

# Falls risk assessment tools and care plans in New Zealand district health board hospitals

## A review and discussion document



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## Foreword

Patient falls, and the harm caused by them, have been described in the international research literature as a nurse-sensitive outcome indicator of care because of the demonstrated relationship between falls, nursing capacity and nursing care actions. Because of nursing's demonstrated impact on falls rates, nurses play a key role within the multidisciplinary team in preventing falls.

As preventing falls and reducing patient harm are priorities for health care organisations, directors of nursing have a leadership role in championing nurses' unique responsibilities as the health professionals continuously present with patients. Nurses can apply their critical thinking skills to falls risk assessment and interventions, and partner with patients and families/whānau in a way that supports them to be involved in all aspects of care.

This review of existing falls risk assessment and care planning tools in use across district health boards (DHBs) is a key piece of work from the Health Quality & Safety Commission's nationally led [Reducing Harm from Falls](#) programme. It advocates 'universal precautions' for safe care environments be applied to all patients, and that nurses can then focus their critical thinking and clinical judgement on what the individual patient needs to minimise or manage their particular falls risk through a comprehensive assessment and development of an individual care plan.

The Clinical Lead for the programme has worked with the sector to promote essential elements for a standardised falls risk assessment process that is both comprehensive and straightforward. This process supports the development of a plan for the individual patient – one that directly links risk factors with appropriate interventions and supports.

The call on nurses' time comes from a variety of sources beyond that of assessment, formulation, provision and documentation of direct care. Critical to complementing direct care work, nurses are required to keep up to date with evidence and incorporate it in a written care plan. This project supports busy nurses in keeping patients safe by providing a framework based on current evidence and expert opinion.

I encourage you to reflect with your colleagues on these findings and recommendations. Review your organisational tools and processes, and ask if they incorporate the essential elements described. This work has the potential to leverage off collective wisdom – there is immense potential for sharing lessons and for making observations around practice based on a common data set. This could be an outcome if we were to have common elements within DHBs, across regions and even nationally.

I thank you for the care you provide every day for patients and their families/whānau, and wish you well in your work.



Dr Jane O'Malley  
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## Executive summary and recommendations

### Executive summary

The Health Quality & Safety Commission's national programme, [Reducing Harm from Falls](#), has an initial emphasis on preventing falls and reducing fall-related injuries in public hospitals. While the ideal of set of programme components at hospital level is not yet clear, risk assessments are common elements in programmes demonstrated to be effective. This project therefore provides a critical foundation for the programme's first focus on inpatient falls.

Because patients who fall have several risk factors, programmes which provide multifactorial interventions (ie, those which address the several or more risk factors particular to individual patients) are being shown to reduce the rate of inpatient falls by 20–30 percent. This finding also requires that we give attention to risk assessment and care planning as processes which support multifactorial interventions.

The overall intent of this project was to recommend effective approaches to risk assessment and care planning based on evidence and best practice, and thus promote a degree of consistency in these processes nationally. The project also provides support to district health boards (DHBs) as they monitor their implementation of processes for risk assessment and individualised care planning for older inpatients at risk of falling against the Commission's [quality and safety markers for falls prevention](#).

Documents currently in use for inpatients related to managing falls risk were sought from directors of nursing in DHBs for review. Findings were that there was considerable variation between DHBs (even within regions) and very little evidence of the patient's involvement (or that of their family/whānau). Further, document formats did not appear to facilitate the critical thinking and clinical judgement required for individualisation of care and it appeared that completion of the tool was most important.

This project recommends that measures to ensure that all patients find themselves in a safe environment and receiving safe care are considered necessary but separate from individualised care. Risk assessment and care planning are the processes of care fundamental to ensuring that individual patients receive the interventions and support which address their particular risks.

Common risk factors found in the older inpatient population are:

- a history of falling
- problems in mobilising and use of assistive devices
- taking medications with side-effects that increase the risk of falling
- impaired cognitive state
- problems with continence
- problems related to underlying conditions and risks associated with hospitalisation.

Rather than a tick-box approach, a checklist of common risk factors can be used to direct a thoughtful assessment of risk with each patient and their family/whānau, and their participation in the implementation of a plan to address these risks. These factors are recommended as essential elements in any risk assessment tool and process. Critical thinking, clinical judgement and the involvement of the patient and their family/whānau are suggested as essential approaches to effective risk assessment and care planning.

Although in total, the multifactorial interventions and support the patient receives are the coordinated effort of the multidisciplinary team, this discussion document is primarily directed to the 24/7 responsibility of nursing staff with patients in hospital. The recommended practices, essential elements and approaches offer a framework for DHBs to adopt and incorporate in the tools and processes they are using, or against which to audit their current tools and processes.

## **Recommendations**

It is recommended that the Health Quality & Safety Commission's national Reducing Harm from Falls programme considers the following as part of its activities over the next two years:

1. Continue to promote system development to assist with the automation/integration of risk assessment and care planning to improve delivery of care.
2. Support the learnings and findings from this document in the national programme's learning activities and other resources for health professionals and older people admitted to hospitals and their families/whānau.
3. Promote the integration of the programme's learning activities into staff education, training and induction processes.
4. Facilitate regional training and education workshops with DHBs, and other providers, to build on the concepts outlined in this document.
5. Adapt the 'universal precautions' terminology to promote a better understanding of the essential elements in the concept, which are increasing patient safety through improvements in the care environment and delivery of nursing care.
6. Evaluate the extent to which the recommended practices, elements and approaches given in this document have been taken up by repeating a review of the risk assessment and care planning tools in use in DHB hospitals in 2015.

## Introduction

According to the consensus definition recommended by the Prevention of Falls Network Europe (ProFaNE) and Outcomes Consensus Group in 2005, a fall is 'an unexpected event in which the participant comes to rest on the ground, floor, or lower level' (Lamb 2005).

The impact of a fall can be significant. A large number of people who fall suffer physical harm (Schwendimann et al 2006) and a number die as a direct result of their fall (Church et al 2011; Rubenstein 2006; Hughes and Currie 2008). There are also psychological consequences, such as fear of falling again, which in some cases is so severe that the individual is unable to mobilise independently again (Dow et al 2013; Young and Hollands 2012). Being unable to mobilise independently in turn increases the risk of a having a fall and can lead to recurrent falls (Benzinger et al 2011). Fear of falling is also associated with social isolation, depression and physical distress (Delbaere et al 2010; Scheffer et al 2008).

Falls are common adverse events for inpatients (Miake-Lye et al 2013a), and in New Zealand, inpatient falls with serious harm are reported through the national serious adverse event reporting programme in New Zealand (Health Quality & Safety Commission 2012), and also captured in the Ministry of Health's National Minimum Dataset. The Health Quality & Safety Commission is leading a national programme, Reducing Harm from Falls, with a focus on falls in older people, with an initial focus on inpatient settings. Inpatient falls increase workload and reduce bed availability – international data suggests patients who have a fall remain approximately 6.3 days longer in hospital (Wong et al 2011; Miake-Lye et al 2013b). In New Zealand, the cost of additional treatment and rehabilitation of any serious fracture following an inpatient fall has been conservatively calculated at around \$26,000 (de Raad 2012).

**Effective fall prevention programmes aim to reduce the number of people who fall, the rate of falls and the severity of injury should a fall occur.**

(World Health Organization, 2012)

A recent systematic review found that relative risk for falls in inpatients can be reduced by up to 30 percent with the implementation of falls prevention programmes utilising a number of components. Caution should be applied when considering this statement as one needs to consider the baseline starting point and the status of existing falls prevention initiatives. While common components in such programmes include patient and staff education, risk assessments for patients, bedside signs, wristband alerts, footwear advice, scheduled and supervised toileting and medication review, the optimal bundle is not clear (Miake-Lye et al 2013a).

Additionally, reductions in falls rates need to be balanced with other priorities (such as promoting independence and recovery) that contribute to the overall goals of patient care (Ganz et al 2013).

All health care providers should strive for continuous quality improvement in their patient safety practices and efforts to prevent harm from falls for those in their care. Themes in the successful implementation of multicomponent falls prevention interventions include:

- leadership support
- engagement of frontline staff in the design of the intervention
- guidance by a multidisciplinary committee
- pilot testing of interventions
- changing nihilistic attitudes towards falls (Miake-Lye et al 2013a).

## Background to the review

A mapping project by the DHBs Hospital Quality and Productivity Programme Working Group<sup>1</sup> found that there was no standardisation or consistency in falls prevention strategies used nationally, regionally or within districts; and that there were no national indicators to measure actual harm, and no cross-sector reporting standards or systems.

This review was proposed with the intent of:

- reviewing evidence and best practice to determine whether some risk assessment tools and care planning methods have better outcomes than others for the prevention of falls and reduction of fall-related harm
- recommending essential elements and approaches for risk assessments and care plans
- promoting a more nationally consistent approach to falls risk assessments and care plans (whether in paper-based documentation or embedded in patient management systems such as TrendCare) without requiring total standardisation.

The Health Quality & Safety Commission's national falls programme team requested risk assessment and care planning tools from DHBs. All 20 DHBs responded to the request, and many indicated their willingness to review their tools against the essential elements to be drawn from the review or to adopt tools recommended or developed by the national falls programme.

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<sup>1</sup> For more information see: DHBs Hospital Quality and Productivity Programme Working Group. 2012. [\*A collaborative national approach to reducing preventable harm. Quality of care indicator mapping: Falls injury prevention and pressure injury prevention.\*](#) Wellington: DHBs Hospital Quality and Productivity Programme.

## Quality and safety markers

A second prompt for the review came in the dialogue around the introduction of quality and safety markers (QSMs) for DHBs. The Health Quality & Safety Commission developed QSMs across its priority focus areas to monitor progress in programme activity and the impact of quality improvement interventions.

For the national falls programme the two quality process markers relate to assessing the patient's falls risk and linking the risks identified to the development of an individualised care plan. The QSMs measure the percentage of:

- older hospital patients (75+, or 55+ Māori and Pacific peoples) assessed for their risk of having a fall. The desired level is having at least 90 percent of older hospital patients assessed for their risk of having a fall
- patients, assessed as being at risk, with an individualised care plan that addresses their falls risk. The desired level is not specified.

These markers are based on the demographics of the New Zealand hospital population. Table 3 lists two of those markers (\*) and how often they were addressed as part of the falls risk assessment process.

By strengthening the relationship and linkages between the risk assessment and individualised care plans, a reduction in the number of falls and the resultant harm, such as hip fracture, an injury commonly caused by a fall, will result.

### What is a falls risk assessment tool?

Falls risk assessment tools help health care professionals assess their patients' risks of falling.

The risk assessment process identifies the cases particular to the individual.

The best-known risk assessment tools are the Morse Fall Scale, Stratify Scale, and Hendrich II Falls Risk Model (Morse 1986; Oliver et al 1997; Hendrich et al 2003). Other informal methods and tools are also used in clinical practice (Miake-Lye et al 2013b).

Because falls risk assessment tools cannot be relied upon as definitive predictors of whether a patient will experience a fall or not (Da Costa et al 2012), these tools should complement clinical judgement, not replace it (Ganz 2013; Oliver and Healy 2009; Vassallo et al 2008). Patient and family/whānau perspectives also increase the relevance of tools to the individual's risk factors.

The use of appropriate risk assessment tools, combined with critical thinking and clinical judgement and drawing on the experience of the patient and family/whānau will direct the actions and supports to be put in place and captured in the care plan.

### What is a care plan?

The primary function of a care plan is to ensure continuity of care between all members of the multidisciplinary team in order to achieve the best possible health outcomes for the individual patient.

A care plan is a critical mechanism of communication for the multidisciplinary team.

A care plan specifies for the particular patient:

- the care problem – *what is the problem we are trying to address?*
- the goals – *what are we hoping to achieve?*
- the interventions designed to reach the goals – *what are we going to do?*
- the method for evaluating to what extent the plan was successful – *how will we measure it?*

Atul Gawande, professor in the Department of Health Policy and Management at Harvard School of Public Health, has recently said that in the 1970s the average patient was attended to by the equivalent of two health care professionals during his/her stay in hospital, generally the nurse or the doctor; however, by the year 2000 the number had increased to some 15 different health care professionals (TED conversations 2012).

By strengthening the relationship and linkages between the risk assessment and individualised care plans a reduction in the number of falls and the resultant harm, such as hip fracture, an injury commonly caused by a fall, will result.

## Purpose of the review and discussion paper

This discussion document is directed to the chief nurse, directors of nursing, directors of allied health, quality managers and the national falls programme expert advisory group. It has several aims:

- It presents our findings in a review of risk assessment tools and care plans in use in DHBs.
- It recommends elements and approaches considered essential to the effectiveness of risk assessments and care plans as components in falls prevention programmes.

Recommended practices are offered for debate to promote a dialogue towards best practice in falls risk assessment and care planning approaches with a degree of consistency nationwide.

In turn, the recommended essential elements and approaches will assist those DHBs looking for improvement actions and help them achieve the expected thresholds for the falls QSMs.

### Summary of key findings

#### ***Little consistency in documents***

There was a lack of standardisation across the falls risk assessments and associated care planning documentation from all DHBs – content and layout of the tools and templates varied widely. Even where DHBs in the same region had based their documents on validated tools, no two DHBs shared common documents, although a small number had similarities.

#### ***Little evidence of patient or family/whānau involvement***

Significant benefits in clinical quality and outcomes, and the consumers' experience of care have been demonstrated when professionals and patients are partners in care (Australian Commission on Safety and Quality in Health Care 2011).

However, there was little evidence in this review that the patient's perspective (or that of their family/whānau) had informed the risk assessment tools, care plan documents or the business and operational side of delivering care.

#### ***Documents not easy to use***

The majority of documents were not set out in a way that supported ease of use – the font was often small and in some cases there was limited space to document material meaningfully. Many had lengthy tick-box lists.

#### ***Simply completing the tool seemed the most important aspect***

Finally, the documents did not suggest that critical thinking or clinical judgement was required on the part of the person completing the assessment or plan, nor a real engagement with the patient and their family/whānau about their understanding of problems, or preferences in goals and interventions.

## **Review design**

As a framework to structure the design of this review and discussion document, we have addressed the following questions commonly asked of the Clinical Lead by health care professionals regarding:

### ***Risk assessments***

- What falls risk assessment tools should we use?
- How should fall risk assessments be conducted?
- Is there a standardised assessment and how and when should it be implemented?
- Which internationally validated tool should we use?
- What is the patient/family/whānau role in falls risk assessment and how do we encourage/ensure their input?

### ***Care planning***

- What care planning tool would you advise using?
- How can we avoid using checklist care plans while ensuring prevention strategies are not missed?
- Nurses complain about the amount of paperwork required when admitting patients. How do we condense while ensuring patient assessment and planning is complete?
- How do you individualise a care plan when many actions are considered essential in keeping all patients safe?
- Are there universal precautions for falls injury prevention and how can we ensure compliance with their implementation?

Criteria against which to review the risk assessment and care planning documents were drawn from the quality improvement toolkit '*Preventing Falls in Hospitals*' (Ganz 2013) published by the Agency for Healthcare Research and Quality (AHRQ). The AHRQ toolkit has successfully been used as a strategy in the reduction of falls (Miake-Lye et al 2013b).

The AHRQ toolkit addresses the challenges associated with developing, implementing and sustaining falls prevention programmes within a hospital setting. It spans the falls prevention journey from instigating a change process, to understanding and implementing risk assessment and care planning, to measuring and sustaining both patient and programme outcomes. The toolkit's content draws on both a systematic review of the literature and expert clinical opinion regarding best practice in falls prevention.

## **Findings and analysis**

### ***Use of risk assessments***

This review concentrated on how many of the submitted documents made reference to a list of measures (called 'universal precautions') that need to be addressed for all patients during their stay in hospital. The concept is explained in the AHRQ toolkit: universal precautions should be implemented for all patients to help keep them safe from harm (Ganz 2013).

Table 1 lists the measures given in the AHRQ toolkit (Ganz 2013) and the frequency with which these measures were identified in DHBs' risk assessment tools, guidelines or care plan documents.

**Table 1: Universal fall precaution measures as listed in the AHRQ toolkit (p30)**

No.	Measure	N=20
1	Familiarise the patient with the environment	8
2	Have the patient demonstrate call light use	5
3	Maintain call light/bell within reach	12
4	Keep the patient's personal possessions within patient safe reach	8
5	Have sturdy handrails in patient bathrooms, rooms and hallway	0
6	Place the hospital bed in low position when a patient is resting in bed; raise bed to a comfortable height when the patient is transferring out of bed	6
7	Keep hospital bed brakes locked	6
8	Keep wheel chair wheel locks in 'locked' position when stationary	6
9	Keep non slip, comfortable well-fitting footwear on patient	8
10	Use night lights or supplemental lighting	5
11	Keep floor surfaces clean and dry. Clean all spills promptly	2
12	Keep patient care areas uncluttered	10
13	Follow safe patient handling practices	0

No DHB mentioned all of the universal measures in their documents, but measures 3 and 12 featured more strongly. We do know that that these two factors are common environmental influences that impact on falls incidents in the hospital setting.

Table 2 lists DHBs' responses to reviewer questions about risk assessment tools being used.

**Table 2: Number of DHBs that addressed specific aspects within the submitted falls risk assessment tools**

No.	Risk assessment tool detail	N=20
1	The number of DHBs that used any falls risk assessment tool	20
2	The number of DHBs that used an existing, internationally known falls risk assessment tool	9
3	The number of DHBs that translated the result of their falls risk assessment into a score and/or risk level?	15
4	The number of DHBs that directly connected falls preventive strategies to the score or risk level	6
5	The number of DHBs that involved a documented clinical nursing evaluation as part of the risk assessment	6

All 20 DHBs used some sort of falls risk assessment tool. The use of existing, internationally known tools was marked a positive when the name of the tool was acknowledged in the document submitted. This was the case for nine DHBs. Some of these known tools were adapted to meet local demands.

Fifteen DHBs translate their assessment either directly into a level of falls risk (high, medium, low) or first translated findings in a numerical score which was then translated into a level of risk.

Six DHBs had specific falls preventive intervention/strategies connected to the level of risk or to the score.

A professional clinical assessment by a nurse was encouraged by six DHBs. In only one DHB was this an essential and independent component of the falls risk assessment process.

**Table 3: Number of DHBs that addressed age and ethnicity of patients in their falls risk assessment**

No.	Item	N=20
1	Age 75+*	1
2	Mentioning other age groups	9
3	Māori & Pacific peoples 55+*	0

\* *Indicates Commission quality process marker*

Only one DHB mentioned the 75+ age group. Nine other DHBs listed other age groups. Some assumed age itself is a risk, but the age they chose to activate the risk varied. No DHB listed Māori or Pacific peoples 55+ as a group that potentially has an increased risk of falls.

All 20 DHBs used risk assessment tools but only nine used existing, internationally recognised falls risk assessment tools (with adaptation ranging from minor or major).

Table 4 lists how often the recommended components of a risk assessment, as recommended by AHRQ, were addressed in the assessment tools used by DHBs.

**Table 4: AHRQ-recommended components of falls risk assessment tools appearing in the risk assessment tools used by DHBs**

No.	Aspect	N=20
1	History of falls	17
2	Mobility issues	19
3	Medications	18
3a	• Greater than four different types	1
3b	• Medication groups	15
4	Mental status	20
5	Continence	16
6a	Potential risk of equipment	6
6b	Potential risk of impaired vision	10
6c	Potential risk of orthostatic hypotension	3

Mobility and the patient's mental status were addressed by most DHBs as essential aspects of falls risk assessments. Seventeen DHBs addressed the history of falls as a potential future fall risk, and 16 mentioned the level of patient continence as an important aspect.

The number and type of medications used by the patient was also assessed by most DHBs. Only one DHB addressed the internationally accepted criteria of the use of four medications or more as a critical falls risk factor. The evidence on the criteria has shifted.

A limited number of DHBs addressed additional falls risk factors such as the use of equipment, having impaired vision and/or suffering from orthostatic hypotension.

It is recognised that the clinical condition of the patient can change many times during their stay in hospital. Therefore, information about the frequency and/or interval of reassessment of a patient's falls risk was also considered important in this review. Twelve DHBs mentioned that the falls risk assessment had to be repeated. Of these, four DHBs mentioned the assessment had to be repeated when there was a change in the patient's condition, seven DHBs wanted a reassessment on a weekly basis and one DHB expected reassessment of the falls risk to occur every shift.

New evidence with regard to the prevention of falls and best practice are published on a regular basis. Updating existing risk assessment tools and falls prevention strategies is critical if care is to be based on best and current evidence and practice. With this in mind the reviewers were led to elicit the currency of the risk assessment tools and to determine if the documents had expiry dates. Fourteen DHBs had a date of origin on their forms but only five had expiry dates with many appearing not to have been updated for three years or more.

### ***Use of care plans***

The submitted care plans showed a wide variety in content, layout and structure. Most care plans attempted to structure the problems, goals, interventions and outcomes but differed significantly in approach. The way the strategies were communicated to those who had to implement them varied significantly. Some

documented the strategies but left little space for free text, while many expected the strategies to follow from a tick list. As there are only general guidelines in the literature (Keenan et al 2008) on how to structure and use care plans in areas of patient safety, the reviewers decided to make some general observations at this stage.

These observations are not meant to be a complete analysis, but are made to stimulate discussion on how to structure and use the care plan effectively in reducing harm from falls.

- Most submitted care plans were prefabricated. They contained multiple tick-box lists, which staff ticked when applying to the patient.
- Some DHBs had specific falls care plans which appeared to be separate from the overall patient care plans. Others incorporated the prevention of falls into the general care plan.
- Some DHBs had falls preventive interventions connected to a particular falls risk identified. Others provide a list of interventions which staff could choose from as appropriate. These were often called guidelines and showed no relationship to the risk level identified in the risk assessment.
- Goals and outcomes sought in preventing the patient from falling and suffering harm are mentioned in only one DHB's care plan.
- The layout of the majority of the care plans appear structured to protect clinicians from lengthy documentation expectations, achieved by directing the development of the care plan through the use of tick-box lists.

## **Discussion**

It is evident from the findings that falls risk assessment tools and the associated care plans used in public hospitals vary widely in New Zealand. All DHBs take the risk and burden of patient falls seriously by conducting risk assessment and care planning to reduce harm from falls, but each DHB takes a different approach in that process. Variation is not necessarily a negative, as long as organisations are aware of and use best research, evidence and practice in actions taken.

In the following discussion and recommended practices, the reviewers attempt to reflect the findings against the best practice examples from the AHRQ toolkit (Ganz 2013) together with the results of the systematic review by Miake-Lye and colleagues (2013a; 2013b).

### ***What should a falls risk assessment tool include?***

The AHRQ toolkit (Ganz 2013) advises that 'falls risk assessment tools provide valuable information but none of the most frequently used/internationally known tools address all the present day relevant fall risk factors.' The reviewers agree with this position and also with the recommendation to conduct falls risk assessments by addressing the following areas:

- history of falls
- mobility problems and use of assistive devices
- medications
- mental status
- continence
- other risks (tethered to equipment, impaired vision, orthostatic hypotension etc).

### **Recommended practice**

*If a DHB prefers to use a particular falls risk assessment tool, and that tool addresses all general areas listed above, there is no need for it to change it. If the tool does not ask questions about the areas listed above, then the reviewers' advice is that missing components be added to the tool the DHB prefers to use (refer also to the key risk factors given in Appendix 1).*

### **How should a falls risk assessment be conducted?**

The use of risk assessment tools does not discharge clinical staff from using their professional expertise in assessing the patient's falls risk.

Relying on risk assessment tools alone can lead to wrong conclusions being drawn that may result in preventative interventions not being introduced when they are needed or unnecessary expenditure on patients who do not have a falls risk.

The purpose of using a falls risk assessment tool is that it is complementary to the clinical judgement of the registered nurse (Vassallo et al 2008) and other health professional members of the care team.

The reviewers do not encourage the reliance on using a scoring system – whether a numerical scale or 'at risk/not at risk' – to depict the level of risk especially if the score directs clinicians to use specific care components or approaches for that particular level of risk level. For example, two patients with the same rating on a falls risk scale may well have quite different individual risk factors and these must be identified in order for individual care strategies to be implemented. Best practice is to individualise care, applying a set of predetermined cares is not individualised care.

### **Recommended practice**

*It is the opinion of the reviewers that a comprehensive falls risk assessment for those patients most likely to be at risk consists of three clear components, which can be described as:*

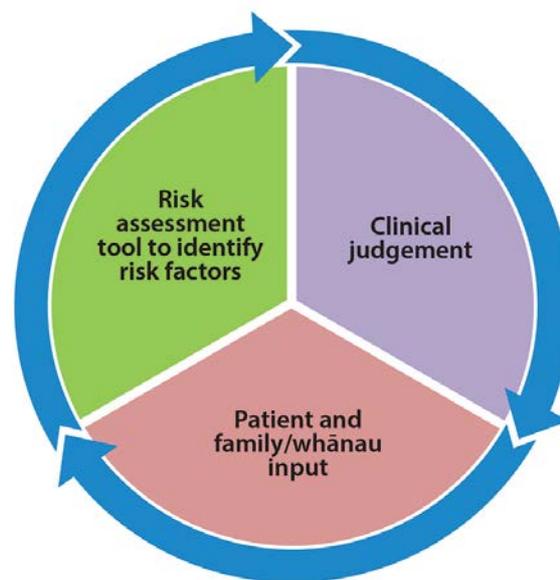
- 1. the patient/family/whānau knowledge or opinion*
- 2. the clinical expertise of the nurse and the health care team*
- 3. the application of the falls risk assessment tool.*

*The reviewers acknowledge that a number of patients may not be at risk of falling but encourage all DHBs to:*

- consider asking all patients whether they see themselves as being at risk of falling*
- adopt the use of patient information (including the Commission's [patient information](#) compendium) to engage with the patient/family/whānau on steps that will keep them safe while in hospital, and also on their return home*
- expect that clinicians will use their judgement as to whether they think that the patient is at risk of falling.*

*The components of a risk assessment for reducing the harm from falls are demonstrated in Figure 1.*

**Figure 1: Demonstration of the synergy between the three different components of risk assessment**



### ***The patient/family/whānau role in falls risk assessment***

The engagement of patients with planning for the care they receive is now considered a key theme in patient-centred health care (Rozenblum and Bates 2013; Berwick 2002). Everything we do should benefit the patient. In this context, it should be expected that we ask the patient and/or their family/whānau whether they consider themselves or their family/whānau member to be at risk of falling. Patients and their families/whānau have the right to be involved in all the care they receive from health care organisations (Health and Disability Commissioner 2009; World Health Organization 2009).

### ***The current approach to patient/family/whānau involvement***

Only one DHB had a prompt in their falls risk assessment tool for this component to occur. Self-assessment of falls risk assessments by patients/families/whānau contributes to staff having a more complete picture of how the patients views their own risk of having a fall. The difference in environment (home versus hospital) may bring new and unknown challenges unfamiliar to the patient. By asking the right questions, new and critical information may come to the surface.

Additionally, patient self-assessment will help patients and families/whānau to accept the use of the interventions in the care plan that will mitigate the risk of falling and suffering harm.

### ***Recommended practice***

*The reviewers support the approach of including falls risk questions in the pre-admission paperwork or on admission, for unplanned admissions, for either the patient or their family/whānau member to complete. The greatest value that would follow from this approach is the discussion that follows between the clinician and the patient.*

*The reviewers note the lack of a generalised approach as to when to reassess the patient. DHBs do have different requirements but, as a minimum, the reviewers consider that the patient should be reassessed when their condition changes and suggest this be documented as an expectation in supporting DHB policy and procedure documents.*

### ***What should a care plan include?***

The structure of the discussion is informed by responding to the questions the clinical lead for the national falls programme was asked frequently:

- What care planning tool would you advise?
- How can we avoid using checklist care plans while ensuring strategies are not missed?
- How do we streamline the impact of paperwork required when admitting patients; how do we integrate actions and documentation, while ensuring patient assessment and planning is complete?
- How do you individualise a care plan when many actions are considered essential in keeping patients safe?
- Are there universal precautions for falls injury prevention and how can we ensure compliance with their implementation?

The literature is generally lacking around the most efficient and effective care planning processes with regard to keeping patients safe while under the care of health care professionals (Keenan et al 2008). During their initial training, nurses learn how to create an individual patient care plan. The standard process steps for this are to diagnose, to plan, to deliver and to evaluate.

In the absence of other models, the reviewers advise DHBs to keep to these core principles of care planning.

### ***Recommended practice***

*Based on observations from the care plans received from DHBs, the following points are offered for consideration:*

- *The list of universal falls precautions, as previously discussed, should be adopted as business as usual for the care of all patients regardless of level of falls risk. These precautions should act as the expected standard of care and should be included in unit nurse audit programmes (Appendix 2).*
- *The falls prevention care plan should be integrated into the overall individual patient care plan. The prevention of falls has many aspects and is related to many other possible care problems, eg, incontinence, malnutrition and medication. A separate falls care plan might miss the relationship between the risk of falls and other care issues.*
- *DHBs should provide a list of possible falls preventive measures/strategies from which health care professionals can choose the most applicable to the patient situation. Some already do this and call them 'guidelines of care'. Such an approach helps health care professionals to make decisions on which interventions to help achieve the goals of the patient's care plan.*
- *The interventions/strategies chosen should have a direct link to the patients' risk of falling as identified in the risk assessment.*

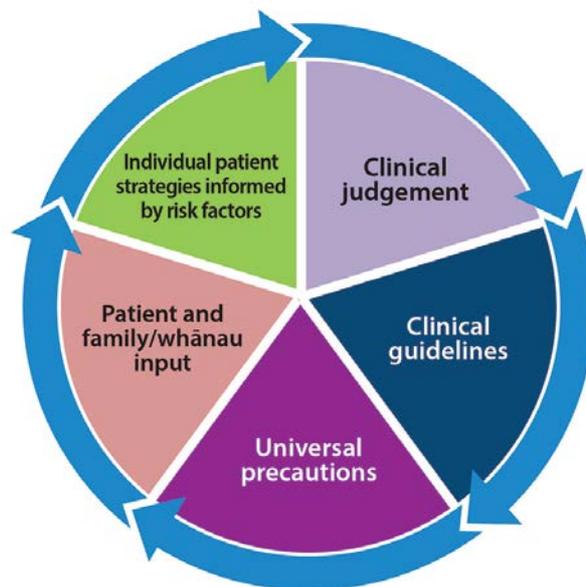
*It is acknowledged that there has been an increase in the volume of care documentation that has occurred over recent years, while in contrast there is a growing reliance on technology for communication. The reliance on a prefabricated form that requires either a tick or a signature to select components of care can be used in an attempt to reduce the writing load, but we must not lose the critical thinking to balance this approach.*

*In the lists reviewed, there were large varieties of actions suggested, many of which could be considered universal precautions, such as the call light/bell in reach. There could be an argument that such factors should not be in a specific list as they are considered to be expected practice for all patients. This tendency for 'tick-box lists' has the risk of moving away from using clinical judgement and critical thinking in planning the care required for the individual patient, which is detrimental to the quality of care. The risk of this happening in a DHB must be addressed.*

*In summary, there are five components to a care plan to reduce harm from falls (see Figure 2). The clinical assessment and patient and family/whānau input are as important in planning as they are in risk assessment. Guidelines help clinicians choose the best strategies for patient care.*

*Universal precautions are part of care for all patients regardless of risk of falling. Individualised patient care strategies are centred on the patient's specific needs as identified in the risk assessment.*

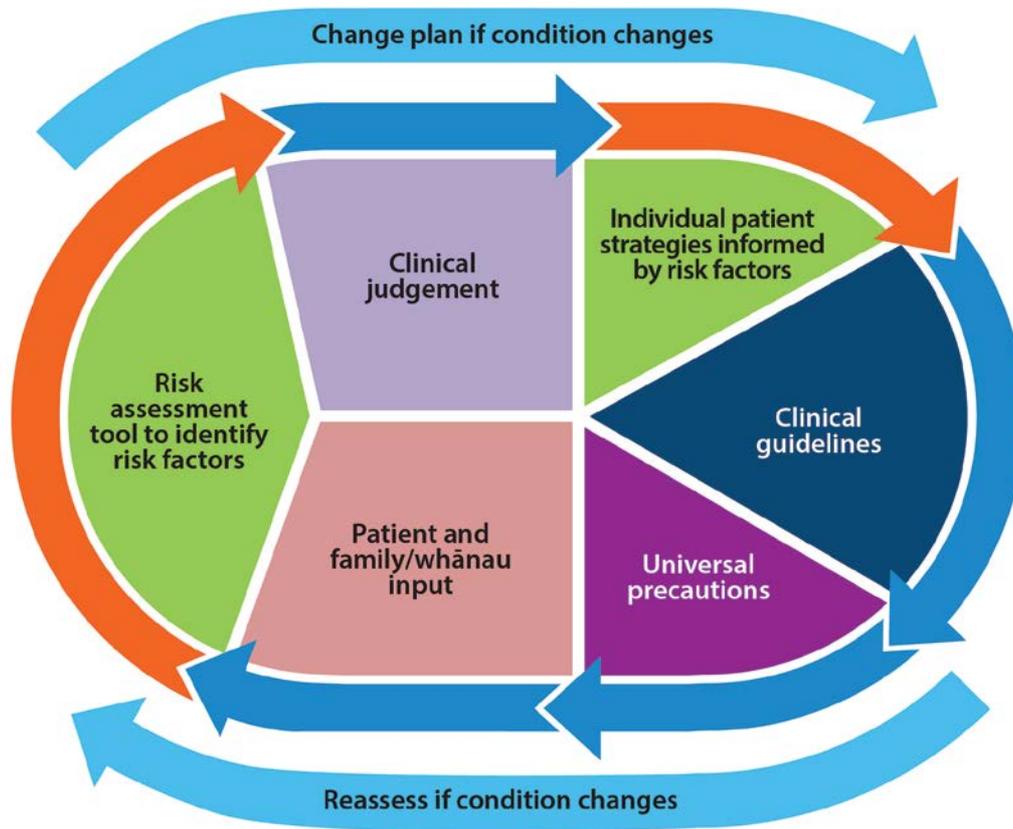
**Figure 2: Demonstration of the synergy between the five different components of reducing harm from falls care planning**



*A care plan that best meets the individual patient's needs and keeps them as safe as possible to prevent a fall and/or harm from a fall needs to be closely linked to the findings of the risk assessment. A care plan must also be clear about when the risk needs to be reassessed and the care plan then adapted accordingly.*

*Figure 3 attempts to express this synergy and relationship between all the components of both a falls risk assessment and a falls care plan.*

Figure 3: Reducing harm from falls framework



## Overall recommendations

This review and discussion document is focused on risk assessment and care planning in relation to 'inpatient' care settings. Some of the recommendations will apply more broadly as the patients/family/whānau focus applies to a range of settings.

It is recommended that the Commission's national Reducing Harm from Falls programme considers the following as part of its activities over the next two years:

1. Continue to promote system development to assist with the automation/integration of risk assessment and care planning to improve delivery of care.
2. Support the learnings and findings from this document in the national programme's learning activities (10 Topics) and other resources for health professionals and older people admitted to hospitals and their families/whānau.
3. Promote the integration of the 10 Topics into staff education, training and induction processes.
4. Facilitate regional training and education workshops with DHBs, and other providers, to build on the concepts outlined in this document.
5. Adapt the 'universal precautions' terminology to promote a better understanding of the essential elements in the concept, which are increasing patient safety through improvements in the care environment and delivery of nursing care.
6. Evaluate the extent to which the recommended practices, elements and approaches given in this document have been taken up by repeating a review of the risk assessment and care planning tools in use in DHB hospitals in 2015.

## Conclusion

This review set out to understand in more depth the risk assessment and care planning tools and processes in use across DHBs in New Zealand.

Current international evidence was used to establish criteria against which to review both risk assessment tools and care plans, with the overarching goal to provide advice to the sector on what the reviewers consider to be 'essential care elements'.

The paper discusses the relationship between the two processes and the extent to which the patient and family/whānau must be an integral partner with the health professional and multidisciplinary care team, so that together patients are kept safe from falling while in hospital care.

The paper emphasises the importance of clinical assessment and judgement, and the support to both clinicians and patients that a set of guidelines and the implementation of 'universal precautions'/'essential care elements' play in reducing patient harm from falls.

The falls QSMs will be used to measure progress of DHBs in working to achieve the 90 percent threshold for completion of risk assessments and individualised care plans (in targeted population groups). The findings of this review will also support DHBs in this area by producing guidance, tools and resources through the national programme.

We encourage an approach to falls prevention and harm reduction that involves patients and families/whānau through every step of the process. This approach accepts the concept of implementing a set of 'universal precautions'/'essential care elements' to help keep all patients safe regardless of risk, and implement care planning of individual patient strategies that are strongly linked to risks identified.

This document will be submitted to the Reducing Harm from Falls expert advisory group for endorsement and consideration of next steps.

### Next steps:

1. Presentation of findings to the Reducing Harm from Falls expert advisory group.
2. Use the report/review as a basis for capability building and learning opportunities.
3. Incorporate the findings from this document as a basis for workshops to promote a standardised framework for risk assessment / care planning approaches
4. Test the concept of 'universal precautions' ('essential care elements') in a small-scale test of change with a nominated hospital/ward, and the assistance of a quality improvement advisor.
5. Evaluate the impact of any cycle of change or improvement intervention.
6. Facilitate spread across DHBs.
7. Present New Zealand approaches and findings to national and international falls forums.

## Appendix 1: Key risk factors

The following key risk factors put patients at greater risk of falling. These factors should be considered during the formulation of individualised falls prevention strategies.

- **History of falls** – all patients with a history of falls, such as a fall in the past 3–12 months.
- **Mobility problems and use of assistive devices** – patients who have problems with their gait or require an assistive device (such as a cane or a walker) for mobility.
- **Medication** – patients on a large number of prescription medications, or patients taking medicines that could cause sedation, confusion, impaired balance or orthostatic blood pressure change.
- **Mental status** – patients with delirium, dementia or psychosis, who may be confused.
- **Continence** – patients who have urinary frequency or who have frequent toileting needs.
- **Neurological conditions** – people who have neurological conditions such as multiple sclerosis or paraplegia, and those who experience seizures, blackouts, fainting or dizziness.
- **Other risks** – being tethered to equipment, such as an IV pole, that could cause the patient to trip; impairment in vision that could cause a patient not to see an environmental hazard.

## **Appendix 2: Precautions for the prevention of falls**

### **Universal precautions (essential care elements) for the prevention of falls**

- Familiarise the patient with the environment.
- Have the patient demonstrate call bell/light use.
- Maintain call bell/light within reach.
- Keep the patient's personal possessions within patient safe reach.
- Have sturdy handrails in patient bathrooms, room and hallway.
- Place the hospital bed in low positions when a patient is resting in bed; raise bed to a comfortable height when the patient is transferring out of bed.
- Keep hospital bed brakes locked.
- Keep wheelchair wheel locks in 'locked' position when stationary.
- Keep non-slip, comfortable, well-fitting footwear on the patient.
- Use night lights or supplementary lighting.
- Keep floor surfaces clean and dry.
- Clean up all spills promptly.
- Keep patient care areas uncluttered.
- Follow safe patient handling practices.
- Involve patient and family/whānau in care planning.
- Provide individualised education to patient and family/whānau.

### **Additional components to be considered (which may reflect local processes of care)**

- Undertake hourly rounding.
- Conduct shift handovers at the bedside.
- Ensure patient-at-a-glance chart is reviewed each shift.
- Use mobility assistance symbols.

## Appendix 3: Examples of falls screening tool/risk assessment

A copy of newly created documents available to be uploaded into the TrendCare system, which incorporate the concepts of this discussion/review document.

### Falls Screening Tool

Printed: 2/07/2013  
4:23:25 p.m.

(Affix Patient-Id label here)

<b>Assessment Obtained From...</b>		Date: .....
<input type="checkbox"/> Patient		<input type="checkbox"/> Spouse/Partner .....
<input type="checkbox"/> Parent .....		<input type="checkbox"/> Relative .....
<input type="checkbox"/> Carer .....		<input type="checkbox"/> Friend .....
<input type="checkbox"/> Guardian .....		<input type="checkbox"/> Organisation .....

ITEM	RESPONSE/SCORE			PROMPTS/COMMENTS
	Yes	No	N/A	
<b>Family/Whanau Input</b>				
Patient input	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Family and carer input	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Falls Screening</b>				
Aged over 55 years and Maori or Pacific Islander	<input type="checkbox"/>	<input type="checkbox"/>	1 <input type="checkbox"/>	
Aged over 75 years in any ethnicity	<input type="checkbox"/>	<input type="checkbox"/>	1 <input type="checkbox"/>	
Patient has fallen in the past year	<input type="checkbox"/>	<input type="checkbox"/>	1 <input type="checkbox"/>	
Requires aids to mobilise?	<input type="checkbox"/>	<input type="checkbox"/>	1 <input type="checkbox"/>	
Clinical judgement suggests full assessment needed	<input type="checkbox"/>	<input type="checkbox"/>	1 <input type="checkbox"/>	

Total Score:

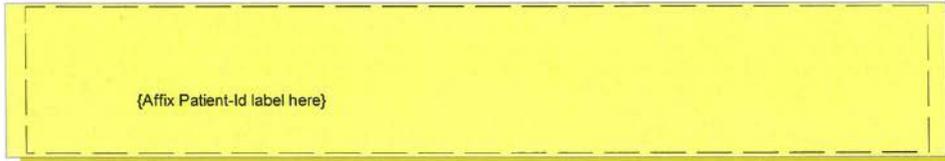
<b>Comments</b>

#### Health Care Professional Completing Form

Signature: ..... Name: .....  
Designation: ..... Date: .....

# Falls Risk Assessment

Printed: 2/07/2013  
4:22:27 p.m.



**Assessment Obtained From...** Date: \_\_\_\_\_

<input type="checkbox"/> Patient <input type="checkbox"/> Parent <input type="checkbox"/> Carer <input type="checkbox"/> Guardian	<input type="checkbox"/> Spouse/Partner <input type="checkbox"/> Relative <input type="checkbox"/> Friend <input type="checkbox"/> Organisation
--	--

ITEM	RESPONSE/SCORE			PROMPTS/COMMENTS	
<b>Family/Whanau Input</b>	Yes	No	N/A		
Patient input	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Family and carer input	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>History of Falls</b>	Yes	No	N/A		
* Select One Only * - Patients most recent fall					
Pt admitted with a fall	<input type="checkbox"/>	1		Cause of fall:	
Pt fall within last 3 months	<input type="checkbox"/>	1		Frequency of falls:	
Pt fall within last 3-12 months	<input type="checkbox"/>	1		Injuries from previous falls:	
Pt fall one year or more ago	<input type="checkbox"/>	1		Comment:	
No history of falls	<input type="checkbox"/>	1			
<b>Mobility</b>	Yes	No	N/A		
Unstable gait or looks unsafe walking	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	Is this new for the pt: Comment:
<b>Vision, Language and hearing deficit</b>	Yes	No	N/A		
Pt has hearing deficits	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	Aids functional and appropriate: Comment:
Pt has visual deficit	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	Aids functional and appropriate: Comment:
Pt requires aids ie. glasses or hearing aids	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	Aids functional and appropriate: Comment:
Does Pt speak or understand English	<input type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	
<b>Cognitive assessment</b>	Yes	No	N/A		
Pt has a communication impairment	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	
Pt has confusion, disorientation or memory loss	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	Physiological causes been identified/excluded: Comment:
Pt is agitated, impulsive or unpredictable	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	
Pt over estimates / forgets limitations	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	
Pt has a neurological condition	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	
Pt has a fear of falling	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Continence</b>	Yes	No	N/A		
Pt has frequency, urgency or incontinence	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	Has UTI been excluded: Comment:
<b>Medications</b>	Yes	No	N/A		
Pt on psychotropic or sedative drugs	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	
Pt on drug that may cause postural hypotension	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	
Pt takes more than four drugs per day	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	
Pt within 24hrs post anaesthetic/sedation	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	

# Falls Risk Assessment

Printed: 2/07/2013  
4:22:27 p.m.

(Affix Patient-Id label here)

ITEM	RESPONSE/SCORE			PROMPTS/COMMENTS
<b>Other Risks</b>				
	Yes	No	N/A	
Does the patient have any other risks	<input type="checkbox"/>	1 <input type="checkbox"/>	<input type="checkbox"/>	Please list other risks:

Total Score:

**Comments**

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**Health Care Professional Completing Form**

Signature: ..... Name: .....

Designation: ..... Date: .....

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