ASPREX Fact Sheet

Personal emergency alarm

Small handheld device (wrist worn or pendant) that comprises a button and transmitter. The transmitter sends a signal to a console that is connected to a telephone line. Preprogrammed calls are sent to a call center and/or emergency contacts via voice and/or text. The transmitter is usually waterproof and can be worn around the neck or on the wrist.

Personal emergency alarms may include a subscription service that receives emergency calls. The console or phone is programmed to telephone the emergency response center, where the caller is identified. All information about the caller is available to the emergency dispatcher, who tries to determine the nature of the emergency. If the dispatcher cannot contact the user or determine whether an emergency exists, local emergency service providers (paramedics) are alerted to go to the user's location. The dispatcher also stays on the intercom with the user and monitors the situation until the problem or emergency crisis is resolved. Some emergency alarms include GPS or links to Google maps to allow the exact location of the phone to be viewed on a map. Systems typically have the capability of being programmed to call multiple contacts with automatic messages. Some systems enable two-way communication.

Product Classification

- o APL (WHO Assistive Product Priority List): 27 (Personal emergency alarm systems)
- o ISO 9999:2022: 222906 (Personal emergency alarm systems)

Possible configuration variants

None specified.

Possible accessories or optional components

 Activity sensors (if the sensor detects no activity in a programmed period of time, the system will automatically call for help).

Product goals

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

O Using communication devices and techniques [d360].

Indicated impairments

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

- Heart functions [b410].
- o Walking [d450].
- o Changing body position [d410].
- o Moving around [d455].
- o Consciousness functions [b110].

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 Areas where the device is out of range of the hub which transmits alerts to a monitoring center or caregiver.

Other indicated factors

Other factors or situations the product is intended to address:

- o Indicating an emergency situation needing intervention.
- Balance, mobility, or neurological conditions that are at risk for medical emergencies.

Other contraindicated factors

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

Points to be considered in product selection

- o The person has the abilities to function independently in their homes.
- o The input technique should match the individual's functional abilities.
- A phone service must be available.
- o Appropriate emergency contacts must be identified.
- o If a subscription service is necessary, the resources to pay for the service must be available.

Points to be considered in product fitting

- o Appropriate emergency texts and messages must be programmed.
- o Proper setup includes connecting the device to the user's phone service.
- O Appropriate wearing of the device, i.e. wrist or around the neck.

Points to be considered in product use

- o Person needs the psycho-social abilities to use the alarm system appropriately.
- o The alarm system will only work within a given distance to the main console.

Points to be considered in product maintenance / follow-up

- Maintain good battery life.
- Maintain phone service.
- o If appropriate, maintain subscription service.
- o Maintain appropriate emergency texts and messages.
- o Test the system on a regular basis to ensure proper connections are 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=222906

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.