Big Idea Grant

Falls Monitoring: Maintaining Safe Environments

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Nurse Researcher
Coffs Harbour Health Campus
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Falls are a leading cause of injury-related deaths and admissions for people aged over 65 years (Clinical Excellence Commission).

Proportion of inpatients aged over 65 years that fall increased from 0.46% to 0.54% from 2008 to 2013 (Aus Clinical Indicator Report 15th Edition 2006-2013).

Governance, systems, screening, preventative approach, communicating with patients and carer strategies (National Safety and Quality Health Service Standards: Standard 10).

2014 MNCLHD: 3 - Inpatient RCA related to a patient death and fall

2014 MNCLHD 15 SAC 2 investigations**

Cost of a fall: $$$, LOS, ↑services, ↑discharge rate to RACF & patient consequences

** SAC 2: Major &/or permanent loss of function unrelated to natural course of illness, surgical intervention, ↑LOS.
Trends

In NSW in 2012/13
- Ambulance NSW responded to over 83,000 calls related to falls
- There were approximately 28,000 overnight hospitalisations of people aged 65+ due to a fall
- 451 people aged 65+ suffered a serious injury from a fall that occurred whilst they were an inpatient in a public hospital (SAC1 + SAC2)

Source:
NSW Ministry of Health, Snapshot of Falls Prevention, November 2014
MNCLHD Falls by Site

Source: MNCLHD Falls Incident Dashboard Report June 2013-October 2014
Challenge

- Jan to Jun 2014:
  
  CHHC
  
  23/30 falls reported as unwitnessed.

Source: Preventing falls in hospitals: Understanding interactions between staff, environment and patients. Associate Professor Terry Haines, Monash University
Visual Monitoring

- HREC Approval QA 137
- 20 participants
- Medical
- Rehabilitation
- Surgical
Baby cams and baby monitors have become more and more advanced. Now, those with multiple devices can actually monitor their child from a different room and even over 3G or LTE anywhere in the world with many of these apps. We compare the best baby monitoring options in this AppGuide.

Essential Apps

Cloud Baby Monitor ~ Unlimited Range Video Baby Monitor (Wi-Fi, 3G, LTE, Bluetooth)
by Martin Man

$3.99

Cloud Baby Monitor is an amazing app that is everything a baby monitor should be. This monitor broadcasts both video and audio, allows you to speak to your baby, play a lullaby from afar, and has an unlimited broadcasting range. You can watch baby when at home or when you are away, granted that you’ve already accepted your parent unit's request on the baby unit device. The interface is nice, not cheesy looking like some of the other apps in this category. Best of all, the developer is constantly improving this app, making it the best baby monitor app out there hands down.
Nurse Information Flyer

**Title**
CCN: Falls Monitoring: Maintaining Safe Environments

**Investigator**
Joanne Rowley Nurse Researcher

**Location**
Coffs Clinical Network, Mid North Coast Local Health District

**What does my participation involve?**
You are invited to take part in a falls prevention project. This is because you are providing clinical care and a staff member who can provide valuable feedback for the project.

Please read this information carefully. Ask questions about anything that you don’t understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with your NUR.

Participation in this project is voluntary. If you don’t wish to take part, you don’t have to. You are supported in the decision you make.

**What is the purpose of the project?**
A fall in hospital can have lasting consequences. Falls can increase hospital stay and costs. Patients at risk of falling are also usually those who are most vulnerable in the hospital setting.

Monitoring patients, even when the nurse is not in the room and attending to other duties may have the potential to reduce patient falls in hospital.

In this project we will be observing a patient by positioning a monitor (iPod) above their bed. The iPod is linked to the iPod device that you carry on your person. You will be able to see the patient while the patient is in or around their bed area. The patient will not be able to see you on the iPod monitoring screen above their bed. The iPod screen only depics a night time scene.

The project purpose is to see if an important effect on preventing a patient falling in hospital is usually monitoring patients. If high risk patients are viewed trying to mobilise without assistance we anticipate the nurse may be able to provide a response that keeps the patient safe from falling.

**What does participation in this project involve?**
Participation in this project will not require any major alterations to your usual shift routine. We ask however that you:

- Periodically check the patient on the iPod screen and respond accordingly.
- Check the patient and/or their family are informed of the project (a participant information flyer is available) – verbal consent is all that is necessary.
- Keep the iPods and charging cords safe, use care with the devices.
- Charge the iPod when required.
- Maintain patient privacy – when patient is receiving personal care we ask that you turn off the iPod (press ‘home’ button on bottom of front panel). Complete a survey on your experience of using the monitoring device.
- Service contact numbers are provided on the back of the iPod in case you have any questions when using the device.

Information about you in connection with this project that can identify you will remain confidential. All information about you collected for the study will be labelled with a number, not your name.

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**Do I have to take part in this project?**
Participation in the project is voluntary. If you do not wish to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw at any stage.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your care, your relationship with those treating you or your relationship with the hospital.

**What are the possible benefits of taking part?**
There may not be a direct benefit to you from participation in this study. However the knowledge we gain from this project may assist us to make falls prevention in hospital safer in the future.

**What are the possible risks and disadvantages of taking part?**
There are no known additional risks from participating in this project. Currently there are many strategies to prevent patients falling in hospital and we trust that you implement those strategies as part of your usual practice however there are limited guidelines on the most appropriate way to monitor patients to prevent a fall.

**Further Information and who to contact**
The person you may need to contact will depend on the nature of your question. In the first instance, ask to speak to the Nursing Unit Manager.

If you want any further information concerning this project

**Project contact person**

<table>
<thead>
<tr>
<th>Name</th>
<th>Joanne Rowley</th>
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<tbody>
<tr>
<td>Position</td>
<td>Nurse Researcher</td>
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<td>Telephone</td>
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</tbody>
</table>
### Participant Information Flyer

**Title**: CCN: Falls Monitoring: Maintaining Safe Environments  
**Investigator**: Joanne Rowley Nurse Researcher  
**Location**: Coffs Clinical Network, Mid North Coast Local Health District  

#### What does my participation involve?
- You are invited to take part in a falls prevention project. This is because you are considered to be at a high risk of falling in hospital.  
- Please read this information carefully. Ask questions about anything that you don’t understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative, friend or your doctor.  
- Participation in this project is voluntary. If you don’t wish to take part, you don’t have to. You will receive the best possible care whether or not you take part.

#### What is the purpose of the project?
- A fall in hospital can have lasting consequences. Falls can increase length of hospital stay and costs. Patients at risk of falling who are also unwell are at their most vulnerable in the hospital setting.  
- Monitoring patients even when the nurse is not in the room and attending to other duties may have the potential to reduce patient falls in hospital.  
- In this project we will be observing you by positioning a monitor above your bed. The monitor will be linked to a device your nurse is carrying. The nurse will be able to see you while you are in or around your bed area. You will not be able to see the nurse on the monitoring screen. If you are receiving personal care the nurse will turn off the device she is carrying to protect your privacy.  
- The project purpose is to see if an important effect on preventing a patient falling in hospital is visual monitoring.

#### What does participation in this project involve?
- Participation in this project will not require any alterations to your care in hospital.  
- Information about you in connection with this project that can identify you will remain confidential. Your information will be obtained from your health records held at this hospital and only be used for the purpose of this project. All information about you that is collected for the study will be labelled with a number, not your name or hospital number.  
- It is anticipated that the results of this project may be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided in such a way that you cannot be identified.

#### Do I have to take part in this project?
- Participation in the project is voluntary. If you do not wish to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw at any stage.  
- Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your care, your relationship with those treating you or your relationship with the hospital.

#### What are the possible benefits of taking part?
- There may not be a direct benefit to you from participation in this study. However, the knowledge we gain from this project may assist us to make falls prevention in hospital safer in the future.

#### What are the possible risks and disadvantages of taking part?
- There is no known additional risks from participating in this project. Currently there are many strategies to prevent patients falling in hospital however there are limited guidelines on the most appropriate way to monitor patients to prevent a fall.

#### Further Information and who to contact
- The person you may need to contact will depend on the nature of your question. In the first instance, ask to speak to the Nursing Unit Manager.

#### If you want any further information concerning this project

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Figure 26 demonstrates common cause variation for the period May 2013 to May 2015.

**June 2015** performance reflects continued falls rate below average rate of 2.4:
- Count of 72 falls incidents (+10 from previous month)
- Rate of 2.5 falls per 1,000 bed days (+0.89 variance from previous month)

Figure 27 demonstrates that, on average, less than one fall with harm (SAC 1 & 2) is occurring each month.

0 Fall Incident with SAC 1 & 2 for June 2015.
## Cost of a Fall vs Monitoring Device

### Cost of a Fall
- Imaging = $
- Surgical Procedure = $
- LOS = $

**EST TOTAL** = $13000

### Device Cost
- iPod = $250
- iPad = $480
- Air Port = $120
- App = $4

**TOTAL** = $854

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NSW Health Costs of Care GL2011_007

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NSW Government
Mid North Coast Local Health District
Where to from here?

- Continue to engage staff in falls prevention strategies
- Continue to monitor outcomes
- Explore options for surveillance systems