

Reducing Patient Falls in an Acute General Hospital

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Summary of project

This nine month project aimed to establish a Trust-wide falls reduction strategy for all in-patients over the age of 16 admitted to Pinderfields & Pontefract Hospitals NHS Trust. The project successfully implemented an evidence based risk assessment tool and strategies to reduce the risk of falling. Nursing staff had the opportunity to access training and all wards were provided with a resource pack that gave information on the background to the project and the evidence base behind the assessment and interventions. Documentation is now available to assist nursing staff maintain clear and accurate records regarding the level of risk, and strategies are in place to reduce individual patients' risk of falling. It is envisaged that this standardised approach will encourage continuity of care throughout the Trust.

Background and baseline statistics

In-patient falls were identified as a major cause for concern by a risk management process within the Trust. Nurses and other professions acknowledged the problem, and in Spring 1999 a steering group was set up to devise a strategy to reduce in-patient falls across the Trust.

People over the age of 65 account for 66% of all hospital admissions and for 40% of emergency admissions (NHS Plan, 2000). Within the Wakefield District there are approximately 45,500 people over the age of 65. During the financial year 1999/2000, there was a total of 3,049 patient falls within the Trust, representing a fall rate of 9.69 per thousand bed days and a subsequent injury rate from falls of 22%. Of these 25 were RIDDOR (Reporting of Incidents, Diseases and Dangerous Occurrences Regulations) reportable incidents. There were 1100 people admitted to Pinderfields and Pontefract Hospitals NHS Trust due to falls-related incidents in 2000-2001.

Box 1: Definition of falls

Fall: An untoward event which results in the patient coming to rest unintentionally on the ground or other lower surface (Morris & Isaacs, 1980)

Accidental fall: A slipping, tripping or other mishap generally related to environmental factors (Morse, 1989)

Anticipated physiological fall: Fall that occurs with patients that are identified as at risk of falling (Morse, 1989)

Unanticipated physiological falls: Attributed to physiological causes but are created by conditions that cannot be predicated before the first occurrences (Morse, 1997)

Aims of the project

- To implement a Trust-wide strategy to reduce the in-patient fall rate, i.e. fall rate = no. of falls/no. of bed days x 1000
- To reduce falls resulting in reportable incidents (RIDDOR) by 20%

Objectives of the project

- To collate the evidence behind the Morse Falls Assessment Tool
- To determine the falls-risk score for different units using the Morse Falls Assessment Tool
- To pilot the assessment tool
- To analyse the pilot data and implement the assessment tool on all wards and for in-patients over the age of 16
- To support/educate staff during the implementation process
- To evaluate the impact of the project

The assessment tool

The Morse Risk Assessment Tool was chosen as it is one of the few assessment tools available that is designed for use in an acute care environment and has undergone rigorous statistical testing for reliability and validity. Each category of risk (box 2) is weighted and scored individually. Once each category has been assessed the scores are totalled. It is this score of between 0 and 125 that provides the individual level of risk for each patient.

Box 2: Morse risk assessment tool

- History of falls
- Secondary diagnosis
- Mobility aids
- Attachment to equipment
- Gait
- Mental status

The pilot

A pilot project was established on seven wards for a two month period. The wards were selected for their diversity of clinical settings. The pilot aimed to look at the ease of use of the tool and its application to practice. Trials of equipment such as soft bed rails and sensor alarms were also undertaken during this period.

All patients on the pilot wards were assessed using the Morse Risk Assessment Tool in order to determine the fall-risk score relating to the clinical speciality on each ward (as suggested by Morse, Morse and Tylko, 1989). However, following the pilot phase it was acknowledged that having individual fall-risk scores for each speciality would be too difficult to manage, as there was a number of wards with mixed specialities. Such difficulties may well have led to failure of the

project and it was agreed that the levels of risk should be standardised across the hospital. Although this has reduced the specificity of the tool, it has enabled the tool to be used throughout the Trust in a more simplified fashion. It has not reduced the validity of the tool as the higher the score, the more at risk the patient is of falling.

A liaison nurse was chosen on each pilot ward to take responsibility for ensuring the documentation was completed and any statistical information was collated and passed to the project manager. Training sessions were organised prior to the pilot to inform nursing staff of the background to the project and how to complete the documentation.

At the end of the pilot, an evaluation took place that included an audit of documentation, a qualitative staff questionnaire and an analysis of fall rate statistics. This enabled the project manager to identify areas which needed to be developed further before implementing the project Trust-wide. A comparison of baseline data and pilot ward statistics presented very impressive initial results, although it was acknowledged that a two-month interval was too short a time-span to determine long lasting results. In the pilot period there were 79 falls on the pilot wards, with 189 for the same period the previous year. This relates to a 58% reduction in falls compared with the previous year. There were 5 patients who fell recurrently on these wards and they were responsible for 13 falls, which represents an average fall rate of 2.6 per patient compared with 4.82 the previous year.

The pilot also identified a number of issues concerning strategies for preventing falls, documentation, care planning and the education and support needs of staff. These were addressed as part of the Trust-wide implementation of the project.

Strategies to reduce the risk of falling

Many strategies for reducing patient falls are documented in the nursing literature. Those selected for inclusion within the care plans can be simply administered and have evidence to back up their effectiveness. All strategies to reduce the risk of falling are clearly identified within the care plans (box 3). The named nurse can individualise the care plan for each patient by writing additional comments in free text. Communicating the level of risk to all health care professionals and other personnel on the wards is vitally important so that all staff can implement

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appropriate strategies to reduce the risks of falling. A traffic-light system of visual cues has been introduced throughout the Trust to identify a patient's level of risk. The symbols are 8cm square, with a 6cm coloured circle on a white background and are designed to be placed within the patient's bed space near their name board. A red symbol represents a high risk of falling, amber a medium risk and green a low risk of falling. The symbol is visual enough to be noticed by staff but not so large as to be intrusive. As the symbols are disclosing information about the patient, informed consent needs to be provided by the patient for them to be placed on view. There is a consent box within the care plan that must be signed and dated before the visual cues can be used for any patient.

Box 3: Strategies within the care plans

- Documentation of risk assessment score
- Communication to other relevant health professionals
- Ensure bed on lowest setting except when giving care
- Ensure patient has necessary items within reach
- Check patient footwear
- Assess environment for safety hazards
- Ensure regular toileting and assist where necessary
- Refer to appropriate agencies if further assessments required
- Assess for bed rails
- Educate patient/carer in safe practices
- Position in easily observable area
- Consider one-to-one nursing
- Consider using sensor alarm
- Communicate with the team regarding patient management

Environmental assessment

A comprehensive environmental risk assessment tool has been developed as part of the project. This assessment is completed annually by the ward sister/charge nurse and provides a detailed account of any extrinsic factors that may influence fall rates in a particular ward area. A summary sheet is completed following the assessment and this can be used to determine where environmental risks can be reduced, how ward resources should be focussed and where additional funding needs to be sought from external sources.

Staff education

Evidence suggests that staff education is one of the most important factors in the success of a falls reduction programme. Box 4 lists some of the approaches used for this project. As well as a number of staff education sessions, time was spent with individual liaison nurses and ward sisters/charge nurses to ensure that they were passing on the correct information and encouraging staff to complete the assessment forms. A resource pack was produced for all wards, containing relevant information, up to date assessment forms, care planning documentation, background evidence and references. This was hand delivered to all wards so that there was an opportunity to ask further questions and arrange any teaching sessions. Guidelines for reducing and managing patient falls, should they occur, have been written and sent through the Trust's 'Shared Leadership' ratification process. These guidelines were sent to all wards and departments.

Box 4: Staff education/support

- Resource pack
- Guidelines
- Staff education sessions
- Posters
- Information displays
- Videotape

Evaluation

Statistical evaluation between April and July 2001 demonstrated a fall rate of 8.09 per thousand bed days, which is a slight reduction in the rate of falls. An analysis of the RIDDOR figures for Jan – Dec 2000 and Jan – Dec 2001 indicate a 44% reduction in falls-related RIDDOR incidents, with a 77% reduction in fractured neck of femurs.

An audit team comprising E and F grade nurses will annually appraise the documentation as part of the nursing charter audit programme already running throughout the Trust. It is anticipated that the audit process will influence the sustainability of this initiative and encourage nurses to use falls prevention strategies routinely in practice.

Conclusion

The project has successfully implemented an evidence based risk assessment tool and associated strategies

to reduce the risk of falling for patients over the age of 16 admitted to Pinderfields & Pontefract Hospitals NHS Trust.

Nursing staff have had the opportunity to access training sessions and all wards have been provided with a ward resource pack that details information on the background to the project and the evidence base behind the assessment and strategies used.

Further developments are required to produce a whole systems approach to falls services. The National Service Framework (NSF) for older people may well provide the vehicle for this work. The project manager is to chair the falls subgroup for the NSF task group and will be developing an action plan to outline the requirements of the district in order to meet the milestones within the NSF.

A number of resource implications for the Trust have been identified through the pilot project, literature review and equipment trial. Whilst staff awareness of falls prevention has improved, and strategies that can be implemented with little or no cost are being used at present, it would be appropriate for more equipment to be available for nursing staff to use for those patients assessed as being at high risk of falling.

Recommendations

- Development of a multi-agency collaborative approach to reducing falls throughout both primary and secondary care.
- Development of appropriate care pathways for patients at risk of falling in the Wakefield District.
- Purchase of additional sensor alarms for use throughout the Trust.
- Provision of hip protectors for those at risk of hip fracture following a fall.

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