ENHANCING FALL PREVENTION MEASURES AT CLOUDNINE GROUP OF HOSPITALS

Dissertation Submitted to

The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

By

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Under the Supervision and Guidance of

Dr Varsha Tanu

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cloudnine

01-03-2024

Sub: Certificate of Completion

This is to certify that Mr. Anunay Maithani has completed his 4 Months of internship in the Quality Department at Cloudnine Hospital from **1st March 2024** to **30th June 2024**.

During his tenure with us, we found Mr. Anunay Maithani to be sincere & honourable in the discharge of his duties. We wish him all the best in his future endeavours.

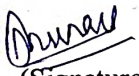
For Cloudnine

Sree Lakshmi B

Executive – People Department

DECLARATION BY STUDENT

I hereby declare that this dissertation titled "Enhancing the fall preventive measures at Cloudnine Hospital" is the bonafide record of my original researchwork. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work ofothers has been duty acknowledged in the text.



(Signature)

Anunay Maithani

Date:

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that the dissertation titled **"Enhancing fall preventive measures at Cloudnine group of hospitals"** is a record of the research work undertaken by **Anunay Maithani** in partial fulfilment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under my guidance and supervision and his approach to the research study has been sincere, scientific, and analytical.

Dr.Sanjay Gupta
School Dean
IIHMR University, Jaipur
Date- 05/07/2024

Dr. Varsha Tanu
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IIHMR University, Jaipur
Date-

Acknowledgment

I am grateful for the fortunate opportunity and exposure I had at Cloudnine Group of Hospitals in Jaipur, and would like to express my sincere gratitude to the individuals who guided, assisted, and motivated me throughout this endeavor.

I would like to express my sincere appreciation to my external mentor, Ms. Arushi Joshi (Advisor) at Cloudnine group of Hospitals, who not only gave me the opportunity to work on this project but also provided me with invaluable guidance throughout the research processI am indebted for his expert hand-holding
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Anunay Maithani

Abstract

Falls are among the common and significant causes of morbidity among inpatients, and, when not prevented in advance, could escalate health care costs and other undesirable events. This paper sought to find out the approaches in the prevention of falls through a hospital set up. A literature search for Randomised Controlled Trials, quality improvement studies and observational studies has been sought to determine the effectiveness of interventions such as risk assessment tools, modification in the environment, medication changes, etc., in making the falls less hazardous alterations, patient teaching, and education of the staff.

The main results found indicate that the combination of interventions tailored to patient-related risk factors is the best intervention in reducing falls. The use of standardized fall risk assessments has proved effective, such as the Morse Fall Scale or Hendrich II Fall Risk Model, which are being used in combination with a patient-specific care plan. However, at the same time, introducing these effective strategies and practices to reduce falls in the environment has many challenges beds alarms, non-slip flooring or adequate lighting among others, increases even more the level of protection to the patients. In-service education and training of healthcare personnel on fall prevention strategies are also essential to make possible the positive changes become sustained over time

Even with the good intentions and the previous and improvements made on strategies to prevent falls, some difficulties still place this certain provisions in different hospital settings. More research is needed in the sustainability of the interventions and creation of new technologies that The study, therefore, concurs that it should be a collaborated approach toward fall prevention between risk assessment, environmental adjustments, education of both patients and staff, and continuous evaluation on patient safety within the hospitals.

CHAPTER 1 – INTRODUCTION

Falls are an immense concern for the hospital as there are many problems that can be set up through falls for the patients and their healthcare is just too expensive. These are one of the most common accidents that befall persons who are hospitalized, sometimes leaving them in agony or distressed, and sometimes it also turns into grave issues, like a longer stay in hospital or prerequisites for extra care after the patient is discharged from the hospital. At Cloudnine Group of Hospitals, many of our patients are i or with complex health needs, preventing falls isn't just important—it's essential. When patients fall in the hospital, it's not just a matter of being hurt by the fall. It can also mean they have to stay longer in the hospital, move to another care facility afterward, or bear a lot of emotional stress. These falls also take a big financial toll on hospitals,

This can include everything from medical bills to legal fees should lawsuits ensue. That's why preventing falls isn't just about keeping patients safe; it's about managing costs wisely. At our hospital we focus on how to keep our patients safe and provide them with the best possible care. Many of the patients are older or have health conditions that make them at risk for falling.That's why we're so committed to using proven methods to reduce the chances of falls. We educate our staff, make changes to our environment to make it safer, and always look for ways to improve how we do things. short, preventing falls in hospitals is a big deal that affects patients' health and hospital finances. At CloudNine Group of Hospitals, we're dedicated to preventing falls by using what we know works best. It's not just about following rules—it's about caring for our patients like we would our own family, making sure they stay safe and get better as quickly as possible.

This sets the stage for our project to improve how we prevent falls, making sure our hospital stays a safe place for everyone who comes through our doors.

CHAPTER 2 – REVIEW OF LITERATURE

Title of the study	**Author's name &year**	**Learnings**
Effective strategies for preventing falls in hospitals	Healey et al (2019)	Comprehensive fall prevention strategies include patient assessment, staff education, and environmental modifications to reduce fall incidence and improve patient safety.
Interventions to prevent falls in hospital setting	Oliver et al (2018)	Multifaceted interventions such as patient-specific care plans, environmental modifications, and medication management are effective in mitigating fall risks and enhancing patient outcomes.

Risk factors and preventive strategies for fall in hospital.	Cameron et al.(2018)	Identifying and addressing risk factors like advanced age, cognitive impairment, and polypharmacy through tailored interventions can significantly reduce fall rates among hospitalized patients

Challenges and barriers in fall prevention in hospital settings	Coussement et al. (2015)	Implementation challenges include staff adherence to protocols, resource constraints, and the need for sustained leadership support and organizational commitment to fall prevention efforts.

CHAPTER 3 – METHODOLOGY

AIM – "Our aim is to improve how we assess and prevent falls, implementing measures that ensure no patient experiences a fall during their hospital stay.’’

RESEARCH QUESTION:

1.What are the current fall rates among patients in our hospital setting?

2.What are the existing fall prevention measures implemented in the hospital?

3.What are the perceived barriers to effective fall prevention among healthcare staff?

4.How can fall prevention strategies be enhanced to reduce fall rates and improve patient Safety?

OBJECTIVE –

1. To streamline the process of fall assessment, install fall preventive measures and strengthen fall prevention techniques in our hospital.

2. To prevent incidence of fall and achieve zero patient fall.

SCOPE-

- **Type of Research :** Primrary
- **Period of data collection**: Mar 2024 to June 2024
- **Data collected for**: Cloudnine Hospital,Old Airport Road
- **Sample Size-** All patients of Cloudnine
- **Inclusion Criteria:** All patients and staff of Cloudnine
- **Exclusion Criteria :** Fall happened outside Cloudnine
- **Source of Data :** Incident forms

  Formula : Total number of Falls

Study tools-

Incident forms- helps to carefully document and analyze each fall incident, helping us understand why they happen and how to prevent them.

Fishbone Diagram-

Visualizing potential causes of falls to understand their interrelationships. Utilized in root cause analysis to identify contributing factors such as environmental hazards, patient conditions, and staff actions.

Using these tools ensures that we have a clear understanding of the problem and can implement targeted solutions to keep our patients safe from falls.

Study period – 3 months (01/04/2024 – 30/06/2024)

Data analysis plan – The software majorly used was Microsoft office which includes mainly – MS Excel, MS word, MS power point.

Limitations of the study- There were few limitations that I faced personally during the conduct of the study which are as follows-

1.Limited Relevance: Our findings might only apply to our hospital and not to others with different types of patients or resources.

2.Dependence on Reports: Our study depends on incident reports, which can vary in accuracy and completeness.

3.Resource Deficits: Staffing issues, limits in budgets, or insufficient equipment—such as grab bars or wheelchair belts—may limit the ways we have in efficiently implementing fall prevention.

4. Ethical concerns: The setting in place of very stiff fall prevention procedures may be adopted to balance the need for patient comfort, autonomy, and independence, which in this context can pose.

5.Time Constraint: The study is only applicable in the time frame of March through June 2024; thus, it would lack the ability to show the seasonal variation or fluctuations in falling trends.

6. Measuring up: Measurement of efforts in fall prevention, working toward a goal of zero falls may be difficult when some of the circumstances are beyond our control, ranging from patient behavior to unforeseen medical complications..

CHAPTER 4 – RESULTS

Falls are a significant concern in hospital settings as they directly affect patient well-being and costs associated with healthcare. Through it, we identified several sticking points and took focused actions to make improvements in fall prevention.

It ranks first among the most adverse events related to hospitalization, directly contributing to pain, distress, and increased health care costs. Other complications that falls among hospitalized patents are related to cause death, cause disability, increased hospital length of stay, placement in an extended care facility, cause psychological distress, and litigations.

Fall prevention remains an essence and prime importance in our facility as we continue to attend to the most vulnerable patients.
Falls in maternity hospitals are a very real concern, given the increased risk for expectant and new mothers. Balance can be severely disrupted during pregnancy due to the added weight from the enlarged uterus, hormonal changes, and increased risk of falling. There could also be various feelings of tiredness, discomfort, or giddiness that would hamper safe movement. After delivery, one may feel muscle weakness and fatigue, symptoms that can easily predispose to accidents.

Other factors also constituted the hospital environment—namely, slippery floors, poor lighting, and obstacles—that could further increase tripping and falling, especially when the women were in labor or taking care of their newborns. The risk may also be worsened by dizziness or fainting due to long-standing medical conditions that are prevalent during pregnancy, such as hypertension and gestational diabetes.

Maternity hospitals have specific fall prevention protocols. They consistently observe their patients, arm them with supportive footwear, keep the pathways uncluttered, provide education to patients regarding the risks, and train staff in regard to safe lifting. These fall-reducing measures bring the mother and baby to a safe environment, hold the possible chances of falling, and secure well-being during this most important time.

PROBLEMS FACED-

The problem we identified with patient falls in our hospital was complex. To begin with, our incident reporting system reported three falls that exposed severe lapses in our safety measures. Basic safety equipment such as calling bells in restrooms and grab bars were absent that are deemed necessary for support of patients and prevention of falls. Some wheelchairs did not have safety belts on them during routine facility checks that added to the risk of patient falls.

While reviewing these cases, we realized that our assessment forms for falls were not applied uniformly throughout the facility.This inconsistency meant that opportunities to identify and address fall risks were frequently missed, compromising patient safety.

Additionally, we recognized a significant need to improve our educational resources on fall prevention. At the time of our assessment, there were no specific educational materials available to educate patients and staff on effective fall prevention strategies. This lack of educational resources meant that both patients and healthcare providers may not have been fully informed or equipped to prevent falls effectively, contributing to the overall incidence of patient falls in our hospital.

So to prevent the patient falls we came with an objective of-

1.To streamline the process of fall assessment, install fall preventive measures and strengthen fall prevention techniques in our hospital.

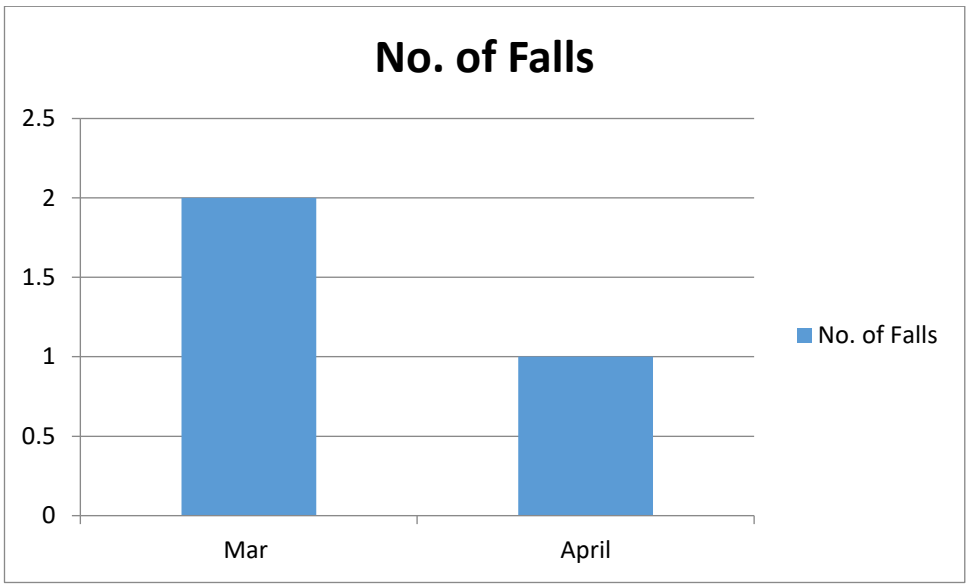
2.To prevent incidence of fall and achieve zero patient fall.

The team for this project includes:

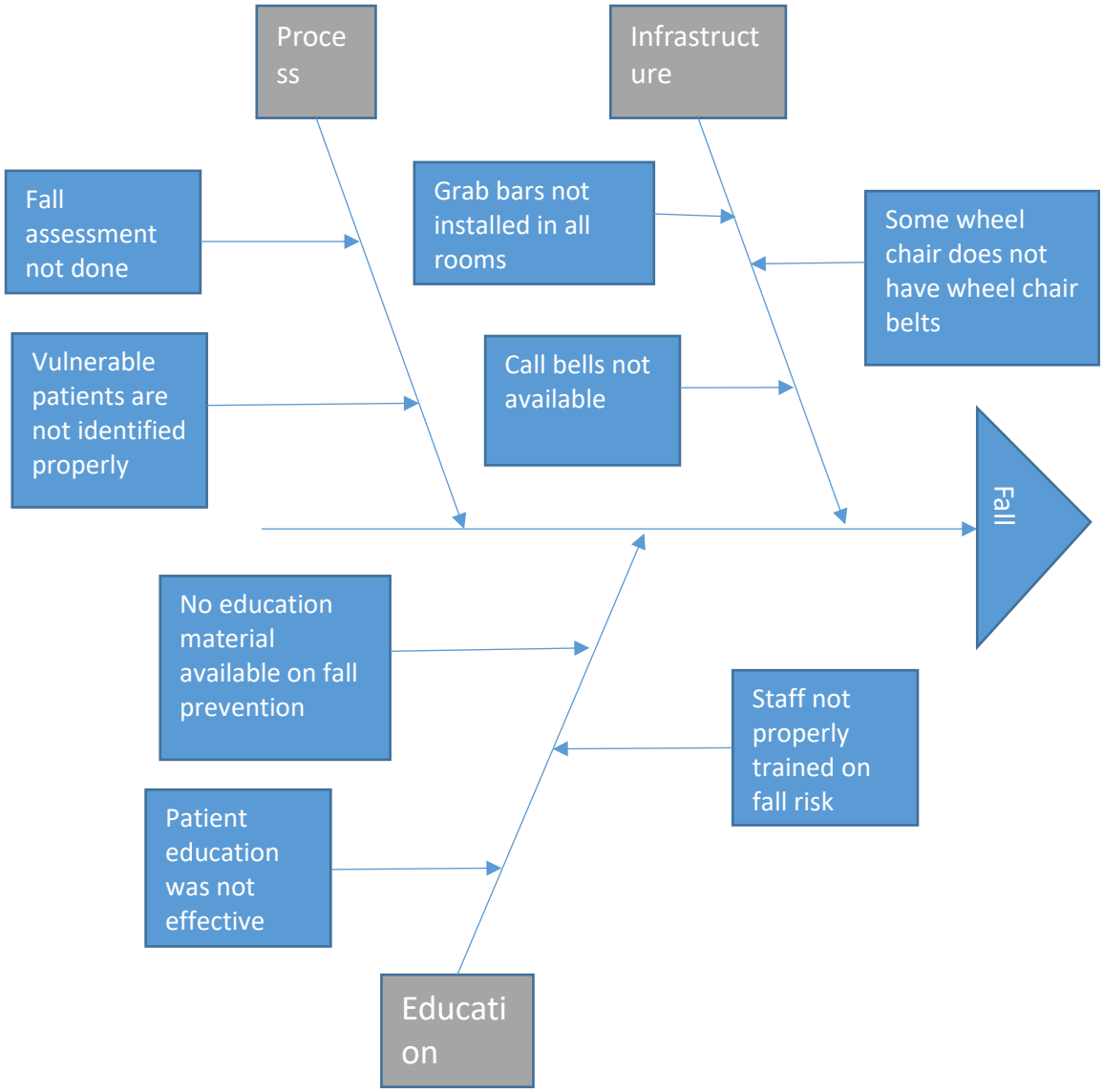
1. **Ward Incharge:** Oversees the daily operations and patient care on the hospital ward.
2. **Nursing Manager:** Manages the nursing staff and ensures patient care meets quality standards.
3. **OP Manager:** Manages operations in the outpatient department, focusing on patient care and service efficiency.
4. **IP Manager:** Manages operations in the inpatient department, ensuring smooth admissions and patient management.
5. **Quality Incharge:** Responsible for maintaining and improving quality standards across hospital services.
6. **Business Head:** Oversees the hospital's overall business operations and strategic direction.

These team members play crucial roles in implementing and overseeing the project to improve fall prevention measures and patient safety within the hospital.

When the project started the number of falls in the hospitals were-



FISH BONE ANALYSIS

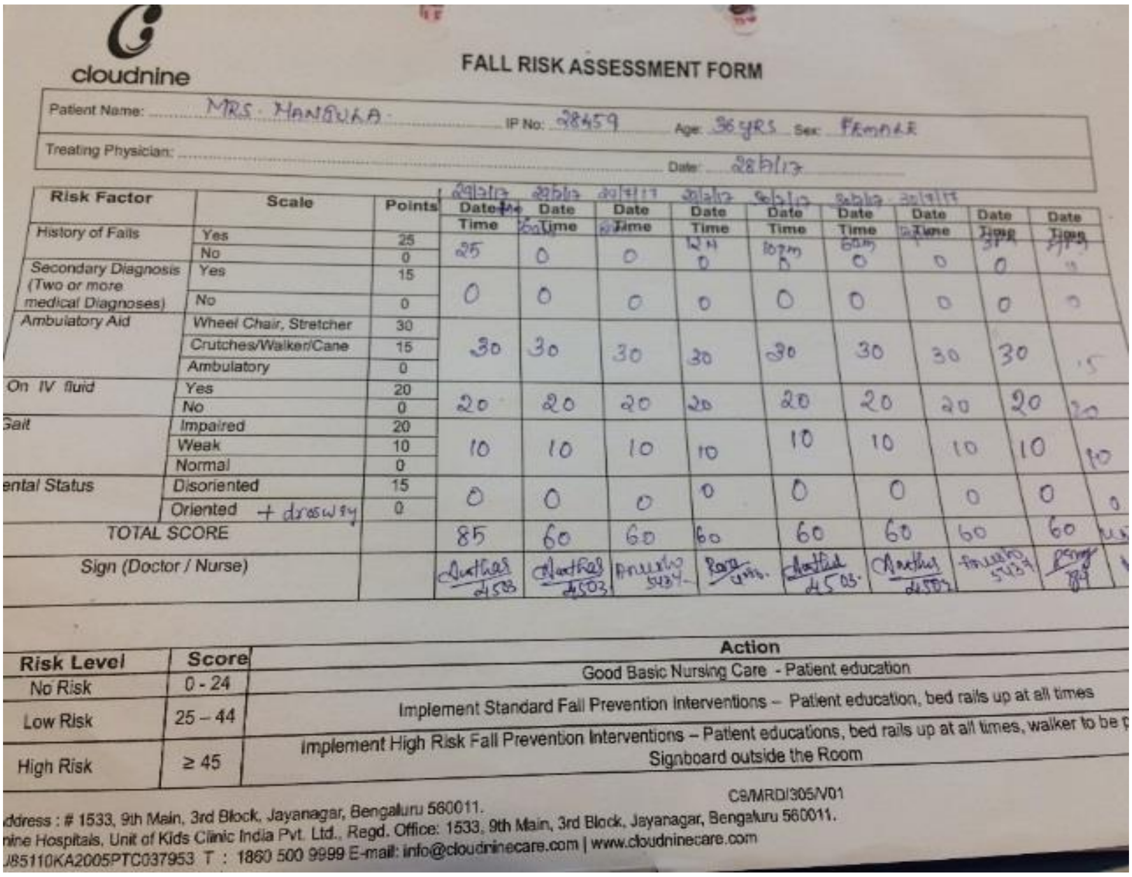


At the onset of this project, the number of falls in these hospitals was-

From conducting the survey with our team members, some of the major issues that were finally found out to directly affect patient safety in our hospital are: absence of very important safety measures, such as grab bars to add support and calling bells for assistance when needed. Lack of these very basic pieces of equipment increases the risk of patients falling, especially in places like restrooms, where support is is most needed.

No grab bars and calling bells

We discovered that the fall assessment form was not used for such purposes, as was happening throughout our hospital departments. What this implies is, opportunities to assess and prevent falls went amiss and might have led to accidents and injuries that could have been avoided.



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FALL RISK ASSESSMENT FORM

Patient Name: MRS. MANJULA IP No: 28459 Age: 36 YRS Sex: FEMALE

Treating Physician: Date: 28/7/17

Risk Factor	Scale	Points	Date Time	Date Time	Date Time	Date Time	Date Time	Date Time	Date Time	Date Time	Date Time
History of Falls	Yes	25	25	0	0	0	0	0	0	0	[illegible]
	No	0									
Secondary Diagnosis (Two or more medical Diagnoses)	Yes	15	0	0	0	0	0	0	0	0	0
	No	0									
Ambulatory Aid	Wheel Chair, Stretcher	30	30	30	30	30	30	30	30	30	15
	Crutches/Walker/Cane	15									
	Ambulatory	0									
On IV fluid	Yes	20	20	20	20	20	20	20	20	20	20
	No	0									
Gait	Impaired	20	10	10	10	10	10	10	10	10	10
	Weak	10									
	Normal	0									
Mental Status	Disoriented	15	0	0	0	0	0	0	0	0	0
	Oriented + drowsy	0									
TOTAL SCORE			85	60	60	60	60	60	60	60	[illegible]
Sign (Doctor / Nurse)			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Risk Level	Score	Action
No Risk	0 - 24	Good Basic Nursing Care - Patient education
Low Risk	25 – 44	Implement Standard Fall Prevention Interventions – Patient education, bed rails up at all times
High Risk	≥ 45	Implement High Risk Fall Prevention Interventions – Patient educations, bed rails up at all times, walker to be p Signboard outside the Room

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The fall assessment form was not used

Next, we saw how the fall assessment form to establish the potential risks for and ways of preventing falls had been underutilized out in the patients by the different departments around the hospital. This is an apparent implication that opportunities for fall assessments and possible prevention have passed by, creating several accidents that could have been avoidable; hence, the patients are left with multiple injuries.

All these have pointed out critical gaps in current practices that need much attention now in order to assist with improvement in patient safety. These need to be addressed commensurate with the availability of updated equipment and better adherence to the protocols on fall assessment in order to reduce and bring about a number of falls that reach a state of patient environment where the patient has a sense of better safety.

By looking at these factors the following implementations were made by the Staff memebers-

1. Staff Training on Fall Risk Assessment: We set out to ensure all staff were competent in assessing the fall risk of a patient and how to manage fall risks, such as the

identification of the risk factors that could lead to the falls and how to intervene in case of falls.

2. Fixing of Grab Bars: We have fitted grab bars in places where the patient can support themselves, such as restrooms and other risky areas. They help patients to maintain balance and thus lessen falling.

3. Fixing of Calling Bells: These are fitted in each attached restroom to allow patients easy accessibility if one wants to call a person for help, thus increasing their safety and reducing the chance of falling.

4.Identification of Vulnerable Patient Bathrooms: We can identify the specific armchairs that are used by patients who are more prone to falls. In this manner, attention can be focused on preventive measures in these areas to protect more vulnerable patients.

5.Use of Wheelchair Safety: Facility rounding was carried out to ensure that all wheelchairs have safety belts and in place. Having this provision will aid in securing the patients on wheelchairs to hinder chances of falling of patients in motion or transportation.

6.Health Education for Patients:We provided in-depth health education for all in-patients on the prevention of falls. Discussion was about the risks and ways of staying safe during the period they would spend in the hospital.

7.Educational Materials in OPD Rest Room: Special educational materials in relation to fall prevention were placed in the rest rooms of the Outpatient Department. This helps in educating the patients on fall risks and prevention measures while in the hospital.

8. Staff Training on the Use of Preventive Measures: The staff was trained to use and implement various preventive measures regarding falls across the hospital effectively. This ensured that everyone was well-aware of their role in securing the fall of the patient.

Grab bars installed

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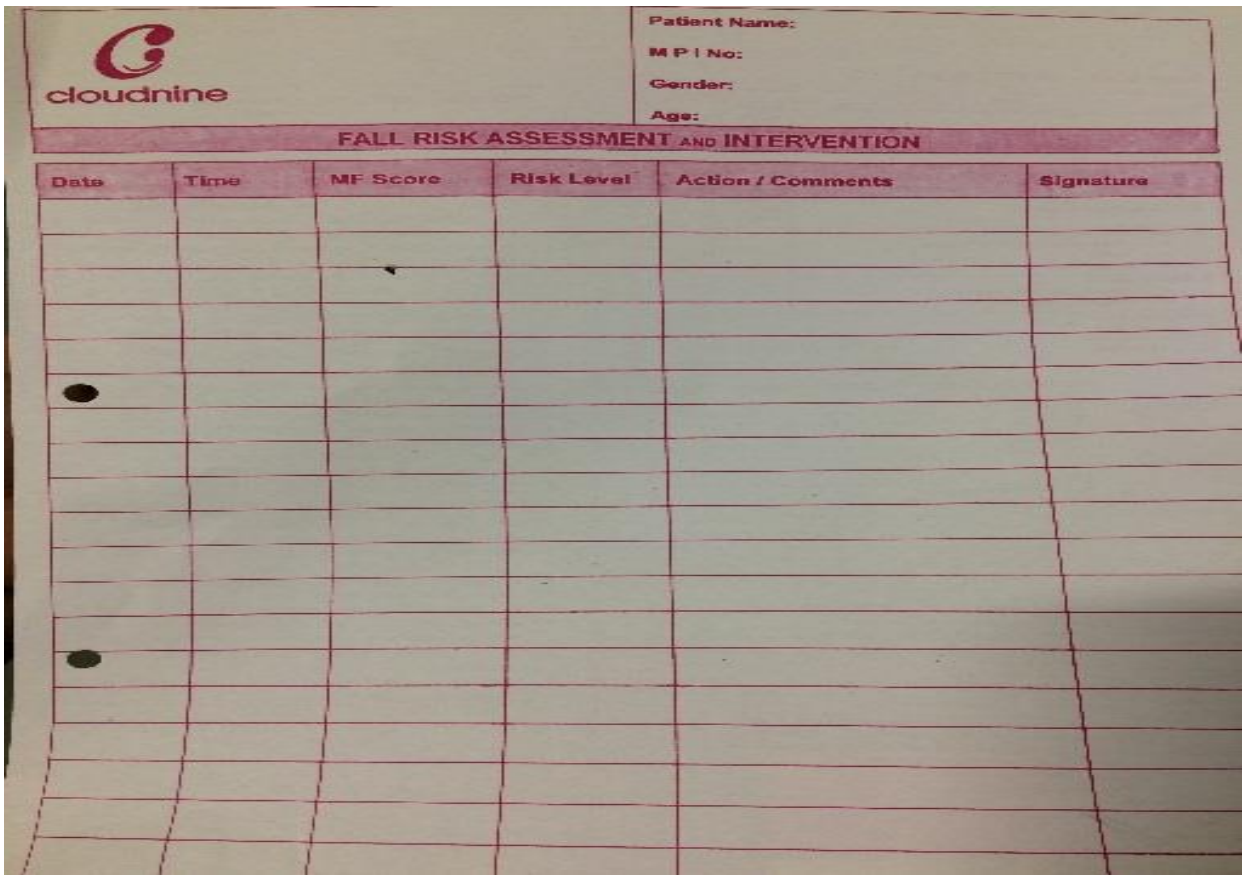
Among the actions that we did to enhance the safety of patients and reduce falls in our health facility were the following. So many improvements were implemented to make our hospital a safer place for all patients by ensuring that grab bars and side rails were fixed in areas so that patients would get support and not fall.

Call bell installed



New fall assessment form

In addition to this, several health education materials about the prevention of falls in the hospital were taught to these patients.

CHAPTER 5 – ISSUES AND RECOMMENDATIONS

ISSUES	RECOMMENDATIONS
Incomplete Safety Installations	Ensure grab bars, side rails, and call bells are installed in all necessary areas. Conduct regular safety audits.
Inconsistent Use of Fall Assessment Forms	Provide regular training on the proper use of fall assessment forms and perform routine audits to ensure compliance
Limited Engagement with Education	Develop more interactive educational materials and sessions for patients and staff, incorporating their feedback
Lack of Ongoing Follow-Up	Establish a system for regular monitoring and adjustment of fall prevention measures based on assessments and feedback
Gaps in Training Due to Staff Changes	Implement thorough onboarding and continuous training updates for all staff to cover fall prevention protocols.
Insufficient Incident Reporting	Foster a culture of open reporting by encouraging staff to report falls and near-misses without fear of blame.
Different Patient Needs	Customize support tools like wheelchairs to meet the specific

	mobility needs of each patient.
Resource Limitations	Prioritize urgent safety needs and develop a phased plan to address other issues as resources become available. Explore additional funding and partnerships.

CHAPTER 6 – CONCLUSION

1. **Enhanced Patient Safety:**The inclusion of safety features such as grab bars, call bells, and wheelchair belts have greatly enhanced the safety of the patients, hence positively affecting safety in the environment of the hospital for all patients.

   Effective Use of Assessment Forms: Introducing new forms for fall assessments, along with proper training of staff, leads to the better identification of fall risks and the management of the same in discharge patients, thereby making their experience much safer.

2. **Improved Staff Training:** Comprehensive training programs are available on the risk assessment of falls and preventive measures so that the staff is well-equipped in responding appropriately to prevent this from happening, but also to do what is necessary in such a case.
3. **Increased Awareness and Education:** Educational materials and informative sessions conducted for patients and staff helped to sensitize them to the risks of falling and the measures for preventing it, hence prompting them towards more active behavior in maintaining safety.
4. **Personalized Patient Care:**The development of fall-prevention programs at the individual patient level has ensured that specific needs and issues are looked into to minimize chances of falls, especially for those who have high chances of falling.
5. **Regular Monitoring and Evaluation:** Continuous monitoring and evaluation of safety measures to ensure effectiveness with continued evolution by feedback and new knowledge.
6. **Addressed Environmental Hazards**:Frequent environmental safety audits and immediate responses to such fall hazards as poor lighting and clutters also tended to reduce fall risks within the precincts of the hospital.
7. **Supportive Reporting Culture:**An a blame culture of incident reporting had led to an increase in the reporting of falls and near misses, allowing better tracking and hence more accurate data for the basis of effective preventative strategies.
8. **Optimized Resource Allocation:** The ability to identify the top safety needs and to plan how resources will be allocated has made it possible to implement fall prevention measures efficiently with limited resources.

9. **Achieved Reduction in Falls:** All these measures combined have guaranteed making the hospital falls number equal to zero, hence justified that some of the fall's prevention strategies and interventions employed in the hospital are very effective.

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