Enhancing Patient Safety by Reducing Patient Fall Rate by 50% at Both Treatment and Simulator Areas of Division of Radiation Oncology (DRO)

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BACKGROUND

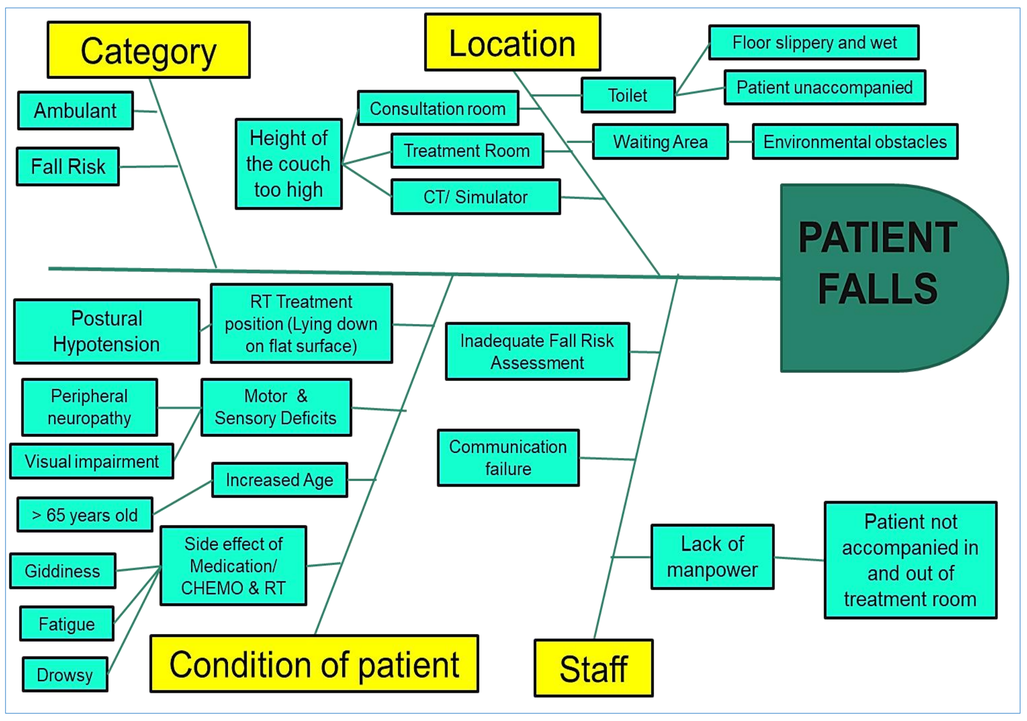
There were a total of 1 and 5 cases of patient fall incidents in Division of Radiation Oncology (DRO) in 2014 and 2015 respectively. The surge in the patient fall incident rate prompted the DRO management to analyze and tackle the issue. In January 2016, a Quality Improvement (QI) Project team was formed to identify the risk factors which contribute to the patient falls and implement interventions.

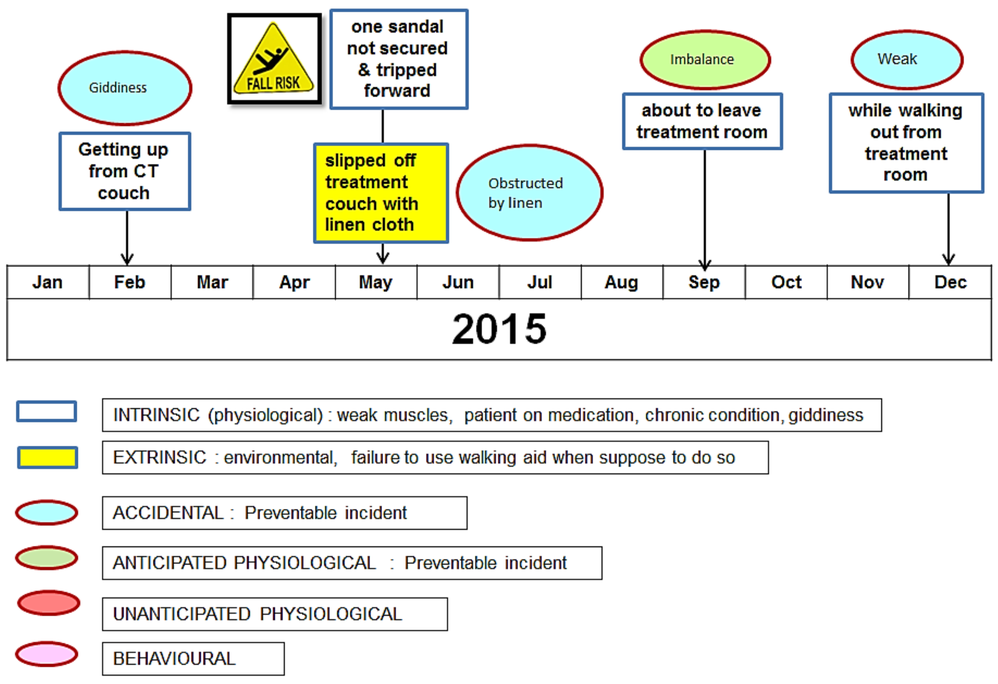
MISSION STATEMENT

To enhance patient safety by reducing patient fall rate by 50% from 1st January 2016 till 31st November 2017 at both treatment and simulator areas of Division of Radiation Oncology (DRO).

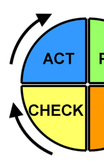
METHODOLOGY

The QI team analyzed every patient fall incident using the Root Cause Analysis (RCA). The team then categorized the fall incidents into intrinsic and extrinsic, preventable and non-preventable factors. The team focused on the preventable cases and deliberated to mitigate the fall.



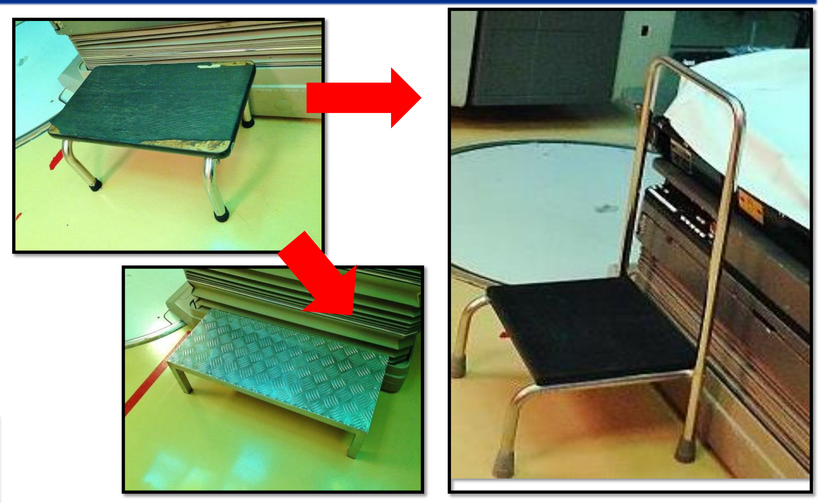


RISK MITIGATION STRATEGIES



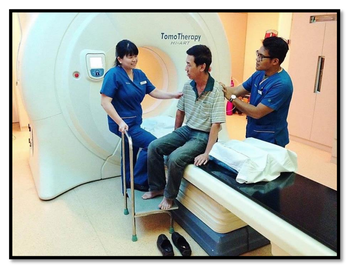
PDSA 1 FEB 2016

Replacement of the medical step stool that prevents patient from slipping over on the floor. Wider and stable medical stool with rubber footpad and handrail.



Mandate the action for at least 1 radiation therapist to escort patient in or out of the treatment or Simulator room.

Mandate the action for 2 radiation therapists to sit patient up from treatment couch after the procedure



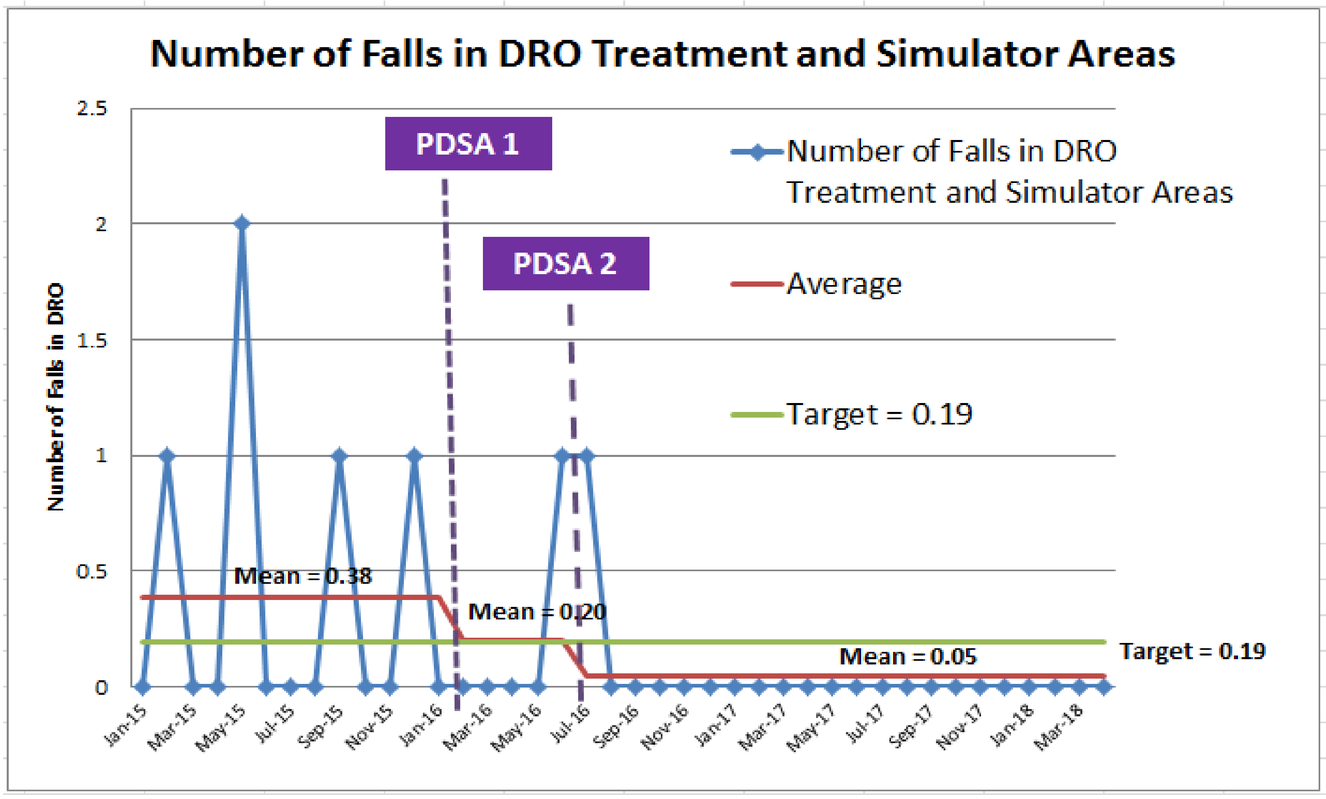
- Reinforce that any fall risk identified patient ought to be accompanied by the care giver or staff to go to toilet.
- Explanation to be given to any fall risk patient who is reluctant to be accompanied and proper documentation is made via MOSAIQ, the patient treatment management system.

PDSA 2 JUNE 2016

- Assign Safety Champion from each Treatment and Simulator unit in the reinforcement of the practices stated in the PDSA 1.
- Document in MOSAIQ if any fall risk patient refuses to be accompanied to toilet.
- Schedule Buffer time (5-10 minutes) for the delay due to the escort of patient in and out of Treatment or Simulator room. This resulted in time delay at the Treatment or Simulator unit as there was an increased time of 5 -10 minutes per patient when 2 RTs go in to help patient sit up after treatment.

RESULTS AND OUTCOMES

After PDSA 1 and PDSA 2 cycles, the number of falls reduced from a mean of 0.38 falls per month to a mean of 0.05 falls per month in DRO Treatment and Simulator areas. The goal set for the QI project was therefore attained and sustained.



CONCLUSION

With concerted effort from all the stakeholders, the QI team managed to enhance patient safety by reducing patient fall rate by 50% from 1st Jan 2016 till 31st Nov 2017 at both DRO Treatment and Simulator areas. With the reduction of the fall incidences, DRO saved a lot of manpower hours in going through investigations and incident reporting. Furthermore, the lower rate of fall incidence has also cut down unnecessary financial loss both to the patients as well as to the division.

ACKNOWLEDGEMENT

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