

Solutions for Fall Prevention

An intuitive guide



Assistive Technology – Care Support Systems



FM84603



Solutions for Fall Prevention

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Bed leaving detection alarms
Chair leaving detection alarms
Worn fall detection sensors
Multi-sensor systems
Carer alerts in-house & off-site
Single & Multiple patient systems
GSM mobile fall solutions
Wi-Fi connectivity

Scenario 1 – Mrs X living independently

- Mrs X spends most of her time alone at home during the day, apart from scheduled daily health worker visits.
- Mrs X has experienced two known falls, resulting in hospitalisation.
- Mrs X has Type 2 Diabetes.
- Mrs X has subconsciously developed her own strategy to prevent falls. By reducing food and liquid intake she believes reducing nature visits will keep her safe.
- **Dehydration, Malnutrition = Delirium**
- **As a consequence, her fall rate increases, by day, and by night.**



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Planning a safer environment for Mrs X

- Identify factors contributing to cause of falls
- When and where do falls occur?
- Develop a falls reduction strategy*
- Identify and confirm if Assistive Tech can help Mrs X
- Select appropriate equipment

Mrs X's falls may be attributable to malnutrition

Mrs X has falls when rising from and leaving her bed and chair

Her general mobility is not considered high risk

Scenario 1 Mrs X

What can we do to help Mrs X and keep her safer at home

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Option 1 – Introduce an automated prompting device to encourage intake of food and drink during the day

MemRabel[®] 2 Automated timed media scheduling playback

- Use video, photos, text to create relevant timed prompts
- Encourage intake of food and drink at specific times
- Introduce reminders for important medications



Scenario 1 Mrs X

What can we do to help Mrs X and keep her safer at home



IT IS TIME TO MAKE YOURSELF A SNACK



IT IS TIME TO MAKE YOUR SUPPER



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Option 2 – Include a system that can predict or reduce the likelihood of a fall.

Mrs X has family who live close by that are able to respond to an incident. Because Mrs X falls from her chair and bed, both need to be monitored.

Possible solution: **MPCSA11 Smart sensor controller**



Sensor controller transmitter



Cordless chair sensor



Fall detection pendant



Emergency dialler with intercom



Cordless dual function bed sensor



PIR movement sensor with narrow beam shutters

Up to 3 Sensor types can be used with the talk-back function. Available sensor types:

- Bed sensor
- Chair sensor
- Worn fall detector
- Movement sensor

Scenario 1 Mrs X

What can we do to help Mrs X and keep her safer at home

This system will allow Mrs X to leave her bed, move to her chair, enter her kitchen or other room without raising an alert unless she fails to connect with one of the sensors within a selected time period.

Desired Outcome



- Mrs X feels safer in her home
- Falls are reduced resulting from regular intake of food and drink
- Family have peace of mind
- Undiscovered fall time is reduced*
- False positives considerably reduced
- Likelihood of ambulatory care is reduced
- Care costs are reduced to LA and NHS

Scenario 1 Mrs X

Falls strategy in place

Scenario 2 – Mr & Mrs “B”

- Mr B is the full time home carer for his wife
- Mrs B has limited mobility, is unsteady when walking unaided, and has had several night time falls
- Mr B has moderate to severe hearing loss and fails to hear Mrs B leaving the bed during the night when his hearing aids are removed
- Mrs B also experiences daytime falls when leaving her chair



Scenario 2 Mr & Mrs B

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Option – Introduce a bed exit detection alarm with recorded voice prompt for Mrs B and a visual/audible alarm to wake Mr B

CTM-3 recordable voice prompt alarm transmitter, with CT-3 bed sensor and flashing light alarm receiver NMDRX.

Mrs B rises from the bed. Recorded voice prompt is played back, simultaneously a transmission signal activates a flashing light alarm (designed for deaf people) to wake Mr B.

A second CTM-3 with a chair sensor CT-2, can be added for daytime chair monitoring.



Flashing coloured LED's would disturb Mr B from sleep! An under-pillow vibrating pad could be included

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We can't prevent every fall



We can make sure help arrives quickly

Alarm & Notification Devices



MPPL3 PAGER

1-2 USER/DEVICES
2 X AA BATTERIES
TONE/VIBRATION ALERT



TUMPAG31 PAGER

1-3 USER/DEVICES
2 X AA BATTERIES
TONE/VIBRATION ALERT
1-3 CHANNEL LED ID



PAG-11c PAGER

1-9 USERS (99 FOR CSA11)
2 X AA BATTERIES
TONE/VIBRATION ALERT
LCD CALLER DISPLAY ID



NMDRX PORTABLE ALARM

1-5 USERS/DEVICES
3 X AA BATTERIES
AUDIBLE & FLASHING LED ALERT
OUTPUT FOR VIBRATING PAD



CMD-11 DESKTOP RECEIVER

1-99 USER/DEVICES
MAINS POWER BATTERY B/U
AUDIBLE ALARM
CALLER & DEVICE ID DISPLAY



EM330 DIGITAL MESSAGE PAGER

UNLIMITED USER/DEVICES
1 X AAA BATTERY
TONE/VIBRATION ALERT
TEXT ALERT ID DISPLAY
RANGE 400M (EXTENDABLE)



MPPA3 DIGITAL MESSAGE PAGER

UNLIMITED USER/DEVICES
RECHARGEABLE
TONE/VIBRATION ALERT
TEXT ALERT ID DISPLAY
RANGE 400M



Occupancy Detection Sensors



MED04BP
Corded bed sensor
750mm 450mm
RJ11 connector plug
Single & double bed



UMBP-10
Ultra-sensitive bed sensor
Specialist beds & mattresses
76cm x 25mm
RJ11 connector plug



CT-3
Corded bed sensor
750mm x 450mm
2.5mm Jack Plug
Single & double bed



CT-2
Corded chair sensor
38cm x 30cm
2.5mm Jack connector

Adaptors available

- 2.5mm Jack to RJ11 female
- RJ11 female to 2.5 Jack
- RJ11 Jack to RJ12 Jack
- 3.5mm female to 2.5mm Jack



TUMFBP1
Double bed sensor
Folds for single bed
126cm x 33cm
2.5mm Jack connector



CT2T
Corded chair sensor
38cm x 30cm
RJ11 connector plug



WPAS10
Cordless bed sensor
Integral alarm transmitter
76cm x 25cm



UCP10T
Cordless chair pad
Integral alarm transmitters
38cm x 30cm



Sensor Alarm Controllers – Radio Alarm Signalling



BTXMED04 Sensor Transmitter

- **Sensors: Bed, Chair, Floor**
- Dual input sensor alarm
- 6.3m & RJ11 sockets
- Integral transmitter
- Selectable alarm delay
- Transmission range 100M
- Integral audible alarm
- Power 3 AA batteries DC adaptor

Compatible alarm receivers
MPPL, TUMPAG31, PAG11
NMDRX, CMD11



NMDTX2 Universal Transmitter

- **Sensors: Bed, Chair, Floor**
- Input: 2.5mm socket
- Range: 100M/400M
- Selectable alarm delay
- Power 2 x AAA batteries DC adaptor
- Free ID message programming software
- Dual transmitter mode

Compatible alarm receivers
MPPL, TUMPAG31, PAG11
NMDRX, CMD11, EM300,
MPPA3



CTM-3 Sensor Transmitter with Recordable Voice Prompt

- **Sensors: Bed, Chair, Floor**
- Input: 2.5mm socket
- Range 100M
- Tone/recordable voice prompt played on alarm
- Power: 3 x AAA batteries, power adaptor
- SOS call button
- Selectable alarm delay

Compatible alarm receivers
MPPL, TUMPAG31, PAG11
NMDRX



MPCSA11 Smart Sensor Controller Transmitter

- **Sensors: Bed, Chair, Floor, PIR**
- Input: RJ11, 6.3mm, RF sensor
- Range 100M
- Multi-function sensor monitoring
- Combine 3 sensors for activity monitoring
- Power: 3 x AA batteries, DC adaptor
- 3-Channel sensor alarm receiver
- Addressable user ID code (up to 99 devices)

Compatible alarm receivers
TUMPAG31, PAG11, CMD11

Solutions for Fall Prevention



Our range of products give you the tools to provide an effective fall prevention system

- Products available in ready-to-use kit form
- Product kit components available separately
- Easy to configure equipment options to suit patient specific requirements

- Reliability, Performance, Quality, Expert Technical Support