



# Falls screening and assessment tools used in acute mental health settings: An analysis of policies in England and Wales

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## Background

There is an urgent need to improve the care of older people at risk of or who experience falls in mental health settings. Falls are the most frequently reported patient safety incident. NICE Guidelines recommend the use of multidisciplinary fall risk assessment during individualised treatment and in prevention care plans for older people at risk of falls (NICE, 2004).

## Aims

This study, funded by NIHR Research for Patient Benefit will:

- evaluate how fall prevention and management are understood and experienced, in inpatient mental health settings providing care for older people.
- analyse current local NHS Trust and national falls policy and guidelines specific to mental health settings.
- develop local policy, practice guidelines and patient and carer information.

## Methods

All NHS Mental Health Trusts in England (56) and Healthcare Boards in Wales (6) were asked to send us any falls policies they had, or other relevant documentation e.g. Local falls audits.

Policies are being subjected to a quantitative content analysis to explore similarities and differences in guidance given to clinical staff and managers about fall prevention and management.

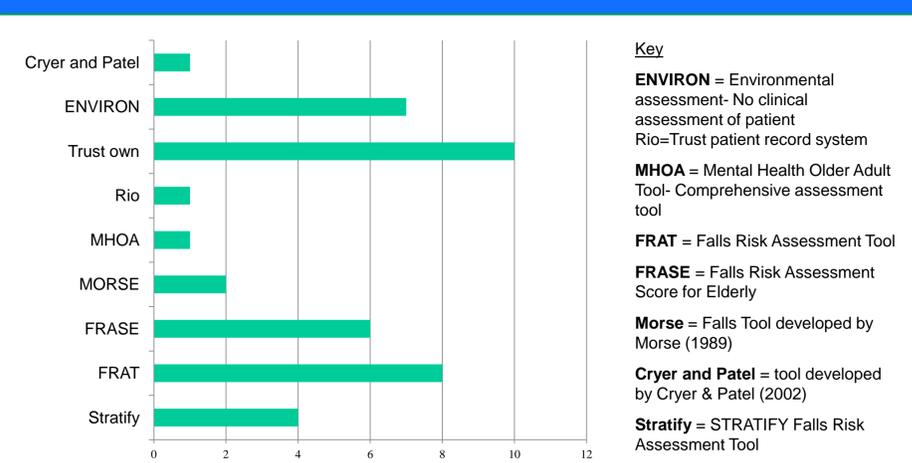
A further discourse analysis of a sub-sample of documents will enable us to explore the language used to discuss risk taking across settings.

This poster outlines an analysis which is underway to explore the policy guidance issued by NHS Mental Health Trusts in England and Health Boards in Wales to support practitioners in preventing falls, with specific focus on the falls risk assessment tools outlined in each policy document.

## Findings

We obtained falls policies from 42 mental health trusts in England, and 2 from healthcare boards in Wales. 30 policies were publically available on the internet. One Trust told us they did not have a fall-prevention strategy. One was currently reviewing their policy. A summary of the number and range of assessment tools used are shown in Figure 1.

Figure 1: Assessment/screening tool used



## Discussion

There is scarce evidence to support the use of any screening tool to predict falls and few have been tested in hospital settings (Myers, 2003). An analytical review of the literature was carried out to evaluate the psychometric properties of STRATIFY, FRASE, MORSE, and other Falls Risk Assessment Tools (FRAT) outlined in these policies. Validity of these tools has been estimated by evaluating the sensitivity, specificity, positive predictive validity and negative predictive validity. Reliability of these tools was checked by analysing inter and intra-rater reliability. Most falls risk tools discriminated poorly between fallers and non-fallers (Gates et al, 2005). Tools used also varied in their complexity – from focusing on assessing a few risk factors to all risk factors related to falls.

Literature reports that risk variables such as history of falls, abnormalities of gait and balance problems are better predictors of falls than other risk variables.

STRATIFY screens the patient for the following risk variables: History of falls, mental status including agitation, Confusion, and disorientation, visual impairment, need for toileting, problems with mobility and transfers. The MORSE tool is comprised of risk variables such as history of falling, mental status, presence of secondary diagnosis, use of ambulation aid, and I.V. therapy.

Despite its commonality of use, due to its low positive predictive value, the STRATIFY tool was believed not to be an optimal tool to identify patients with high risk of falls (Oliver et al, 2008).

Inter-rater reliability for both FRASE and STRATIFY is high with correlation coefficients of 0.964 and 0.836, respectively, and *p* values of 0.001. However, the tools have demonstrated poor predictive accuracy with the retrospective group; with a ROC score of 0.370 for FRASE and 0.463 for STRATIFY (Jester et al, 2005).

Both MORSE AND STRATIFY tools were reported to have poor specificity; meaning that both tools may not be good enough to identify patients who are 'not at risk'. As a consequence of this, even 'non-fallers' will be using the resources needed for the potential fallers who are in high risk group (Ang et al, 2007).

In total twenty seven NHS Mental Health Trusts used the fall risk assessment tool (FRAT) or their own adapted version of it, to identify patients who are at risk of falls. In the United Kingdom (Nandy et al,2004), one study has evaluated the validity of FRAT. This tool was developed for use in primary care, but was tested in community settings. It was shown to have significant positive predictive value and specificity, but to have poor sensitivity. It was reported that these individually customised versions of FRAT have shown very poor predictive accuracy and may not be useful to identify risk factors for those at risk of falls (Barker et al, 2009)

## Conclusion

From the preliminary analysis, we can infer that although a few studies have reported that these tools have significant reliability and feasibility, most of the screening assessment tools for falls used across these Trusts seem to have poor predictive validity. This preliminary analysis excluded tools which are particularly focused on environmental factors alone.

A wide variety of screening and assessment tools are in use, however, the most commonly used are those developed by individual Trusts, or focus solely on the external environment, with no screening/assessment of individual patients. Use of unvalidated tools raised initial questions of effectiveness.