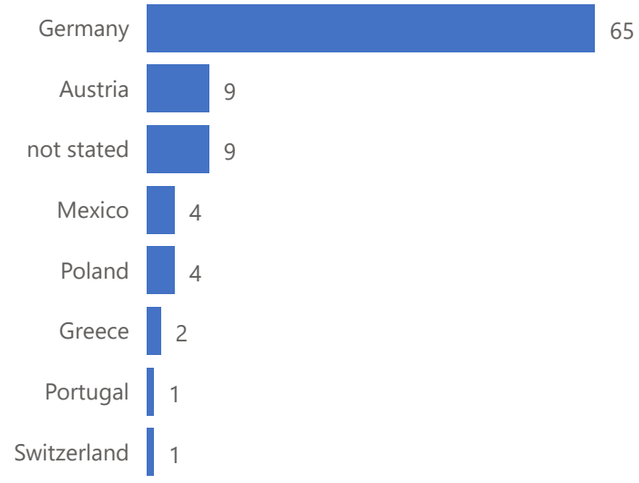
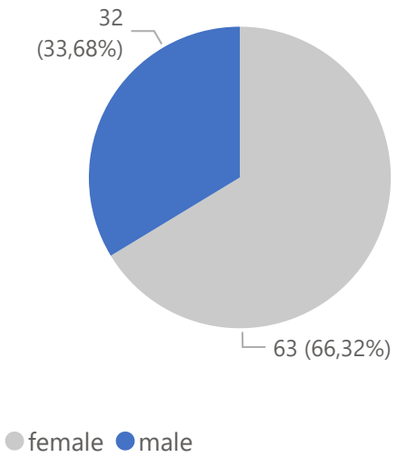
Section A: Socio-demographic background

Count of answers

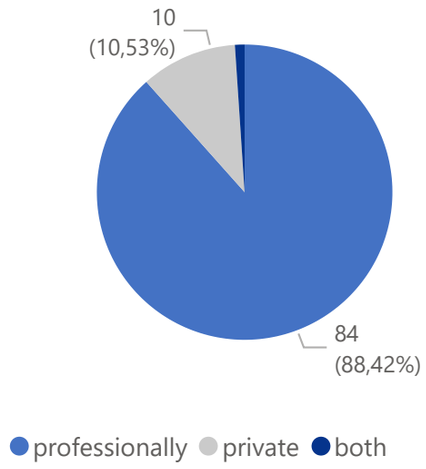
Country of work



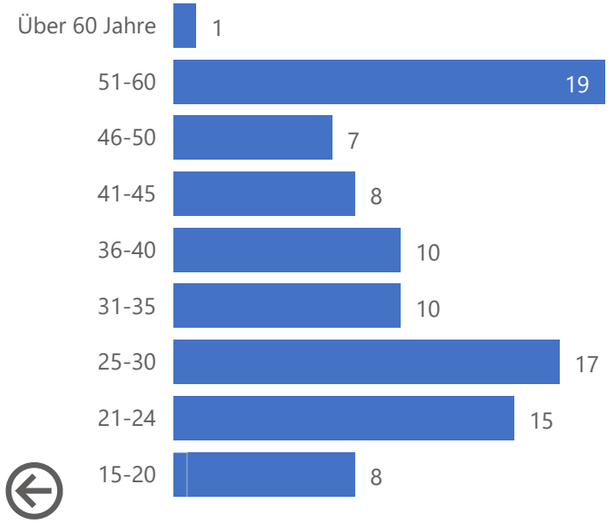
Gender



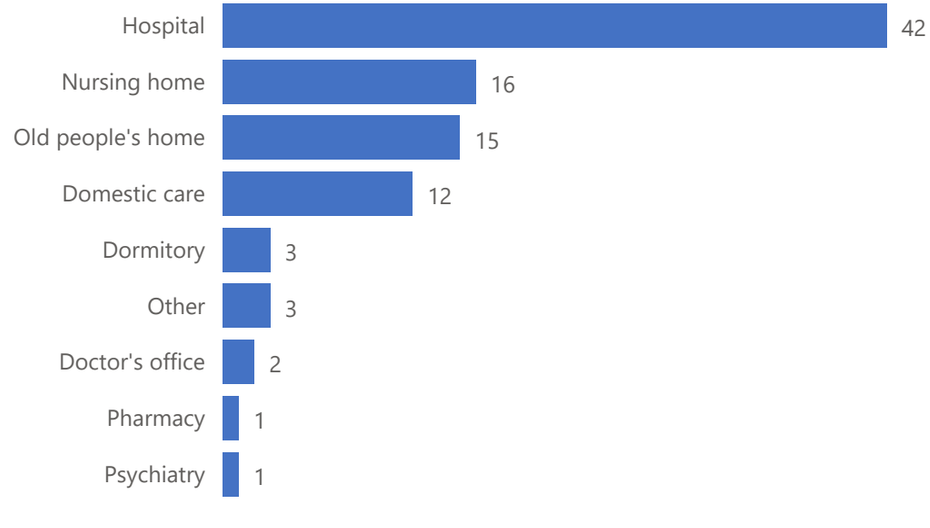
Relationship to people to care for



Age group

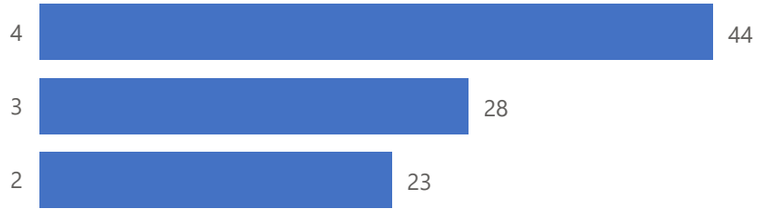


Institution of work

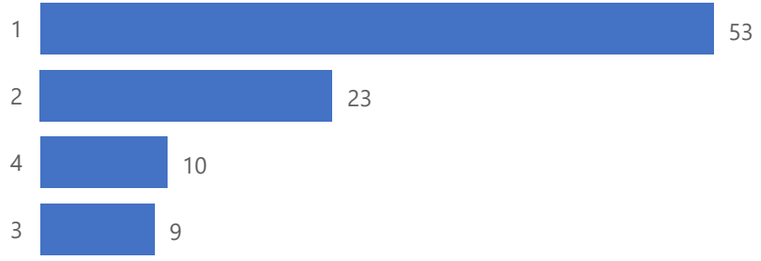


Legend: **1** - not at all to **4** - very much

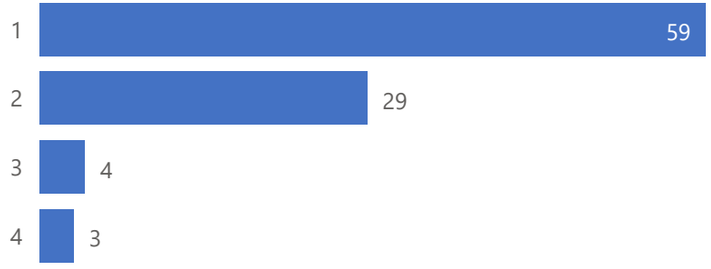
I enjoy trying out new technologies.



I see no need for new technologies.



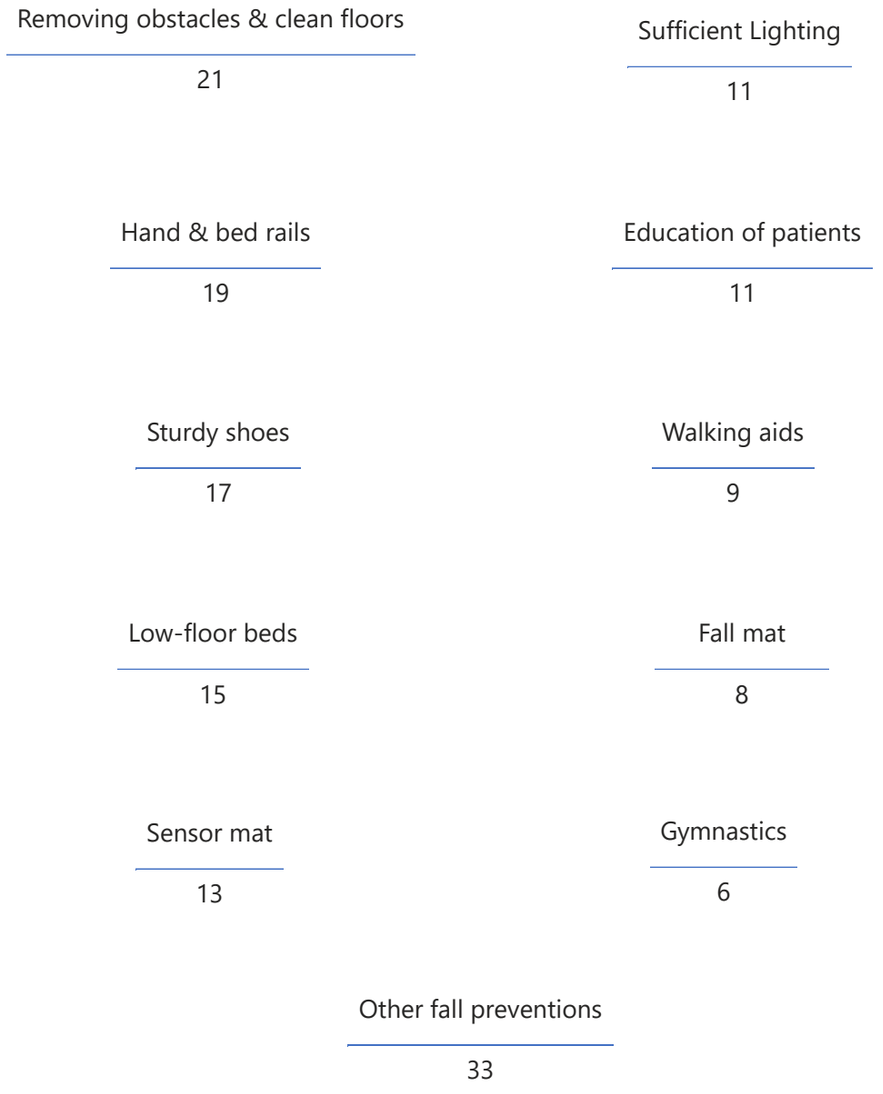
I'm afraid of change through new technologies.



Section B: Fall prevention

Count of answers

Summary



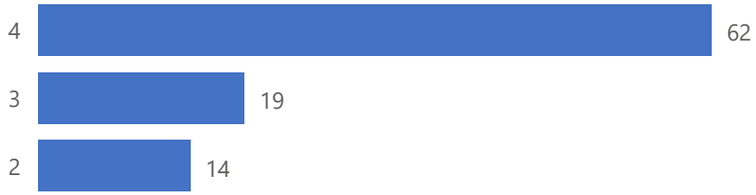
Details

Fall prevention taken
yes
Work according to expert standard fall prevention in nursing
We are careful with medications that can have falls as side effects. The beds in the hospital are built to prevent falls.
We advise our customers and they get something to read about to avoid falls
Walking and standing exercises, Good lighting of the rooms and corridors, Hold handles, Fall and sensor mats, Safer Exit plates
Walking aids, crumbs
Walkers for patients who need attention, brackets in toilets
Training, risk assessment, suitable footwear
The facility has no stairs, and it is friendly to the disabled.
Sufficient lighting, aids such as FreeWalker or rollator, putting on patients' sturdy shoes, minimizing tripping hazards
Sufficient lighting of the rooms, grab rails
Sufficient light no tripping hazards
Sturdy shoes, turn on lights, remove obstacles, provide walker/other walking aids, support person, guide to get up slowly
Sturdy footwear
Strength training, low-floor beds
Sensor mats, crash mats, crash helmets, low-floor beds, UBG if necessary
Sensor mat, sensor bar, safebag or mattress in front of the bed, protector trousers
Sensor mat, sensor bar, safe bag, low-floor beds
Sensor mat, motion sensors, floor care, low-floor bed, raising bedside panels with the consent of relatives or caregivers
Sensor mat, low-floor beds, close-meshed monitoring
Sensor mat, hip protector pants, physio, gymnastics, consultations, aids
Sensor mat
Senormat, protectors
Safebag, sensor mat

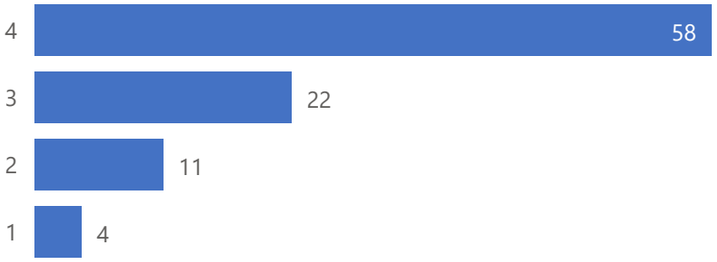
Section C: Fall detection

Count of answers

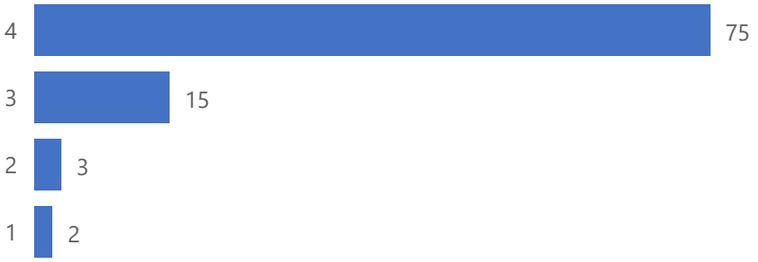
The fall must be detected with an accuracy of over 90%.



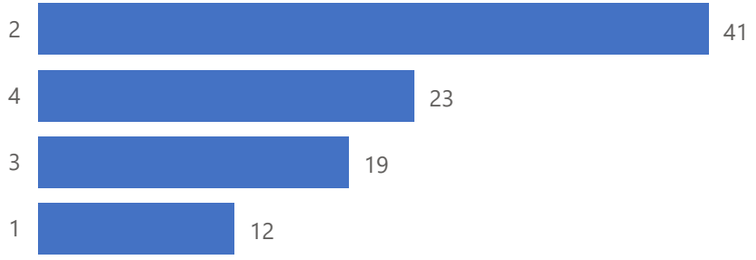
A fall must also be detected when several people are in the room.



A fall must also be detected if the person is obscured by pieces of furniture.

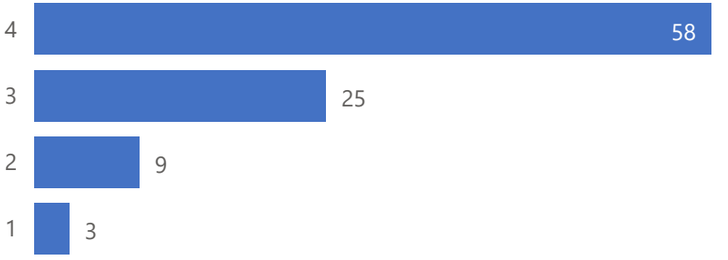


No false alarm may be triggered.



A fall must also be recognized in the dark.

A fall must be detected both indoors and outdoors.



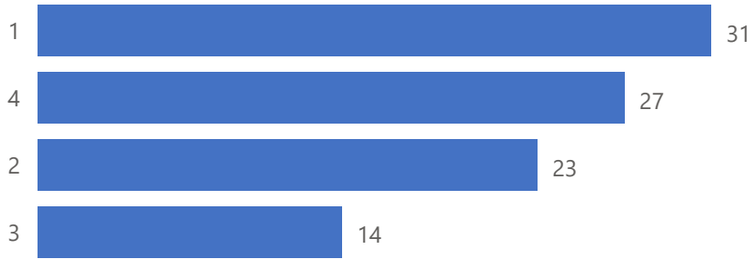
Legend: **1** - not important to **4** - very important

Section D: Robot functions

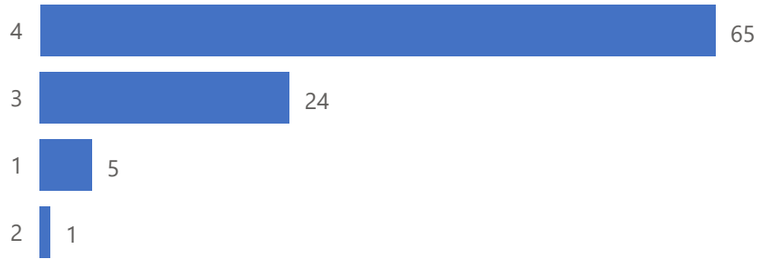
Count of answers

The robot should be able to move freely in the room with the camera.

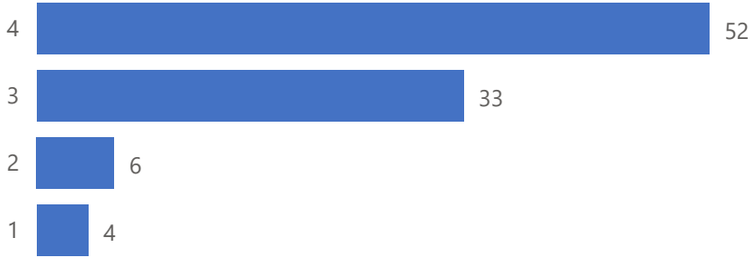
The robot should be able to email a fall alert to the caregiver.



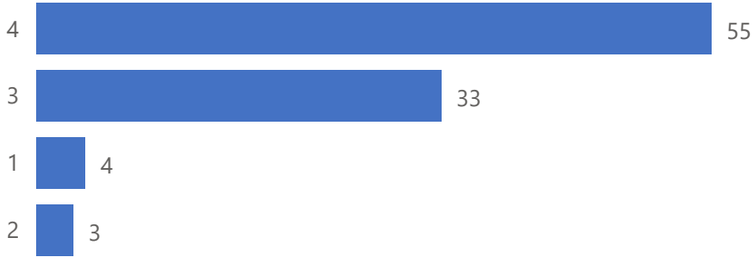
The robot should be able to send a fall alert to the caregiver via call/SMS.



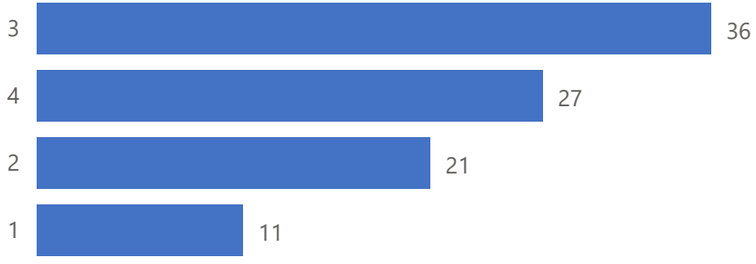
The robot should not get too close to a person so as not to be a tripping hazard.



The robot should have as long an operating time as possible.



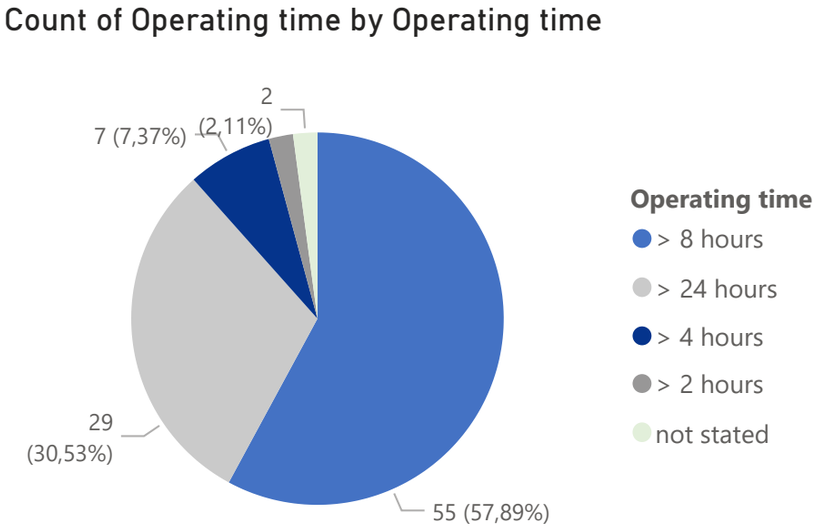
The robot should take an animal form to gain a higher acceptance of the inhabitants.



Legend: **1** - not important to **4** - very important

Section D: Robot operating time

Count of answers



Robot other
12 student would be a good amount of time
Basically, the operating time must be adaptively coupled with a motion sensor, so that, for example, during the sleep phases, the device is charged, but when urinating at night, the walk to the toilet is detected.
Fast charging, alarm should also switch to DECT mobile phones or nurse call systems
Of course, it would be good if it does not need to be charged for as long as possible.
Operating time in such a way that overnight charging is sufficient.
Robot should at best load when Client is asleep
The operating time is irrelevant if you have a second robot or a spare battery.
The robot should communicate the alarm via the nurse call system; Operating hours at least from 6:30 a.m. to 8:30 p.m.
unimportant

Section E: Area of application & costs

Count of answers

Old people's home

73

Domestic care

74

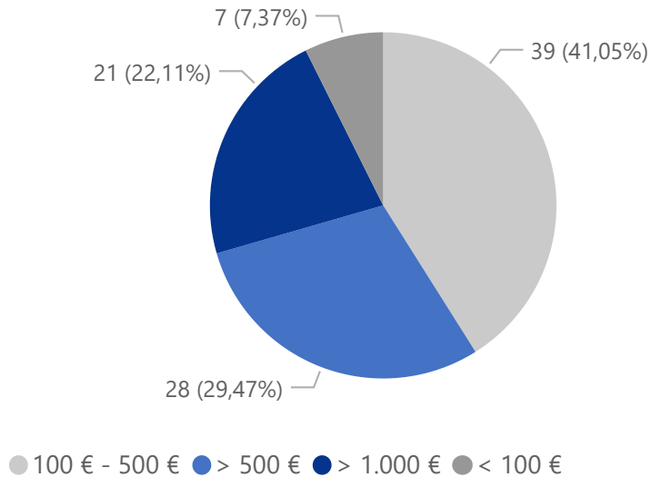
Nursing home

61

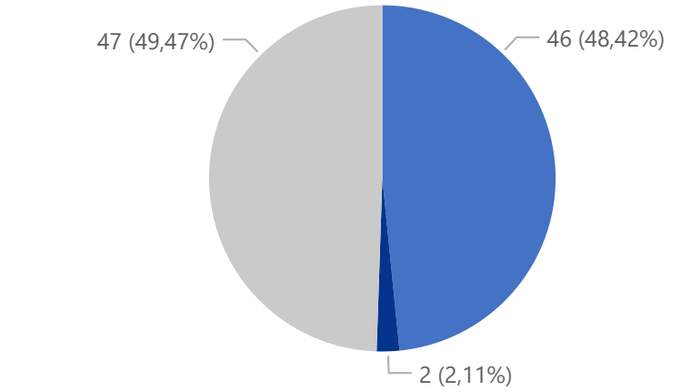
Hospital

23

Price willing to pay



Payment should be made

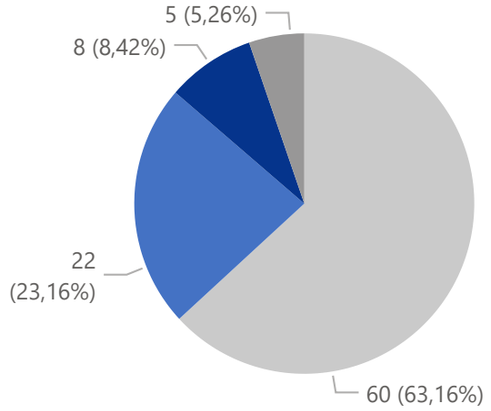


Section F: Reasoning

Count of answers

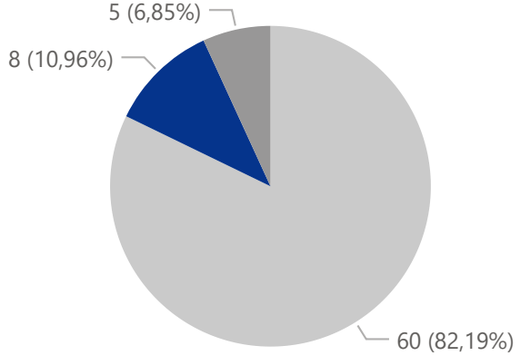
Summary

Does it make sense to use a robot to detect falls?



yes not stated possibly no

Valid counts of Does it make sense to use a robot to detect falls?



yes possibly no

Details

Reason for a robot for fall detection
A caregiver cannot always be at the same time everywhere, especially on night duty. Fall often between 3 and 5 o'clock in the morning, often after the tour with the person concerned.
A fall has a number of problems. Older people have very "brittle" bones.
A robot would at least be an alternative, but it also serves as a potential stumbling block! More important for me would simply be sufficient staff in the elderly- and nursing homes.
Anything that prevents a fall makes sense.
As it would therefore not be necessary to provide permanent staff.
Because a fall can be detected very quickly even if there is a shortage of staff.
Because due to the lack of care falls could be detected too late.
Because especially in home care the person can not always be under observation (eg. Doing shopping, housework, etc.).
Because in nursing homes falls at night are usually only discovered in the morning.
Because nurses cannot stand permanently next to the clients to monitor them. The clients also know that if they fall, someone will definitely come, as this robot reports to the nurse.
Because the residents can then continue to act independently.
Because too few nursing staff.
Can be quite useful on larger stations.
Due to the nursing emergency in institutions and in home care, since there is not always someone there, or the affected may not be able to call for help.
Especially for people who do not have 24/7 surveillance.
Especially in home care, such a system can close gaps in ensuring the safety of patients
Especially in nursing homes or in the home environment, help can be alerted much faster in the event of falls.
Especially in old people's homes and in home nursing, a relief of the nursing staff and an improvement of the security of supply is thereby given.
Especially in the domestic area, the home emergency call is often not worn on the body. When going to the toilet at night, there is a great risk of falling. No one should lie helpless and in pain in his apartment for hours.
Especially in the domestic sector. It serves safety and could, above all, prevent long lying dreams, for example.
Everything that can help the nurses and patients is good.
For confused older patients, e.g. dementia, a robot would certainly be helpful, as acceptance would probably be increased, especially with

Section F: Improvements

Count of answers

Summary

Voice recognition wanted	12
Multiple notification	9
Reminder functions (e.g. for medcine) wanted	7
Measure other body functions	7
Other shape or fury skin	4
Lighting wanted	3

Details

What improvements could you imagine?	Could you think of other useful features of the robot and if so, which ones?
The robot should be able to follow the resident - even out of the room before the door is closed. Acoustic, loud alarm would be useful.	With built-in call function, if someone has fallen and is not unconscious, then can say immediately whether he can get up on his own or needs help.
The robot could not only send a message to the caregiver, but also to neighbors or relatives, depending on who is near the person who has fallen and could help them the fastest.	Voice control, communication with caregivers
The dog should also respond to verbal utterances...for example, a call for help.	The robot is able to assess the severity of the fall.
The construction looks very delicate and fragile, something more robust would not be bad. A "skin" that hides the mechanics could possibly increase acceptance.	The robot could automatically call an ambulance in case of a fall.
The certainty that you can recognize falls more quickly and that you don't always have to proactively check if the person is okay.	That you can talk to him; like with Alexa
That the robot can support the patients to get up again themselves.	That the robot recognizes risk factors for falls and communicates them. (Room very dark, shoes in front of the bed, for example)
That it can more easily prevent and detect falls.	Takeover of the function of a house emergency call/patient bell through voice control
Storage of the "normal" daily routine, if there is a deviation from this, there is an increased risk of falling because the resident is not in the usual environment	Soothing music or animal sounds to calm nocturnal residents (if they are not afraid of animals such as dogs) or for depressed and severely demented residents.
Simplification of operation for seniors	Social interactions should be possible without causing falls. E.g. by recognizing people who are sitting (contact allowed), person stands up (keep your distance immediately). Continue to contact personnel when calls for help or certain signals are present. Light e.g. illuminate the way from the bed to the bathroom.
Problem of access to individual rooms needs to be solved. For example, if there is a fall in the bathroom.	Robots as children's toys.
Possibly additional functions such as recognizing emergency situations in patients who live alone but are in need of care, i.e. call an ambulance in the event of cardiac arrest, etc.	Responds to voice commands
optimize energy	Reminders of taking medication and the like
Offer different forms/animals	Reminder of certain activities - e.g. B. Time to take medication, go to the bathroom, have lunch, or do other activities. Going for a walk (mobility promotion)
Notification of a fall event to the cell phone of the nursing staff	Remind me to take medication
None	Recognizing whether the person leaves the house
More staff	Recognize and execute simple voice commands, such as "Call emergency, turn on the light..." or similar. Voice feedback in the event of a fall to have a calming effect ("Please keep calm. Help is on the way..." or similar.)
longer working hours, see in the dark	
Just try it out with people to be cared for, then you can judge the reaction ect.	