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Falling for change: Innovative strategies to prevent falls on The Stroke Unit Amid environmental changes

Madeleine Gifford

Band 6 Specialist Neurological Physiotherapist

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Agenda

- Introduction to the project
- Falls and Stroke
- The audit
- What did we do?
- How did it impact the ward?
- Conclusions to be drawn

The project?

- The Stroke Unit at Hillingdon hospital was moved to a new ward
- Immediately following the move there was a sharp increase in falls
- We wanted to know and understand the cause of this as nothing had changed but the ward layout.

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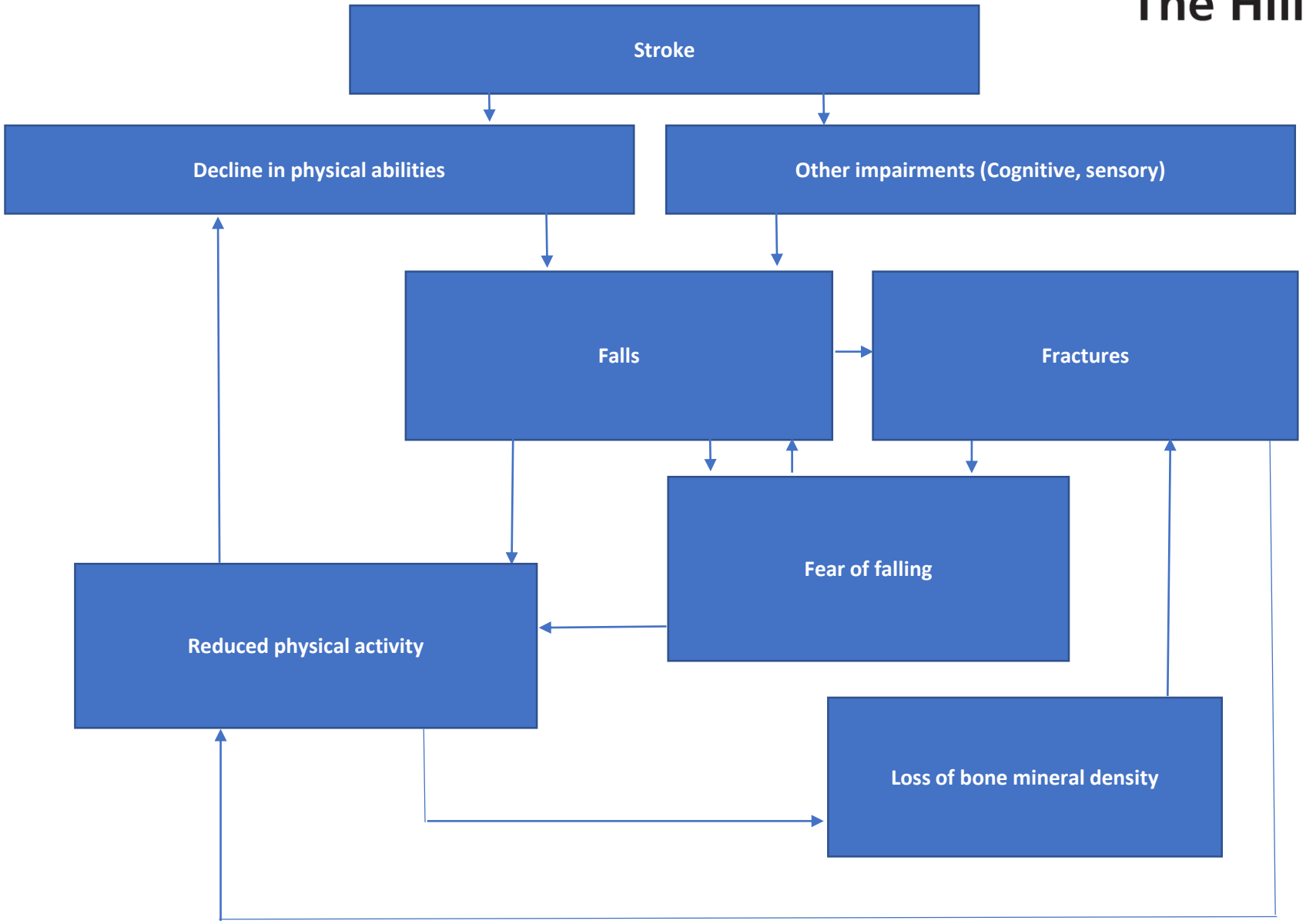
Falls and Stroke

- Falls are number one medical complication after stroke
- A stroke patient is also more likely to have a fracture usually on their affected side
- After a fall a stroke patient is likely to experience: fear of falls, loss of independence, less social activity depression and deconditioning (all of which will further increase the risk of falls)
- Please flowchart of interactions between risk factors, falls, and consequences of falls in patients with stroke. Taken from article ‘Falls in individual in stroke’.

Weerdesteijn, V.G.M., Niet, M.D., Van Duijnhoven, H.J. and Geurts, A.C., 2008. Falls in individuals with stroke



Weerdesteijn, V.G.M., Niet, M.D., Van Duijnhoven, H.J. and Geurts, A.C., 2008. Falls in individuals with stroke

Falls and stroke

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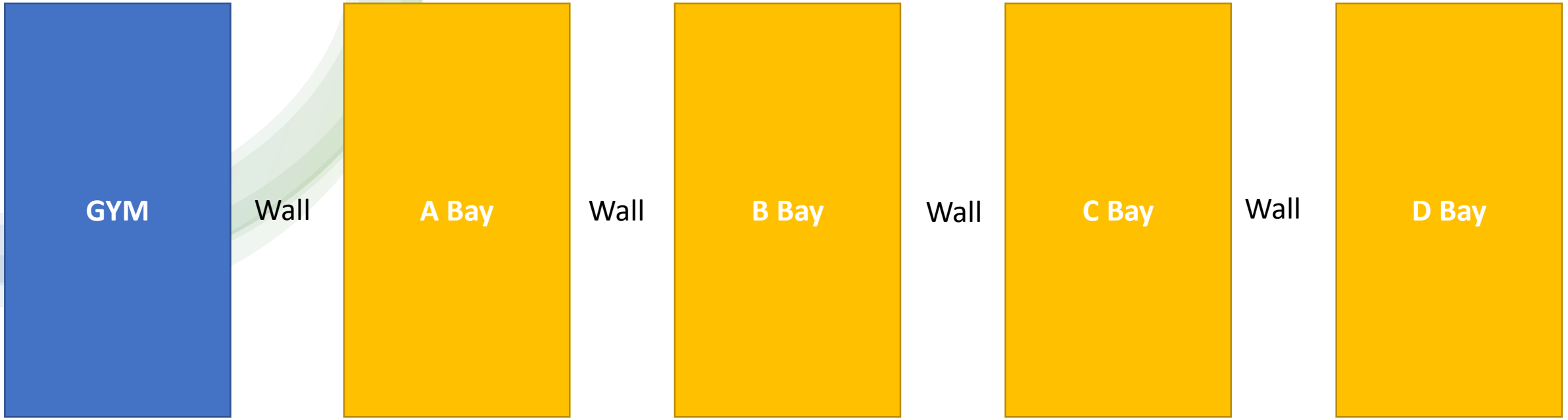
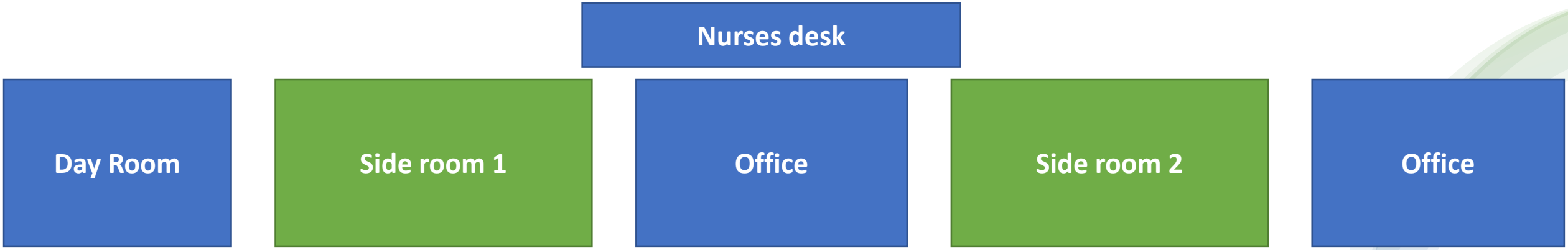
- Falls is one of the most common complications in stroke, yet it seems to be accepted and known that stroke patients will fall. Why is this?
- From research there is very little attention paid to falls in rehabilitation literature.
- Frequent fallers can make up to 85% of incidents on an acute stroke unit.
- Up to 65% of stroke patients will have a fall whilst receiving inpatient rehabilitation.
- From the paper 'Patient Falls in Rehabilitation (1995)' it showed that 61% of falls were unwitnessed – something we found on our unit.
- Early identification of those most at risk of falls was the best falls prevention method
- Different categories of falls that have been identified are:
  - Extrinsic falls – less likely to cause serious harm
  - Intrinsic falls
  - Non-bipedal falls
  - Unwitnessed or non classifiable
- 'It seems inadequate that patients with serious cognitive impairments are expected to understand and remember verbal instructions and recommendations regarding ambulation and physical activity'
  - (Nyberg & Gustafson, 1995)

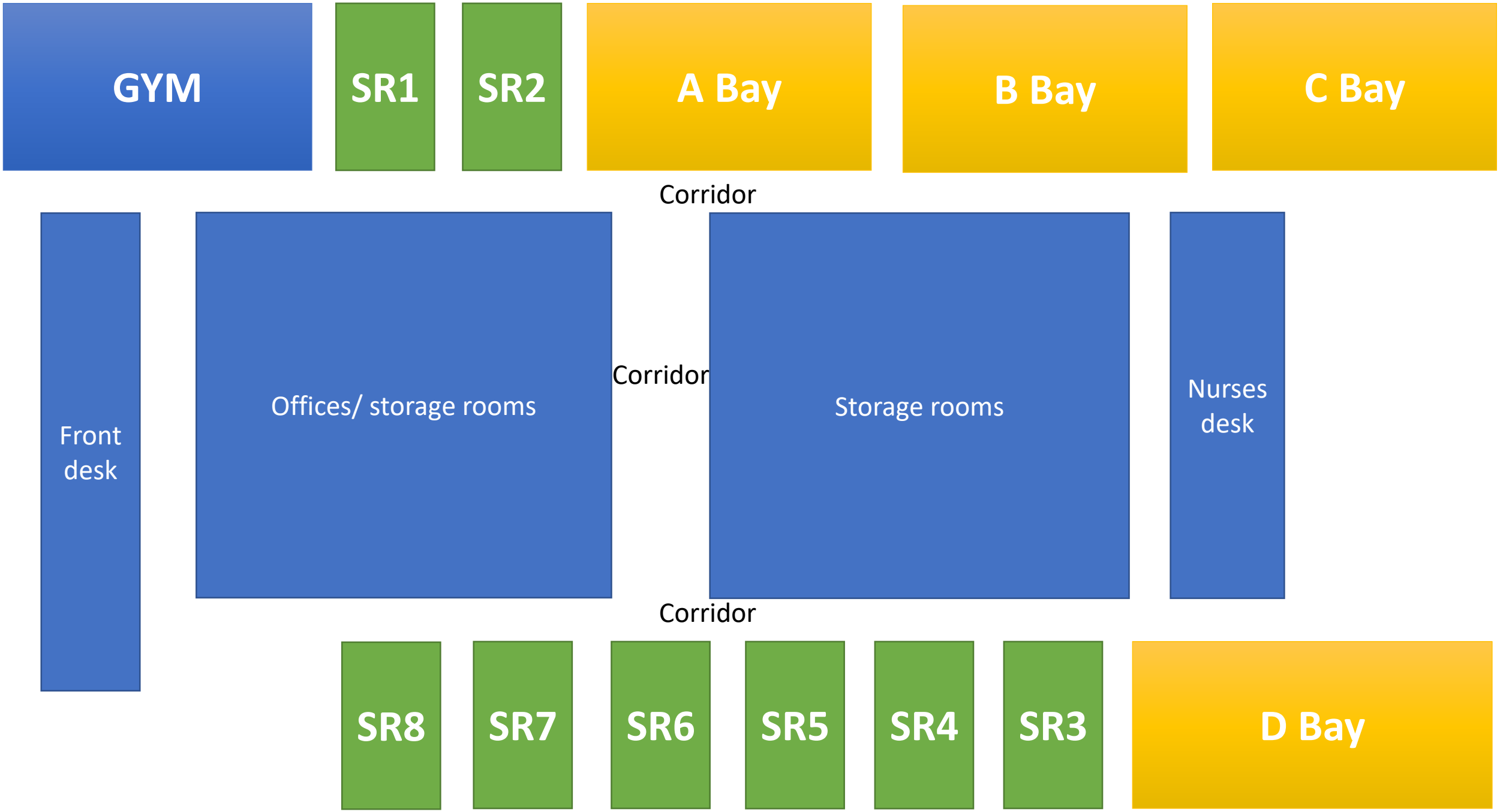
The project

- The ward had moved to a new modern unit with the same layout
- The number of falls had increased
- An audit showed that in three months on the old unit there had been 7 falls 4 of these were described as ‘patient found on the floor’
- In the new unit in three months there was 13 falls 9 of these were described as ‘patient found on the floor’
- Nothing else had changed except the ward layout, there was the same amount of nurses and the same amount of patients
- A review of the incident reports showed that the causes of the falls were mostly unknown as patients were often being found on the floor but it was suspected that patients were getting up by themselves and due to the new ward layout this was not seen.


GYM
Wall
A Bay
Wall
B Bay
Wall
C Bay
Wall
D Bay

Corridor


Nurses desk
Day Room
Side room 1
Office
Side room 2
Office


GYM
SR1
SR2
A Bay
B Bay
C Bay
Corridor
Front desk
Offices/ storage rooms
Corridor
Storage rooms
Nurses desk
Corridor
SR8
SR7
SR6
SR5
SR4
SR3
D Bay

Themes Highlighted

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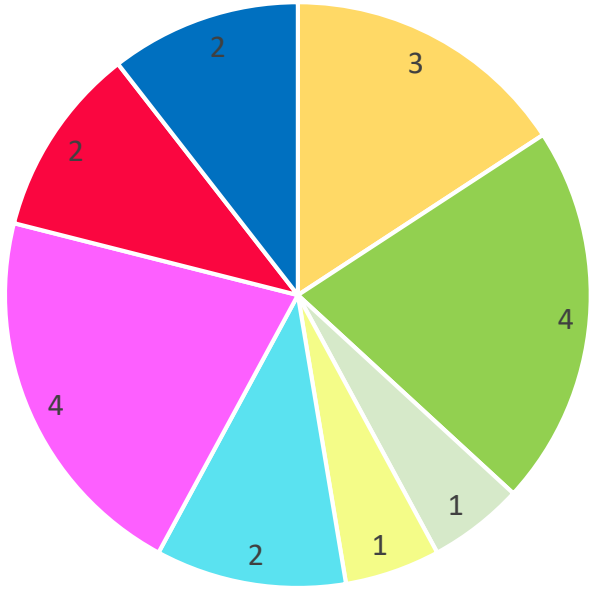
June - August 2021

- Human factors
- Medical Condition
- Patient non-complience
- Fatigue/ loss of balance
- Unknown
- Agitated
- Walking unassisted

June - August 2022



- Other
- Unknown
- Agitated
- Dementia
- Walking unassisted
- Fatigue/ loss of balance
- Medical condition
- Patient non complience

Interestingly none of the categories were listed as stroke, none of the patients who had a fall were medical outliers.

Conclusions

- There was an increase in the amount of falls on the new unit compared to the old unit
- Most of the falls are happening during night shift or during handover and were unwitnessed
- Falls are mostly unwitnessed 9/13 falls
- 5 of the falls on the new unit were patients attempting to get up by themselves.
- Due to the bays and side rooms not being as visible as the previous unit patients are not being seen when they are getting up by themselves.

What did we do

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- A few potential solutions were proposed:
  - Traffic light system
  - A flow chart that helped identify the appropriate bed space for the patients to be in
  - Utilising falls alarms
  - Falls Huddle

The traffic light system

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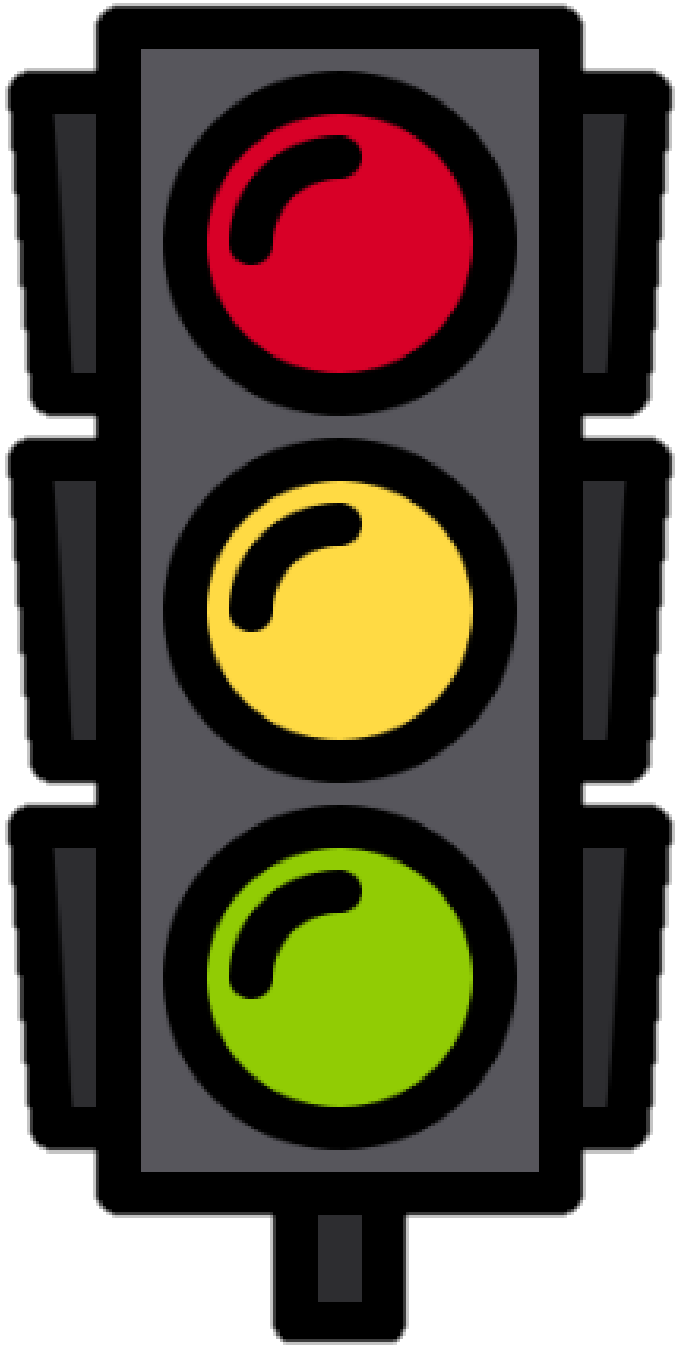
- Not a new thought or invention
- Adapted to suit stroke patients



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High Falls Risk:

- PASS of 15 or less
- Significantly confused or cognitively impaired
- Assistance for mobility
- Fatigues quickly i.e. low sitting tolerance
- Agitated
- May try to get up by themselves
- Impulsive
- Full assistance with personal care
- Unable to call for help
- Reduced insight into impairments

Medium Falls Risk:

- PASS of 15-30
- Confused or cognitively impaired
- Assistance/ close supervision for mobility
- Assistance of one for some personal care
- Reduced insight into impairments

Low Falls Risk:

- PASS of above 30
- Alert and oriented
- Supervision for mobility
- Able to appropriately call for help

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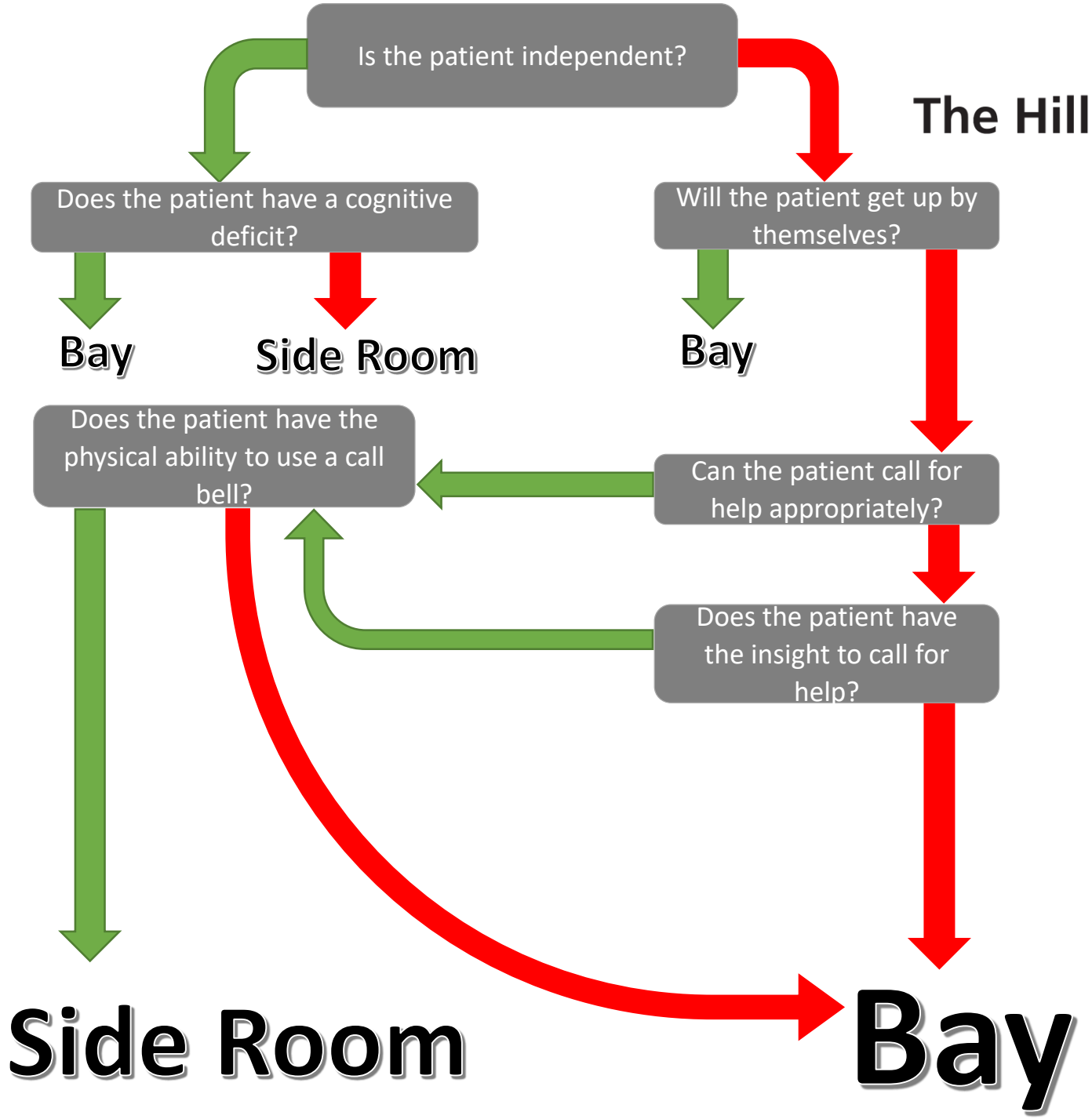

What if there is no bay available?

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- <u>The patient is identified as more appropriate for bay</u>

- Place patient in a bay.
- If there is no bed in a bay available
  - Screen bays to see if there is anyone else who is appropriate for a side room
  - Place patient in a side room but hand over at the end of each shift that the patient would be safer and at less of a risk of falls if in a bay
  - Monitor the patient regularly
  - Use falls monitors if available
  - Place patient in a more visible side room such as side room 3 or 4
  - Use visual prompts to prompt the patient to call for help
  - Keep the call bell within reach at all times
  - Consider if the patient needs a 1:1

Falls alarms

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- Falls alarms from the equipment library were used for the highest risk patients.

Falls huddle

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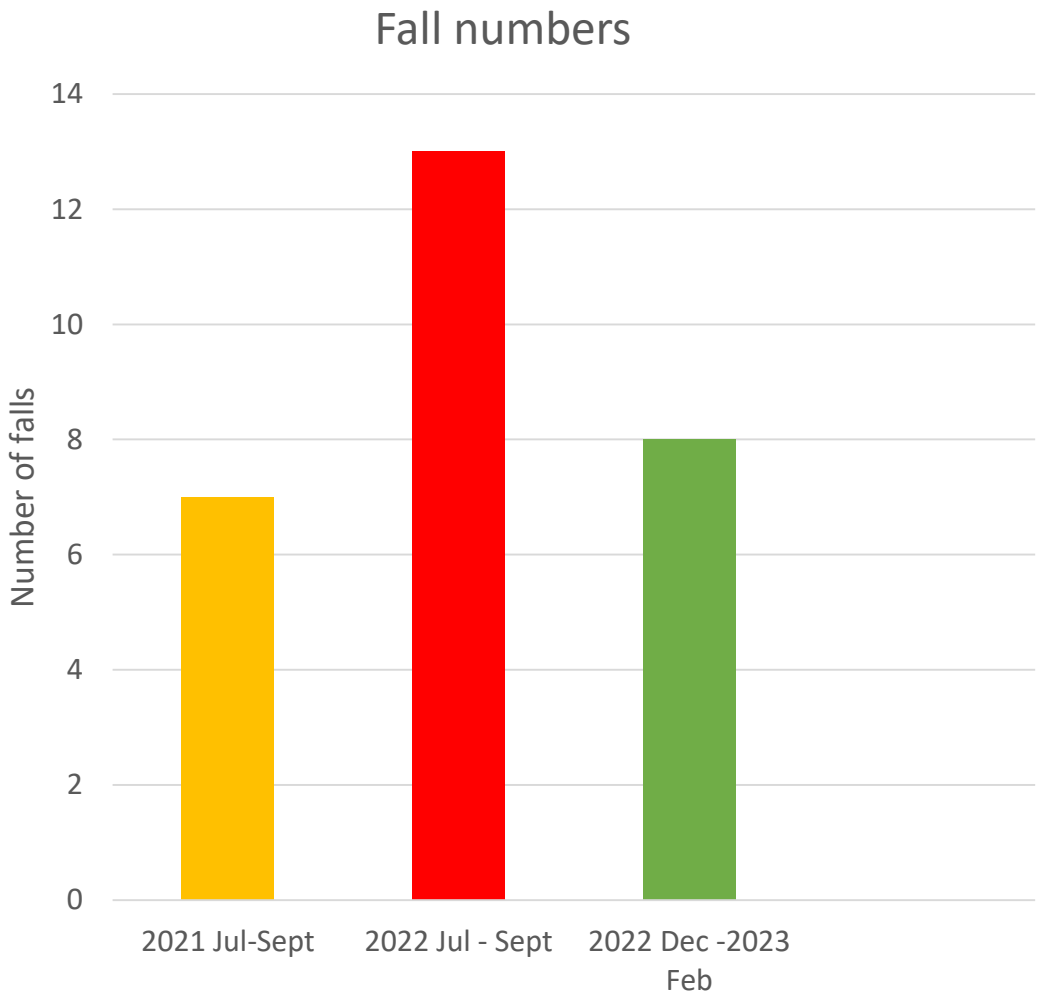
- This was meeting that asked the following questions:
  - What happened?
  - Nursing learning points?
  - Therapy learning points?
  - Medical learning points?
  - Actions?

Results


Fall numbers
Number of falls
14
12
10
8
6
4
2
0
2021 Jul-Sept
2022 Jul - Sept
2022 Dec -2023 Feb

Full results

- 8 falls in three months – two occurred during the night shift and three occurred during hand over time
- 1 of these occurred in therapy
- There were some similar categories but there was what appears to be a reduction in categories that directly link to reduced visibility
- Only one of the description of the fall was the patient described as ‘Found on the floor’

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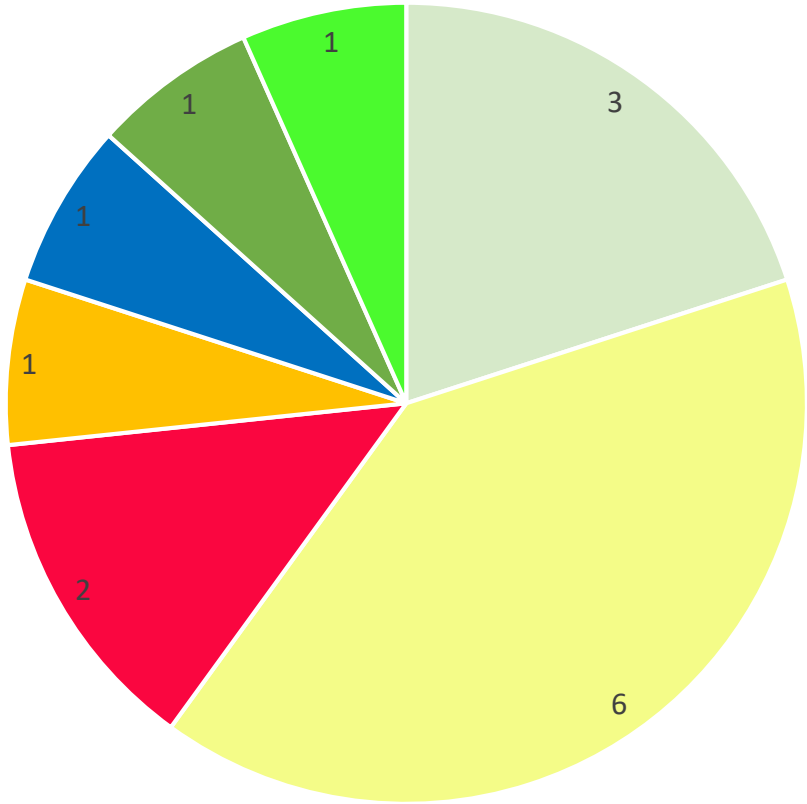
Full results

Highlighted themes



Conclusion

- Since implementing the discussed strategies there was a reduction in falls on the new unit: 13 -> 8
- There was more information on the falls in the datix's regarding the mechanism of fall suggesting that there was more witnessed falls
- Overall the awareness of falls and the vigilance around falls had increased
- It required the whole team to take an active roll in falls prevention to see a noticeable change
- It seemed that early identification was the best prevention tool
- Education for all around the full impact of stroke on induviduals.

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References

Nyberg, L. and Gustafson, Y. (1995) 'Patient falls in stroke rehabilitation', *Stroke*, 26(5), pp. 838–842. doi:10.1161/01.str.26.5.838.

Weerdesteijn, V.G.M., Niet, M.D., Van Duijnhoven, H.J. and Geurts, A.C., 2008. Falls in individuals with stroke.

Tan, K.M. and Tan, M.P., 2016. Stroke and falls—clash of the two titans in geriatrics. *Geriatrics*,.

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Thank you for listening

Any questions