Improving harm from falls as part of the Patient safety initiative

The story so far.

1. CONTEXT

1.1. Since January 2011, 2gether NHS Foundation Trust has been involved in the NHS South West Quality and Patient Safety Improvement Programme for Mental Health. The NHS South of England (SoE) and the Institute for Healthcare Improvement (IHI), an international body, have revised the safety programme for Mental Health, which is being led by a collaborative “faculty”. The NHS South of England Improving Safety in Mental health collaborative developed from January 2013, so for clarity the term Patient Safety Programme (PSP) is used.

1.2. The overall aim of the Patient Safety Programme is to reduce avoidable harm to Inpatients and community patients in our care, by making improvements in the way we work, and thereby improving the patients’ experience of what is provided. Improving the physical care of patients through harm reduction is focused on a group of work streams, of which reducing harm from falls is one.

1.3. The PSP offers the opportunity to be proactive and identify ‘gaps’ in safety before they occur. The plan, do, study, act (PDSA) cycle is a simple, yet proactive methodology which equips frontline staff to try out small improved ways of filling the safety gaps before they occur, and measuring what difference has been made in reducing avoidable harm. The PSP attempts to bring both approaches together towards creating and measuring improvement rather than performance.

1.4. The Work on falls has been ongoing since April 2011, led and monitored by the Trust Patient Safety lead Sally Ashton and progress regularly reported to the Board for consideration.
2. Introduction

2.1. Two falls leads were identified, Colin Baker – Ward Manager for Chestnut Ward and initially Kristoff Fraszczak, latterly David Anderson, both in the position of Lead Physiotherapist. A series of work streams were implemented based of PDSA cycles with corresponding monitoring of falls statistics using both Ward reports and Datix.

2.2. The cycles were initially introduced to just one ward then spread to the other two in the Hospital; however this was changed to implementation on all three wards with the intended spread to the rest of the inpatient units within the trust. This increase in the study group number gave a better indication of the effectiveness of the interventions whilst retaining the ethos of “start small” as part of the PDSA cycle.

3. Other influences

3.1. There were spikes in reported falls over time and each was investigated, the spikes were attributable to individual patients either with extreme needs in terms of falls prevention or with a behavioural pattern of repeatedly placing themselves on the floor. Patients found on the floor were included in the falls data even if it was an intentional act rather than an accidental fall. The decision to include these was made to ensure personal interpretation was minimised in the reporting.

3.2. Where the patient exhibited extreme needs in terms of falls, the investigation would ensure that all available steps had been taken. Where the available precautions had been applied but still resulted in a high level of falls there was opportunity to explore the individual factors. This would possibly give rise to a new intervention and subsequent further progress.

3.3. Using this approach to formulate interventions meant that they were tailored to demonstrated needs of the local client group, thus more relevant and responsive to our specific population.

4. Ward environment and bed numbers

4.1. Initially the three wards were divided as Willow (Organic) 14 beds, Chestnut (Functional East) 16 beds and Mullberry (Functional West) 18 beds. Willow ward then increased the number of beds by taking two from Chestnut when it changed wards with Chestnut ward on July 9th 2012. The rationale behind the move was to improve the environment for organic patients, as the existing Willow ward was the smallest ward in terms of physical space.

4.2. Several meetings were held and minuted to discuss the benefits/logistics of changing the wards. The fixtures, fittings, furniture and flooring are the same throughout the hospital and the move did not change the function of the ward. Throughout the year Willow ward has been operating at between 98-100% bed occupancy and the move has facilitated specialist assessment for an addition of 2 extra service users. Typically the two functional wards had always had at least 2 organic patients occupying their beds so the change also complied with the demographic presentation.
4.3. During the design of the hospital Stirling University were consulted to ensure that the entire building was “Dementia friendly” and that signage and facilities were all sympathetic to the patients’ needs throughout.

4.4. Rather than focus such design features on the organic ward the same facilities were supplied throughout the building. This was done to recognise the fact that many older people have some degree of cognitive dysfunction even if this is not the main presenting illness.

4.5. The new ward environment has made a significant difference; the increased space enables service users with Dementia to achieve personal space, participate in activities and move around without difficulty, whilst also having enough room for staff to be able to use distraction techniques, reducing the incidents of violence and aggression. The environment is significantly less crowded leading to better sight lines for observation are improved opportunity for unobtrusive observations.

5. **PDSA cycles implemented**

5.1. After initial planning work was completed and staff were consulted the introduction of PDSA cycles began in June 2011, new cycles were introduced at regular intervals, not only to contribute to what was already being done but also to maintain awareness and momentum. Staff were made aware of the project and invited to contribute ideas for future cycles.

5.2. **Safety crosses from June 2011**

Safety crosses were put up on the wards and updated daily. A fall would be indicated clearly so staff were aware and were quickly able to identify patterns and react. This was a quick and easy indicator of patterns of falls and raised staff awareness.

5.3. **Falls mapping since August 2011**

Falls were then mapped separately for those identified as being at risk and for those who weren’t. The aim was to identify hot spots so we could focus our efforts there. Bedroom areas were the most likely place for those yet to be identified and for those already noted as being at risk the spread was more widespread.
5.4. **Hip protectors and safer footwear from April 2012**

Any patient identified as being at risk of falling would be equipped with Hip protector pants. Non slip “slippers” were also introduced and provided for patients, these included a shower proof variety. As well as being prescribed by the Physiotherapist each ward had supplies ready for out of hour’s admissions and emergencies.

5.5. **Falls pathway and Post falls pathway introduced from May 2012**

All patients were assessed on admission for risk of falls, those indicated as being at risk were then assessed in depth by each member of the MDT and a specific falls prevention care plan developed. Patients who fell were subject to a prescribed monitoring process which would identify any slow developing injuries, in particular to the head.

5.6. **Falls prevention training was made mandatory for all staff from July 2012**

All staff were trained in falls risks, prevention, osteoporosis, and post falls protocol using a combination of eLearning and face to face training sessions.

5.7. **Falls risk identified in handovers from December 2012**

The handover process included identified risks and this was adapted to include falls acting as a prompt to the shift coming on duty.

5.8. **“At risk” indicators were introduced from April 2013**

Magnets that identified patients at risk were used on the main ward board to remind staff. Coloured wrist bands were considered but unfortunately conflicted with those used in other hospitals to identify allergies etc. Risk was also identified on the patient’s room wall with clear advice from the Physio regarding needs and particular times of increased risk.

5.9. **Falls pathway was revised and introduced from January 2014**

The initial falls pathway was quite large and required a lot of input from clinicians, because of this compliance was not as good as it could have been. A new shorter assessment tool was developed and introduced with the key responsibility allocated to the Physio for the ward the patient was admitted to. Completion and compliance was improved as a result.
5.10. **Falls prevention training was spread to Herefordshire April 2014**

Following the concept of “spreading” successful ideas the falls training was introduced into our Hereford sites. This led to corresponding improvements in harm.

5.11. **Falls Crosses re invigorated June 2014**

Falls crosses were reinvigorated by being made part of the handover discussion, a brief resume of any fall that had occurred was given with a discussion around any changes that may be appropriate to prevent another.

5.12. **Red frames**

From the latter part of 2013 and into 2014 red frames were trialed with some very encouraging results. To achieve funding and support for further development a formal research project was to be commenced in July 2014, due to the temporary absence of the lead in this, the project has been delayed until later this year. Other Trusts have been inspired by the idea and are implementing red frames already and the concept was shared at the International Forum on Quality and Safety in Paris in spring 2014. Several healthcare providers from other countries expressed an interest and may be introducing them in their countries.

The proposed study involves establishing a study group of those at risk due to noncompliance with their frame, exchanging this for a red one and then measuring for any improvement. This will also be re-assessed at intervals to establish lasting changes if present.

If proven effective in improving compliance the plan would be to introduce red frames as a “norm” within this client group. We are hoping to work in partnership with the Hospitals Trust to improve the validity of the data and cover a wider scope of environments.

5.13. **Leaflets for Patients**

Leaflets for patients explaining the interventions how they can reduce their chances of falling were distributed from January 2015. They were given to all patients to educate them on how they can help themselves, not only whilst in hospital but also after discharge. An easy read version was also provided.

5.14. **Luminous signs**

Luminous toilet signs were fixed to all ensuite doors in July 2015, the concept was to provide a visual prompt to those patients waking in the night needing the toilet. A symbol of a toilet was used rather than wording to be dementia orientated.
5.15. **Adhesive hip protectors trial**

During the latter part of 2015 issues with hip protector pants were addressed with a trial using a skin friendly adhesive pad to fix the pads in place. The theory being that this would allow the person to use the toilet normally and not suffer the inconvenience and discomfort of the pants. This project is still being developed.

5.16. **Nursing boards risk indicator**

Board magnets were replaced with a specific column and risk indicator, this was thought to be more precise and also to reinvigorate the idea for staff.

Each Patient was assigned a risk as part of the ongoing assessment process and this was reflected on the board. Risk levels are assessed following any change in presentation or circumstances.

5.17. **High risk environment**

The concept of using specific bed rooms for patients at very high risk of falls is being explored, utilising furnishings and fixings specifically designed to minimise harm in the event of a fall. With careful consideration to the ethical issues present in specialised areas of care the intention is to provide a safer area for patients who are at very high continuous risk of falls but not to nurse them exclusively in this area.

5.18. **Safer flooring**

A project is currently underway to renew the flooring surface within the hospital and to try and find something that has less impact potential yet remains stable enough to not create a hazard in itself.
6. Effects of implementation

6.1. The improvements in numbers of falls brought about by the initial implementations and publicity around the project have been generally maintained over the last 4 years. There has been a notable and continuing reduction in the harm from falls which was the focus of the project. This improvement has been maintained through two episodes of high numbers of falls which were caused by several patients with repetitive and extreme behaviour patterns.

6.2. Harm from falls remains nil for around 75% of incidents, around 20% result in low harm and approximately 2% result in moderate harm i.e. a fracture. There has been one death as a result of a fall in the last 5 years.

7. Future plans

7.1. Colin Baker and Sally Ashton have been asked to present and advise in a number of Trusts in the South of England, it is hoped that by sharing the work they will be able to bring back ideas used successfully in other areas.

7.2. The planned study into the efficacy of Red frames in improving compliance will move forward and hopefully lead to a published piece or work. If the results are conclusive then Red frames can become a norm for older people with dementia.

7.3. The links made at the International Safety and Quality conference can be exploited to use other cultures perspectives, sharing of ideas at Patient Safety Forums will also lead to future interventions and ideas.
8. **Summary**

8.1. The work completed at Charlton Lane Hospital using the PDSA cycle format has proved very successful in achieving a significant reduction in harm from falls. The collective attitude to falls has changed to being an issue that everyone has the power to contribute to and falls are no longer seen as an inevitable consequence.

8.2. The next step in our journey is to verify our achievements with quality data, produce empirically credible evidence and then spread this to other areas. The evidence will be offered to other organisations in the hope that we can share our learning and help them in their work.

8.3. A key element in the progress made has been the reinvigoration of ideas. Staff quickly become used to changes in practice and they become the norm, with regards to falls risks new ideas tend to result in better compliance and adherence. Changing an idea slightly and re-launching it seems to have a beneficial effect on staff participation and consequently helps to maintain progress made.

Colin Baker 16/02/16