product maintenance / follow-up

- Consumers and care givers need to appropriately clean and maintain, and safely repair parts of the mobile shower commode chair according to written instructions.
- Refurbishing the moving parts and upholstered parts of the mobile shower commode chair and checking tire inflation on pneumatic tires may be required as part of periodic maintenance.
- Be familiar with the product user's manual.

## Examples of products available on the market

o Live product search in the EASTIN website <a href="https://www.eastin.eu/en/searches/products/list?iso=091203">https://www.eastin.eu/en/searches/products/list?iso=091203</a>

#### Source

This Fact Sheet was compiled in 2021 by an international team of experts, to provide the initial knowledge base for a project ("An online system to assist the selection of assistive product") supported by the World Health Organization in 2020-2021 within the GATE Initiative (Global collaboration on Assistive Product). Fact Sheets were compiled for each of the 50 types of products included in the WHO APL (Assistive Product Priority List).

The team was composed of Renzo Andrich (Italy, group leader), Natasha Layton (Australia), Stefan von Prondzinski (Italy), Jerry Weisman (USA), Silvana Contepomi (Argentina) and Hasan Minto (Pakistan).

The project led to a prototype online tool called ASPREX (ASSistive PRoduct EXplorer). At the end of the project, it was transferred to a WHO collaborating center (the Global Disability Hub in the UK), in view of possible future developments.

