ASPREX Fact Sheet

Memory support device

Cognitive aid that provides prompts and reminders. It can create lists of tasks organized with priorities, due dates, and tags based on information provided by the user.

Configuration of memory support products include small tabletop computerized devices as well as small tags, keychain fobs, pill dispensers, small wearable devices, and software and apps for smart phones and tablets. Some memory products can be connected to the Internet enabling prompts and information to be sent by family members and caregivers. Messages and prompts can be triggered by various sensors, e.g. motion sensors.

Product Classification

- o APL (WHO Assistive Product Priority List): 40 (Time management products)
- o ISO 9999:2022: 222812 (Memory support products)

Possible configuration variants

None specified.

Possible accessories or optional components

None specified.

Product goals

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

o Carrying out daily routine [d230].

Indicated impairments

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

- Orientation functions [b114].
- Memory functions [b144].
- o Experience of self and time functions [b180].
- o Seeing [b210].
- o Focusing attention [d160].
- o Looking after one's health [d570].
- o Doing housework [d640].

Contraindicated impairments

Difficulties for which the product may be inappropriate:

o Difficulty in understanding basic concepts of dates, times, and task accomplishment.

Indicated environments

Specific environments in which the product should be used: None specified.

Contraindicated environments

Environments in which the product may be inappropriate: None specified.

Other indicated factors

Other factors or situations the product is intended to address:

- Memory difficulties due to conditions such as traumatic brain injury, aneurysm, stroke, intellectual impairment or dementia.
- Reminders and notifications for memory tasks such as taking medications.

Other contraindicated factors

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

Points to be considered in product selection

- O What kind of display is best for the user?
- O What is the best input method?
- o Should device be battery operated?
- o Is there a need to track objects?
- o Dedicated device versus an app for a smart phone or tablet.
- Are alternative outputs, e.g. vibration or auditory, appropriate for user?
- Should device be wearable or tabletop?
- o Size of memory or number of reminders available.
- o Ability to dispense medications.
- o Is internet connection desired/required?
- Ability to connect to email, text, IM, social media, and mobile notifications.
- o Is language other than English desired?
- o Are pictograms or other graphic elements necessary to represent tasks and reminders?
- Are sensors, e.g. motion sensors, required to trigger reminders?

Points to be considered in product fitting

- O Use of 12- or 24-hour time format.
- o Messages alarms, and reminders must be programmed.
- o If used, photos, pictograms and graphics must be chosen and programmed.
- o Appropriate language must be chosen.
- o Appropriate output modality must be chosen.
- o Appropriate input modality must be chosen and configured.

Points to be considered in product use

- o Reminders, messages, and alarms must be kept up to date.
- o Pictograms and graphic elements must be kept up to date.
- o Time and date must be kept up to date.
- o Reassessment of user's cognitive abilities to ensure appropriateness of device.

Points to be considered in product maintenance / follow-up

- o Correct time and date must be maintained.
- o Battery must be maintained.

Examples of products available on the market

o Live product search in the EASTIN website https://www.eastin.eu/en/searches/products/list?iso=222812

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.