

‘What Gets Measured Gets Managed’ – A Quick Guide on Falls-Related Measures

To reduce the risk of service users experiencing a harmful fall, healthcare organisations (HO) must use data to drive their quality improvement initiatives. Three types of measures are commonly used: structural-related, process-related and outcome-related. *Structural* relates to the resources of the HO that contributes to falls and fracture prevention, such as the presence of a Falls & Fracture Prevention Committee. *Process* relates to the quality and reliability of the service provided by the HO, such as frequency of a falls assessment or access to bone densitometry. *Outcome* relates to the individual’s health, such as reduced harmful fall rates and reduced hip fractures. This article will review commonly used *outcome*-related measures and recommend new *outcome*-related measures.

Rate of Falls:

The rate of falls (number of falls per 1000 occupied-bed-days) is a recognised measure in determining the efficacy of a falls prevention programme. The measure is useful as it allows comparison of falls between wards, hospitals and HOs, regardless of patient type. Care should be taken not to include falls in the ED, theatre or out-patient areas as bed-days do not apply. The absence of a universal definition of a fall and significant underreporting underestimates the rate of falls and reduces the ability to compare results. Benchmarking, therefore, is a significant challenge for HOs. Recent UK data report average fall rates of 6.63 (Acute Hospitals), 3.8 (Mental Health Units) and 8.6 (Community Hospitals) per 1000 bed-days, though the range varies significantly. Meeting a benchmark may drive complacency and miss opportunities to prevent avoidable falls.

Rate of Harmful Falls:

Rate of harmful falls (number of harmful falls per 1000 occupied-bed-days) should be considered a primary measure within a HO, notwithstanding similar caveats as above. Measuring harmful falls, rather than falls only, could drive quality improvement projects which focus on risk factors for harmful falls, such as bone health.

Comparison: Persons Who Fall to Falls Frequency

Rates of falls and harmful falls focus on the fall rather than the person who falls and offer no context as to how many people fall or how many people fall recurrently (i.e. two or more <12 months). In figure 1, note that 750 people fell 1000 times and that 250 people were recurrent fallers who accounted for 500 falls. This means that one-third of persons who fall account for half of all falls thus allowing HOs to target those persons who fall recurrently in an effort to reduce all falls rather than reacting to spikes in falls rates. Similarly, HOs can compare the number of persons who suffered a harmful fall to the number of harmful falls that occurred. In figure 2, 100 people had a harmful fall and there were 250 harmful falls. This means that people who harmed themselves due to a fall did so a number of times. One-fifth of persons with a recurrent harmful fall accounted for one-quarter of harmful falls such that persons who fall recurrently may not necessarily harm themselves more often. HOs incident reporting systems may not be able to determine if a service user falls 10 times on one admission or once on ten admissions.

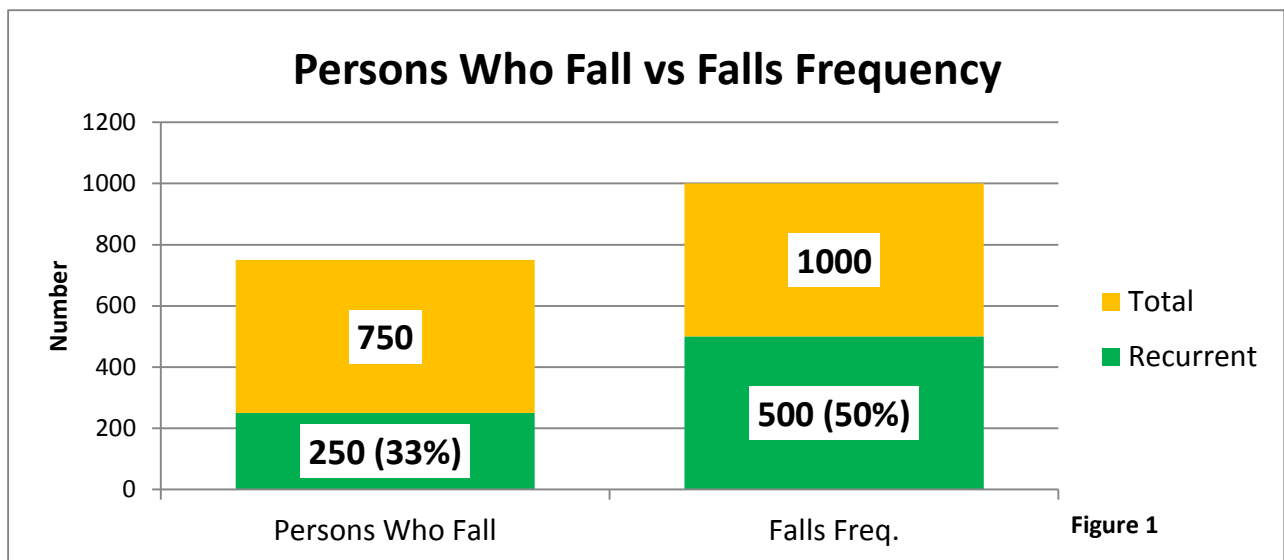


Figure 1. Comparison: Persons Who Fall to Falls Frequency

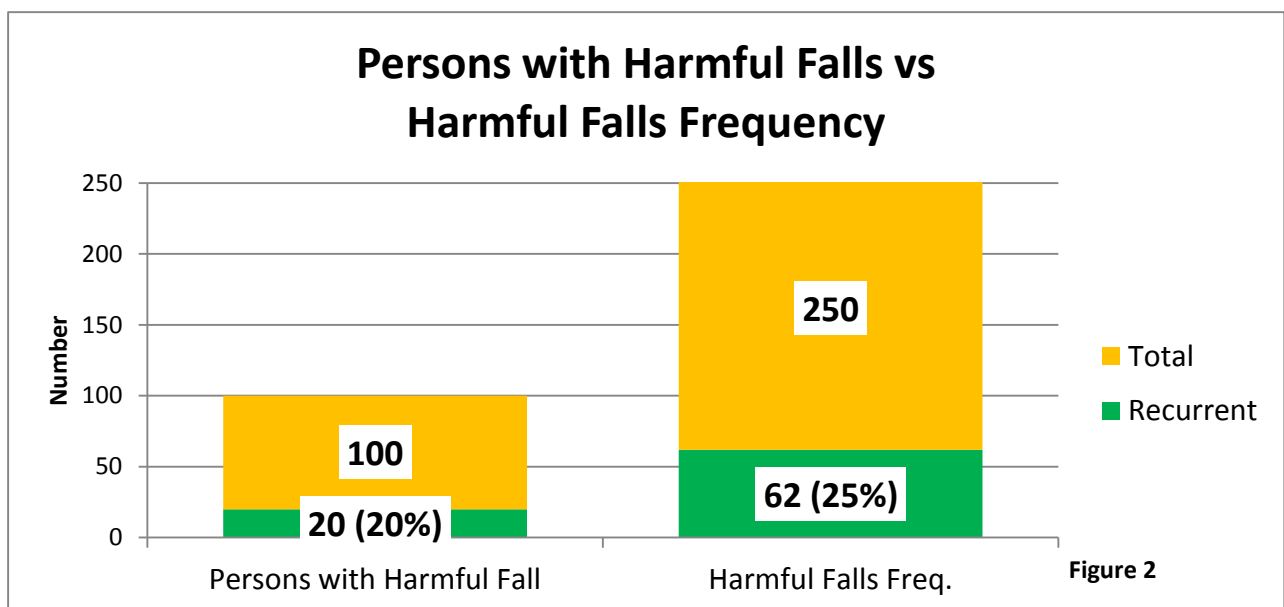


Figure 2. Comparison: Persons With Harmful Falls to Harmful Falls Frequency

Ratio: Persons Who Fall to Falls Frequency

Similarly, determining a ratio focusses on the person who falls rather than the fall itself and allows the setting of a realistic benchmark by determining how many times a person will fall or how many times a person will have a recurrent fall in your HO. In figure 3, note that every person who falls will fall 1.33 times (or 1:1.33). The ideal target is that persons who fall will fall only once (or 1:1). Similarly, note in figure 3 that every person who falls recurrently (i.e. two falls or more) will fall 2 times (or 1:2). Consequently, a HO could implement strategies to maintain a target ratio of 1:2. This allows the HO to target two “categories” of person at risk of falls - persons who fall and persons who fall recurrently.

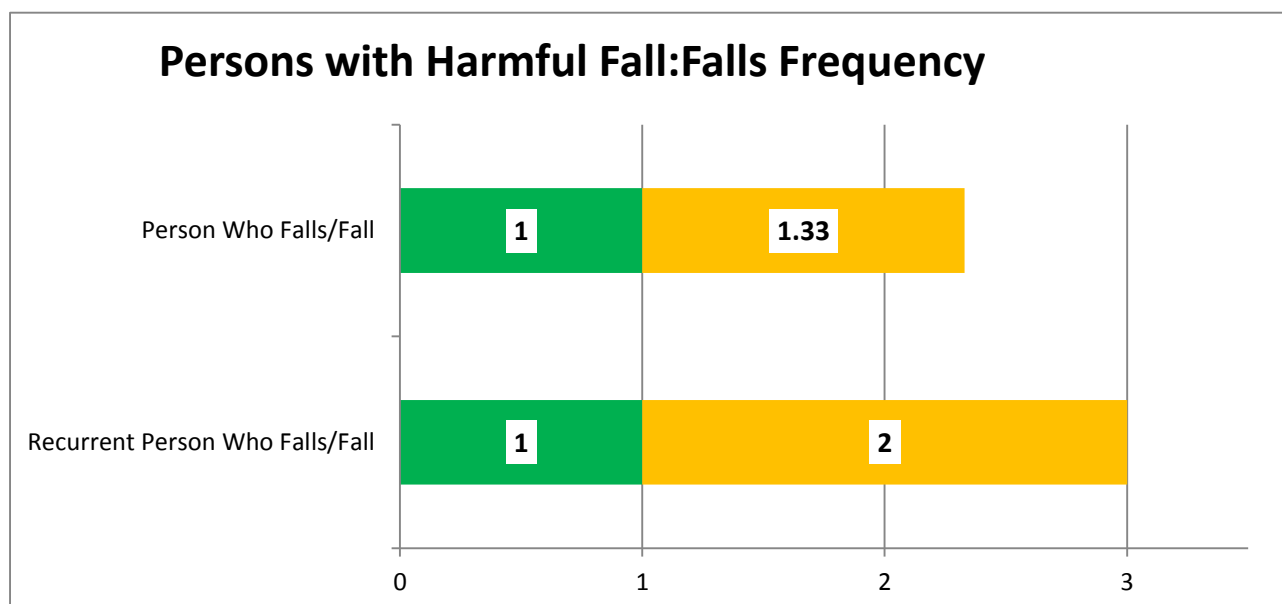


Figure 3. Comparison: Persons with harmful falls and falls frequency

The *Framework of Measures*, proposed by AFFINITY (Activating Falls and Fracture Prevention in Ireland Together), aims to determine a consistent approach to measuring and monitoring falls and fracture prevention programmes nationally. To read more, see consultative document V1 <http://www.affinityfallsbonehealth.ie/IntegratedModel/measureAndMonitor.html> or contact Irene O’Byrne-Maguire, 01 2384184 or iobyrnemaguire@ntma.ie

References available on request.

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