

Gap Analysis of Nurse's Documentation at Moolchand Hospital: A Nurse Audit Complying to NABH and JCI Standards

By

Vibhisha Khatri

*Dissertation submitted for the partial fulfillment of the
MBA Hospital and Health Management*

Academic year, 2015-2017



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To whomsoever it may concern

This is to certify that Dr. Vibhisha Khatri student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at Moolchand Hospital, New Delhi from 6th February 2017 to 6th May 2017.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.



Dean, Academics and Student Affairs

The IIHMR University, Jaipur



Professor

The IIHMR University, Jaipur

The certificate is awarded to

Dr. Vibhisha Khatri

In recognition of having successfully completed his
Internship in the department of

Quality and systems

and has successfully completed his Project on

Gap analysis of Nurse's Documentation at Moolchand hospital: A Nurse audit complying to
NABH and JCI standards.

6th February to 6th May 2017

Moolchand Medcity Hospital

New Delhi

He comes across as a committed, sincere & diligent person who has a strong
drive and zeal for learning

We wish him all the best for future endeavours.


06.05.17

Manager Human Resources

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "Gap Analysis of Nurse's Documentation at Moolchand Hospital: A Nurse audit complying to NABH and JCI standards" submitted by Dr. Vibhisha Khatri Enrollment No IIHMR-U/01/2015-17/0363 under the supervision of Dr. Tanjul Saxena for award of MBA in Hospital and Health management of the University carried out during the period from 6th February to 6th May embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.



Signature

THE IIMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that all ethical issues have been considered while collecting data for my dissertation titled "Gap Analysis of Nurse's Documentation at Moolchand Hospital: A Nurse audit complying to NABH and JCI standards"


Signature of student

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Dr. Vibhisha Khatri

MBA- HM 20 (2015-2017)

IIHMR, Jaipur

Table of contents

No.	Contents	Page No.
1.	Acknowledgement	7
2.	Abbreviations	9
3.	List of figures and tables	10
4	Part-2: Dissertation	
5	Executive summary	11
6	Introduction	12-13
7	Review of literature	14-15
8	Objectives	15
9	Material and methods	15-16
10	Analysis	17-23
11	Result	23-24
12	Interpretation and Conclusion	24-25
13	Suggestions	25-26
14	References	26-27
15	Annex-A	28
16	Annex-B	29-48

ABBREVIATIONS

BAR	Billing activity record
CTVS	Cardio-thoracic Vascular Surgery
DPCR	Daily Patient Care record
FF	First Floor
GF	Ground Floor
HUID	Hospital unique identification number
ICU	Intensive Care Unit
IPD	In-patient Department
IPSG	International patient safety goal
IW	International Wing
JCI	Joint Commission International
NABH	National Accreditation Board for Hospital and Healthcare Providers
NABL	National Accreditation Board for Testing and Calibration Laboratories
OPD	Out-patient Department
OT	Operation Theatre
PICU	Pediatric intensive care unit

List of tables and figures

S.No	List of tables	Page no.
1.	Table 1: List of documents audited during the study	16-17
2.	Table 2: Percentage of compliance, partial compliance and non-compliance in nursing documentation of the 6 parameters, audited on various floors during the study.	23-24
	List of figures	
1.	Figure 1: Initial assessment of patients within 30 minutes of admission	18
2.	Figure 2: Nutritional screening within 30 minutes of admission	18
3.	Figure 3: Vitals monitoring and documentation	19
4.	Figure 4: Signatures in BAR sheet	19
5.	Figure 5: Nursing handover signatures	20
6.	Figure 6: Documentation of patient's name	20
7.	Figure 7: HUID documentation as patient identifier	21
8.	Figure 8: Patient identification by ID Band	21
9.	Figure 9: Documentation of verbal/stat order	22
10.	Figure 10: Patient and family education documentation	22

Part 2: Dissertation

Title: Gap analysis of Nurse's Documentation at Moolchand hospital: A Nurse audit complying to NABH and JCI standards.

Executive Summary:

Nurses are the backbone of the hospital. Starting from the entry of the patient in the ward till the discharge of the patient, nurses play a major role in the recovery of patient's condition. During the stay of the patient in the hospital, it is nurse's responsibility to document the care provided, e.g. medicines administered, vitals monitoring, Assessment of the patient etc. Nursing documentation in the patient records helps in continuity of care of the patient and helps to understand the course of treatment in the hospital.

However, with increase in workload, the importance of timely and accurate documentation in the patient records is sidelined and is often overlooked. This might lead to discrepancies in the hospital charges leading to revenue loss, indicate errors in the care processes provided in the hospital

This study was conducted in Moolchand Hospital to understand the gaps in the nursing documentation according to NABH and JCI standards in the IPD areas. The study was conducted over a period of three months (6 February 2017 to 6 May 2017). Nearly 250 Inpatient records were audited with the help of a nursing audit toolkit.

Auditing of records was done on all the four inpatient floors of the hospital (First Floor, Ground Floor, Third Floor, International wing). Results indicated a lack of compliance in all the floors.

Introduction:

An important part of nurse's daily work constitutes documentation in the patient records [1]. The delivery of good care and the ability to communicate effectively about patient care depends on the quality of information available to all health care professionals. One important part of this information is nursing documentation in nursing care plans.

Nursing Audit is defined as a review of the patient record designed to identify, examine, or verify the performance of certain specified aspects of nursing care by using established criteria. [2]

Purpose of nursing audit:

- **Evaluation:** Evaluating the nursing care given. Achieve deserved and feasible quality of nursing care.
- **Verification:** Stimulant to better records. Focuses on care provided and not on care provider.
- **Contributes to research.** Review of professional work or in other words the quality of nursing care i.e. we try to see how far the nurses have confirmed to the norms and standards of nursing practice while taking care of patients.
- It encourages followers to be actively involved in the quality control process and better records.
- It clearly communicates standards of care to subordinates.
- Facilitates more efficient use of health resources.
- Helps in designing response orientation and in-service education programme.

Incomplete documentation by nurse's in the patients' record can lead to:

- Unnecessary delays in diagnosis, treatment and care
- Repeated tests
- Missed or delayed communication of test results
- Incorrect treatment or medication errors.

Accreditation boards also recommend complete and legible documentation in the patient's record to facilitate quality patient care.

JCI Recommendations:

Standard IPSG.1 Identify patient correctly

Use two identifiers other than room number.

Standard IPSG.2 Improve effective communication

IPSG.2.1 Verbal medication, non-medication orders and communication of test findings should be documented in the patient's record file.

Standard IPSG.2.2

The hospital develops and implements a process for handover communication

Standard IPSG.3

The hospital develops and implements a process to improve the safety of high-alert medications.

Patient Centered Standard:

Patient and family education:

Patient and family should be educated about their disease process, proposed plan of care and effects, nutrition, medication. This must be documented in the case records

NABH Recommendations:

Standard AAC 5: Patient cared for by the organization undergo an established initial assessment.

Objective elements:

- The organization defines the content of the assessment for the out-patients, inpatients and emergency patients.
- The organization defines, who can perform the assessment.
- The organization defines the time frame within which the initial assessment is completed.
- The initial assessment includes screening for nutritional needs.
- The initial assessment results in documented plan of care which is monitored.

Review of Literature:

A number of studies have emphasized on the nursing care and documentation, highlighting its importance. Nursing has increasingly conquered space in nursing management. Auditing can verify the quality of nursing care for patients, contributing to its constant improvement. [3] Lindo et al [4] have highlighted the weakness in nursing documentation and the need for increased training and continued monitoring of nursing documentation at the hospitals.

Due to errors in the nursing notes, patients' line of treatment gets effected as there is ineffective communication among the professionals, [5]. The consequences of discontinuity of care are linked to increased cost and length of hospital stay, readmissions, poorer patient satisfaction, adverse events, delays in treatment and diagnosis, inappropriate treatment and omission of care. [6] Müller-Staub *et al.* [7] reported that due to shortcomings in the nursing documentation of signs, symptoms and etiology ,the diagnostic processes were found to be insufficient. Wand et al, [8] conducted a nursing documentation study in Australia and emphasized on accurate documentation in patient records for quality care. The implementation of the audit can equip the nursing team and strengthen the importance of the nurse auditor in this process through actions and orientations, besides the elaboration of tools for care planning.

Documentation of vital signs, handover, nurse assessment, etc are certain important parameters which have to be documented properly. Recording vital signs is an important part of the care of patients on hospital wards but problems have been identified with the way these signs are recorded. [9] A recent study in 2015 in Mulago Hospital, Uganda revealed that even patients perceived duty handovers (shift change, duty transfers and health worker sign-offs) as triggers for several problems that affected quality of care, created gaps in continuity of care, and increased patient morbidity or mortality. [10]

Objectives of the study:

- 1) To design a nurse toolkit for auditing the nursing documentation in IPD area of the hospital.
- 2) To identify the gaps in nursing documentation in IPD area of the hospital
- 3) To suggest measures to improve timely and accurate documentation by nurses.

Material and methods:

Study Design: Cross sectional descriptive study.

Setting: Moolchand Hospital, New Delhi.

Duration of study: 6 February 2017 to 6 May 2017.

Sample Size: Total 254 case records

Ground floor- 58

First floor- 76

Third floor- 71

International wing- 49

Sampling Technique: Convenient sampling technique

Sample Selection:

Inclusion criteria: Inpatient active files (files of currently admitted patients) on all the four floors of IPD including ground floor, first floor, third floor and international wing.

Exclusion criteria: Inactive files (files already sent to medical records department post discharge).

Data collection procedure:

Primary data collection:

- 1) Direct observation of the nursing assessment and vitals monitoring post new IPD admission on the floors.

Secondary data collection:

- 1) Daily audit of the inpatient records on the floors in IPD with the help of nursing audit toolkit.

Table 1: List of documents audited during the study

Nurse assessment form	This form is filled when the patient is admitted in any of the wards. it contains vital signs, fall risk assessment, functional screening, nutritional screening, pain assessment etc. The assessment should be ideally done and documented within 30 minutes of admission.
Daily patient care record	This form is filled by the nurses to document the daily patient care activities, investigations ordered, procedures ordered, Vital monitoring chart, safety measures taken. During shift change, nurses are supposed to sign for handing over and taking over of the patients.

Billing activity record	This record contains the details of items billed for the patient. During each shift, name and signature of nurse updating the BAR should be there.
Medical Administration record	It contains the details of the medicines administered to the patient along with nurse's signature and time. In case of high risk medication administration, there should be a counter sign also. The verbal orders are documented with seal and verification signature of doctor is very important.

Note: The above forms are attached daily in the patient record and are arranged date wise.

Patient identifiers i.e Name and HUID are recorded in every document of the patient's file. The ID band is provided to patient in order to avoid any patient identification error.

Data Analysis:

The analysis is based on the scoring for documentation of 11 different parameters in patient record of Ground, First, Third floor and International Wing.

The scoring criteria is as follows:

- Total compliance: Score 10 (When documentation is complete and is present in all the forms attached date wise in the file)
- Partial compliance: Score 5 (When documentation is present in two or more forms arranged date wise in the file)
- No compliance: Score 0 (When documentation is present in only one or less than one forms, arranged date wise in the record)

Findings:

Following graphs shows the comparison between the floors regarding the compliance in documentation.

1 Initial assessment of patients within 30 minutes of admission

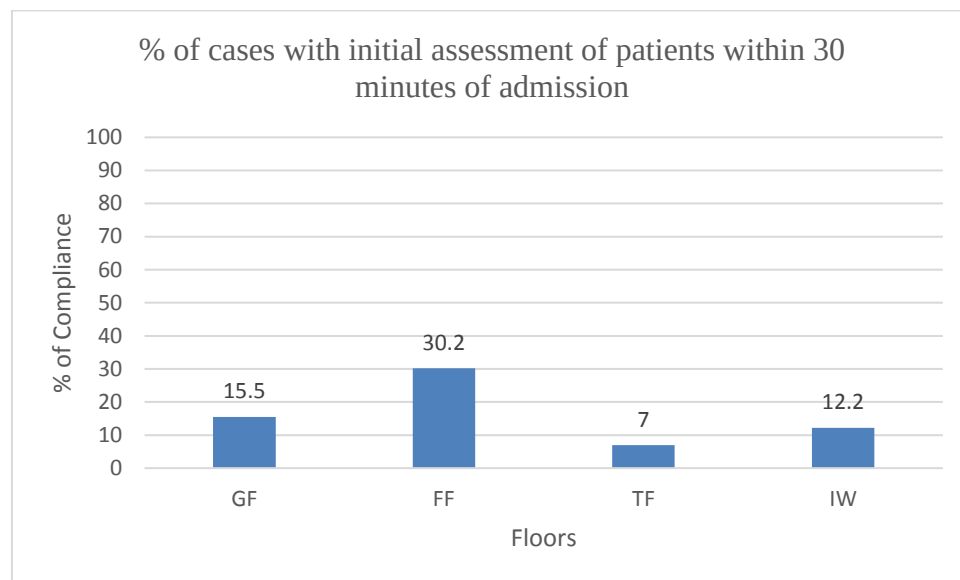


Figure 1

The above figure shows that the compliance for initial assessment of patients is maximum in First floor (30.2 %), followed by Ground floor and International wing. Third floor has the least compliance (7%).

2. Nutritional Screening within 30 minutes of admission

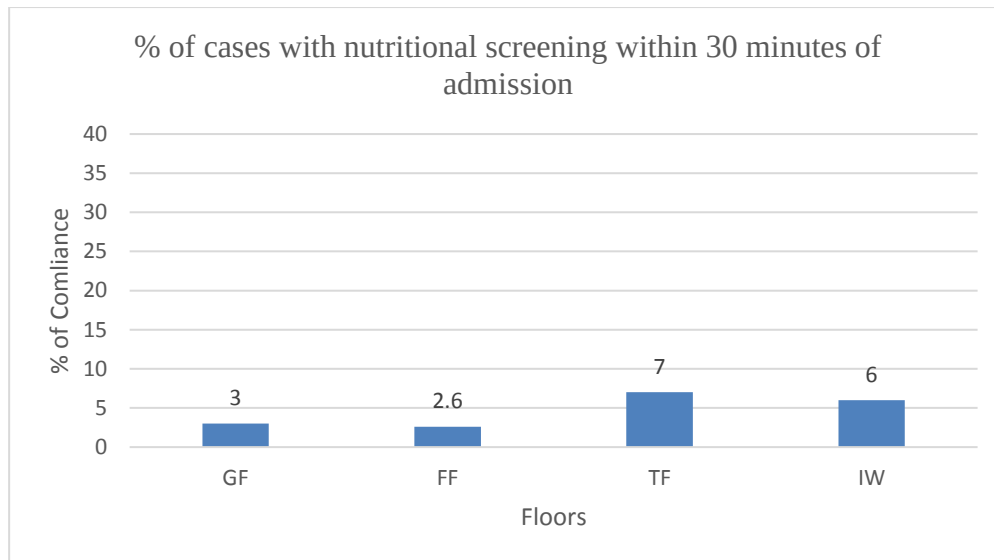


Figure 2

The above figure shows that Nutritional screening within 30 minutes is done only in 7% of the cases in Third floor, followed by International wing with 6% compliance. Ground floor and first floor have least compliance, about 3%

3. Vitals monitoring and documentation:

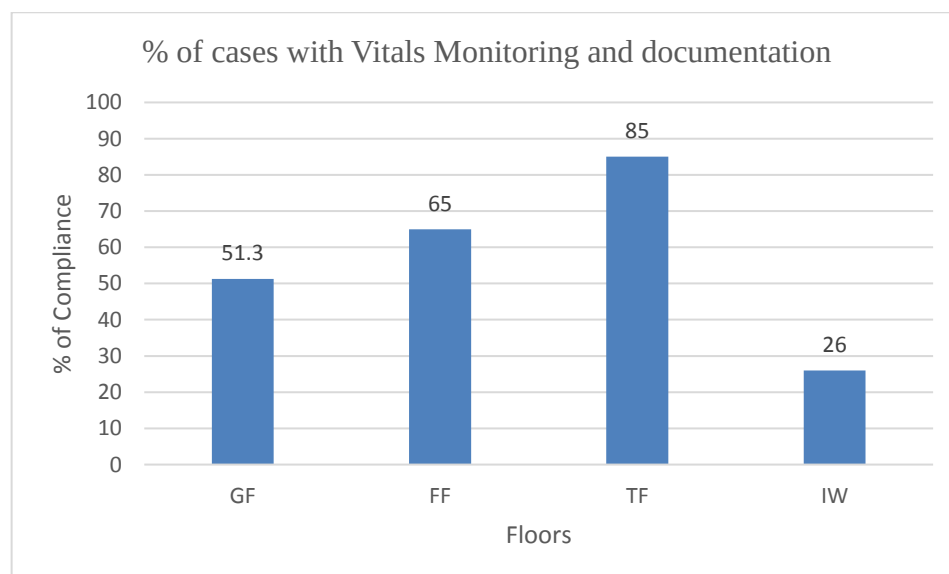


Figure 3

Figure 3. shows that in almost in 85% of the cases, vitals monitoring and documentation is done on Third floor, However International wing is least complaint with vitals documentation in only 26 % of the cases.

4 Signatures in BAR sheet

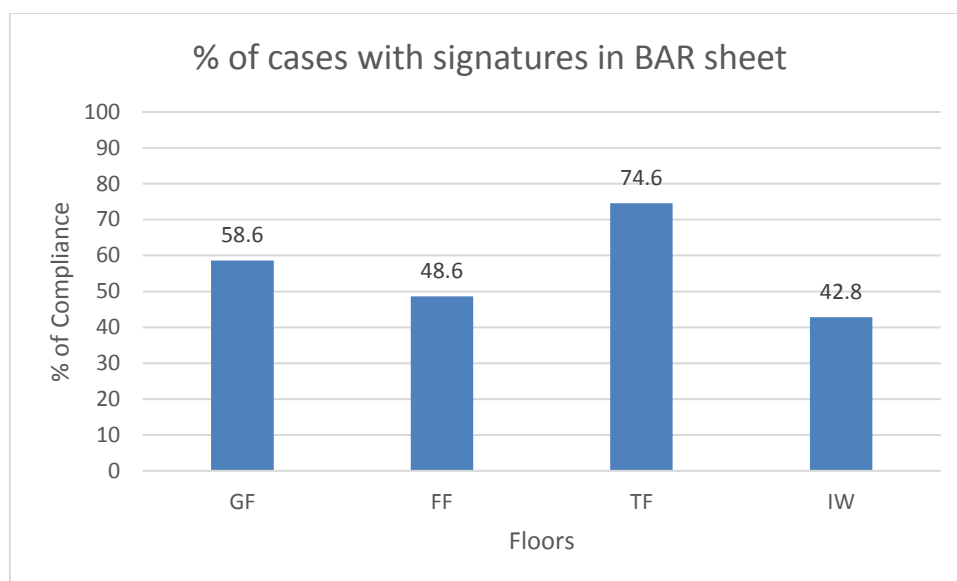


Figure 4

Figure 4 shows that Third floor has maximum compliance amongst all the floors regarding the signatures in BAR sheet (74.6%), followed by First floor (48.6%), IW and ground floor.

5. Nursing handover signatures

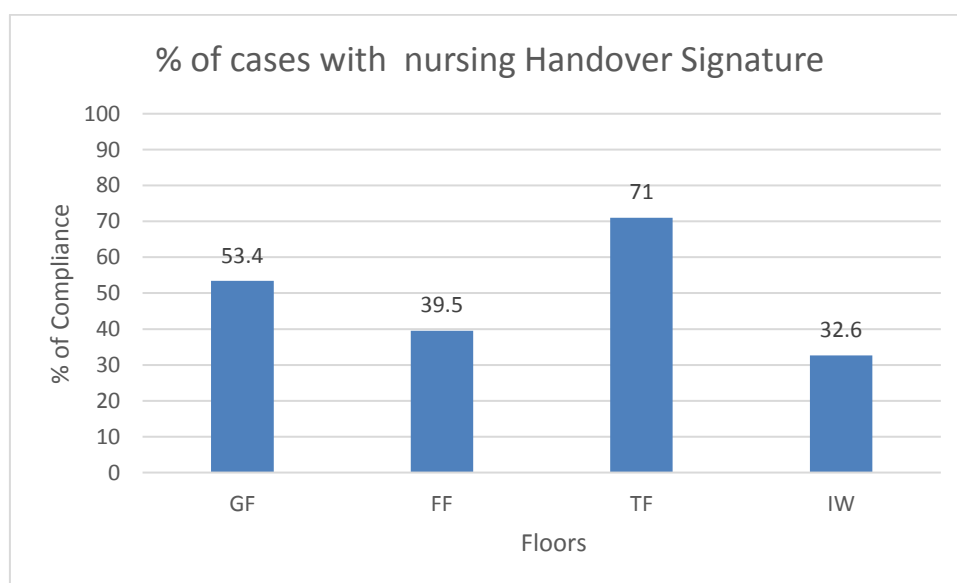


Figure 5

The above figure shows that Third floor has compliance in 71% of cases where nursing handover signatures are present. Ground floor has 53.4% compliance followed by First floor (39.5%). International wing is least compliant with handover signatures in only 32.6% case

6. Documentation of Patient's Name

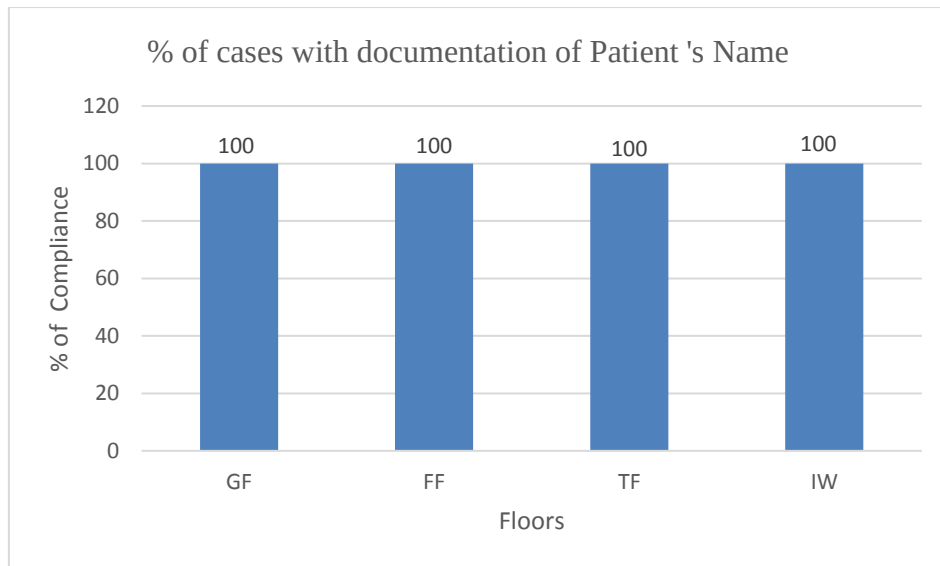


Figure 6

The above figure shows that all floors have 100% compliance of documentation of patient's name in the patient record file.

7. HUID documentation as patient identifier

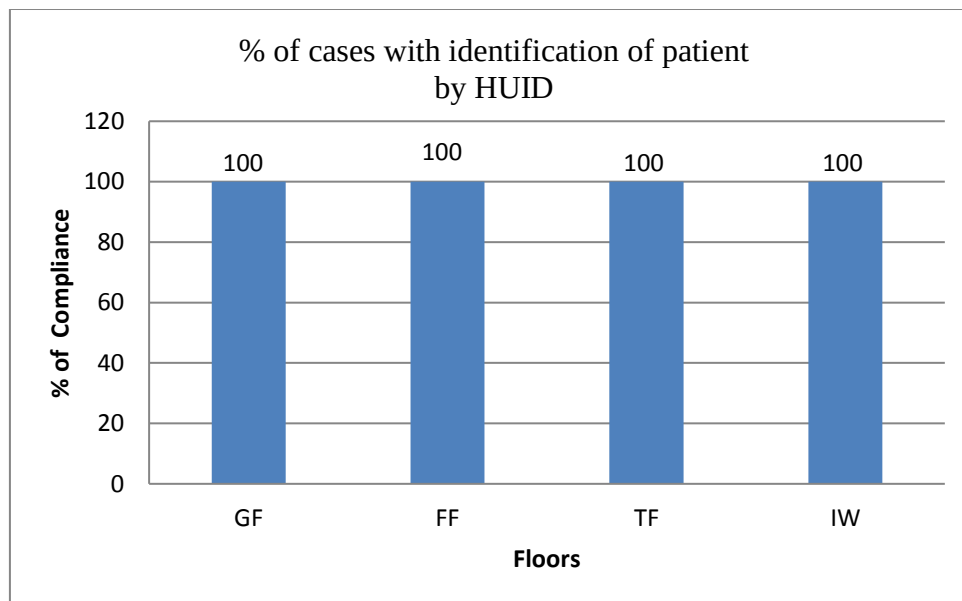


Figure 7

The above figure shows that all floors have 100% compliance of documenting HUID as patient identifier.

8. Patient Identification by ID band

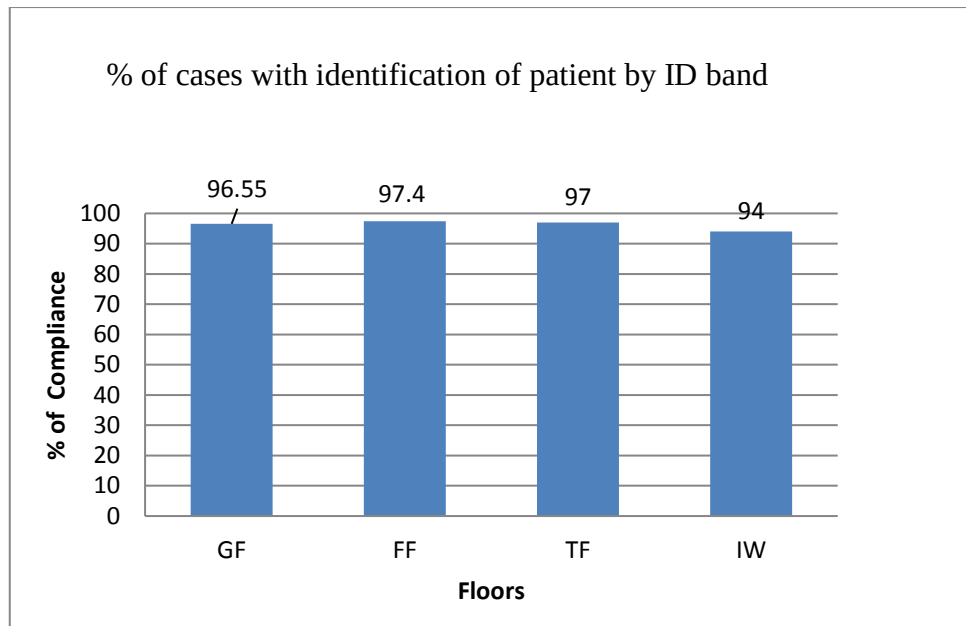


Figure 8

The above figure shows that First floor has compliance in 97% of cases for identification of patient by ID band and least compliance in International wing (94%).

9. Documentation of Verbal/Stat order

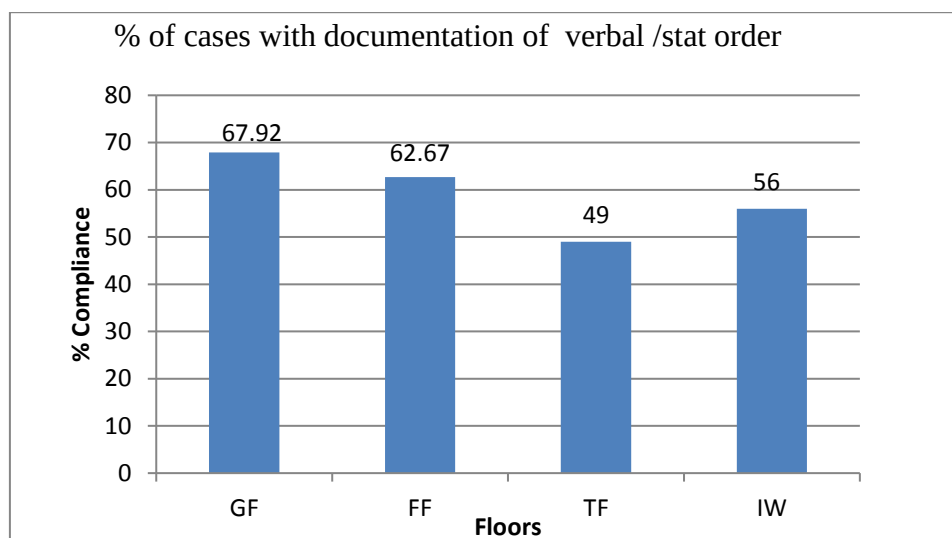


Figure 9

The above figure shows that Ground floor has compliance in 67% of cases of documentation of verbal/stat order with seal and doctor verification signature, first floor has compliance in 62% cases followed by International wing 56% and least compliance is of Third floor 49%.

10. Patient and family education documentation (procedure /proposed plan of care and effects of treatment)

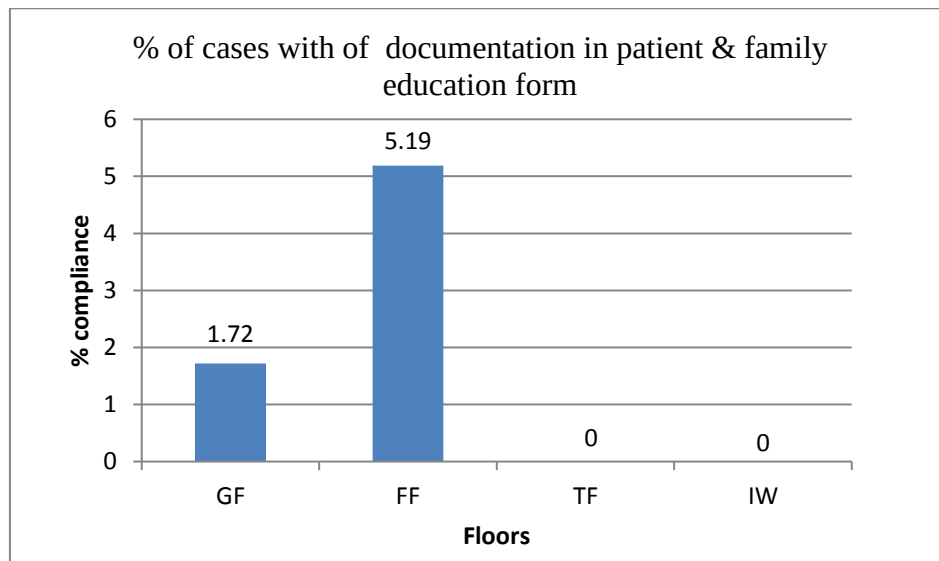


Figure 10

The above figure shows that compliance percentage for documentation of patient and family education is 5.2% in first floor records and no compliance score in case of third floor and International wing.

Results:

Table 2: Percentage of compliance, partial compliance and non-compliance in nursing documentation of the 11 parameters, audited on various floors during the study.

N=254		% of compliance		
Audit Parameters	Floors	Compliant	Partially compliant	Non-compliant
Initial assessment of patients in 30 minutes of admission	GF	15.5	84.4	0
	FF	30.2	68.4	0
	TF	7	93	0
	IW	12.2	87	0
Nutritional screening in 30 minutes of admission	GF	3	60.3	36.6
	FF	2.6	51.3	46
	TF	7	56.3	36.6
	IW	6	67.3	26
Vitals monitoring and documentation in DPR	GF	65	35	0
	FF	51.3	48.6	0
	TF	85	15	0
	IW	26	73	0

Signatures in BAR sheet	GF	58.6	41.3	0
	FF	48.6	51.3	0
	TF	74.6	25.4	0
	IW	42.8	57.1	0
Nursing handover signatures	GF	53.4	46.5	0
	FF	39.5	60.5	0
	TF	71	29	0
	IW	32.6	67.3	0
Nurse's sign and counter sign in case of high risk medication administration	GF	0	100	0
	FF	0	100	0
	TF	0	100	0
	IW	0	100	0
Documentation of Patients Name	GF	100	0	0
	FF	100	0	0
	TF	100	0	0
	IW	100	0	0
HUID documentation as patient identifier	GF	100	0	0
	FF	100	0	0
	TF	100	0	0
	IW	100	0	0
Patient Identification by ID band	GF	96.5	0	3.45
	FF	97	0	2.6
	TF	97	0	3
	IW	94	0	6
Documentation of Verbal/Stat order	GF	67.9	28.3	3.77
	FF	62.6	36	1.33
	TF	49	43	7
	IW	56	40	4
Patient and family education documentation	GF	1.72	98.28	0
	FF	5.19	93.51	1.3
	TF	0	97	3
	IW	0	96	4

Interpretation:

- Compliance in documentation of vitals, Handover signatures, BAR sheet is maximum on Third floor (85%,71%, 74.6 % respectively) as compared to other floors.

- Initial assessment and nutritional screening are not done within 30 minutes in majority of the cases. Maximum compliance of initial assessment is seen in First floor (30%) and minimum is seen on Third floor (7%).
- Nutritional screening has lower compliance as compared to other parameters audited on GF, FF, TF, IW (3%, 2.6%, 7%, 6%) respectively.
- In all the cases with high risk medication administration, nurse's counter sign was missing. Hence there is 100% partial compliance with only one nurse signature on administration record
- Documentation of Patients name and HUID has 100% compliance in records of the floors audited.
- Patient identification check by ID band is maximum followed by first floor (97.4%) followed by third floor (97%) and least compliance percentage is of International wing (94%).
- Patient and family education parameter has least percentage compliance as compared to other parameters. This parameter has partial compliance percentage higher than 100% compliance in all floors.

Conclusion:

Quality nursing documentation promotes structured, consistent and effective communication between caregivers and facilitates continuity and individuality of care and safety of patients.

The accuracy of documentation content in relation to patients' actual conditions and the care given is an important process feature of documentation quality.

From the study, it can be concluded that the nursing care was not fully expressed in the records, so written communication between different caregivers about patients was inadequate.

Suggestions:

- Education and training programs to be organized for nurses for timely and accurate documentation in the patient records. During the trainings,
 1. The nurses should be explained about the importance of documentation of the vitals and regular monitoring which may otherwise lead to unexpected outcome and compromised patient care leading to their dissatisfaction.

2. They should be educated that if the BAR sheet is filled properly, it will help in reducing billing errors which in turn will reduce the revenue loss.
 3. Accountability of patient care during a particular shift depends on the assigned nurse, hence importance of documentation of handing over and taking over should be communicated to the nurses.
 4. Nurses should be explained that if initial assessment and nutritional screening is not done within 30 minutes, there will be delay in the further treatment plan and it can have adverse outcomes.
- To design a system of Peer Audit and regular monitoring among peers so that documentation becomes the culture of the system.
 - To conduct regular on the job training for the nurses.

Regular trainings on effective documentation and auditing the same are few measures which can be taken to improve the documentation process.

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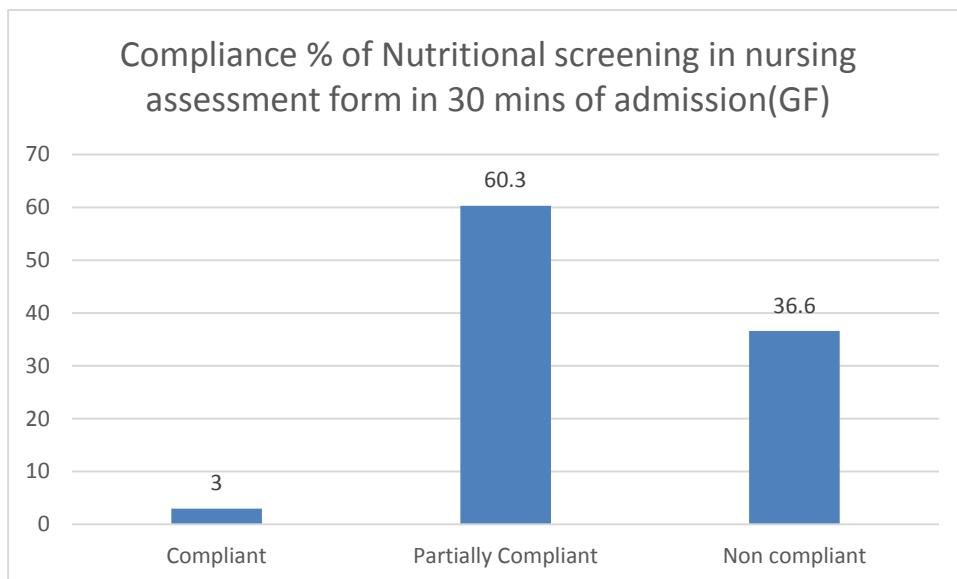
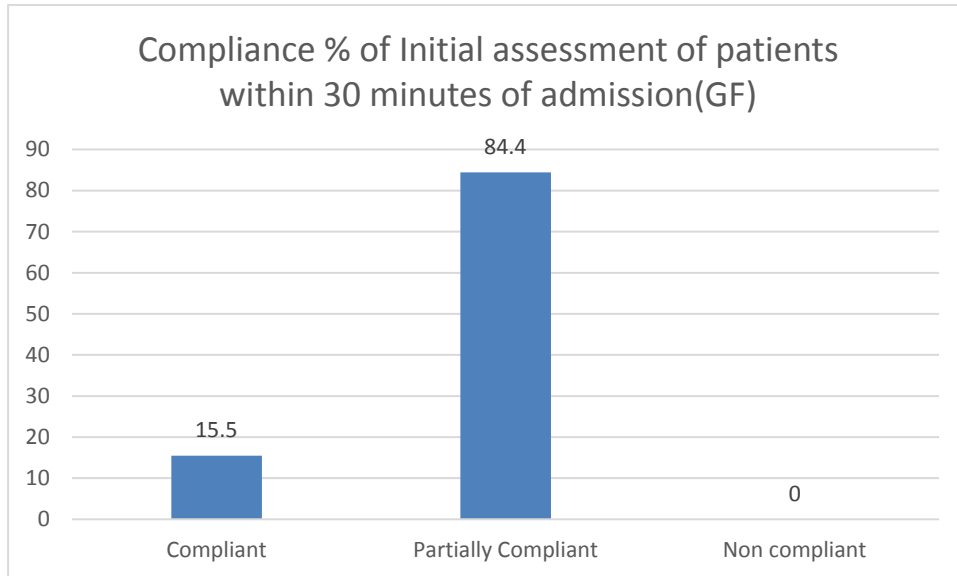
Annexures

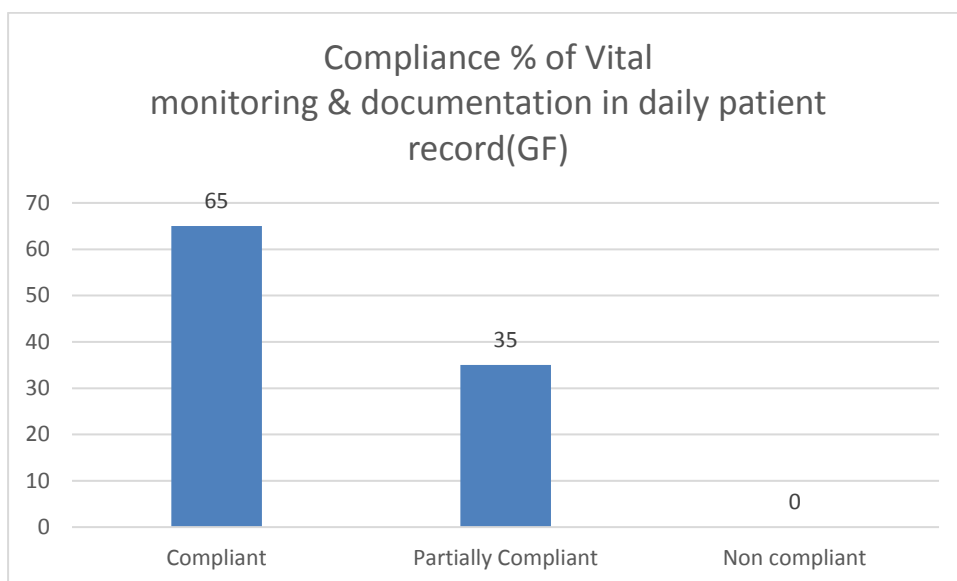
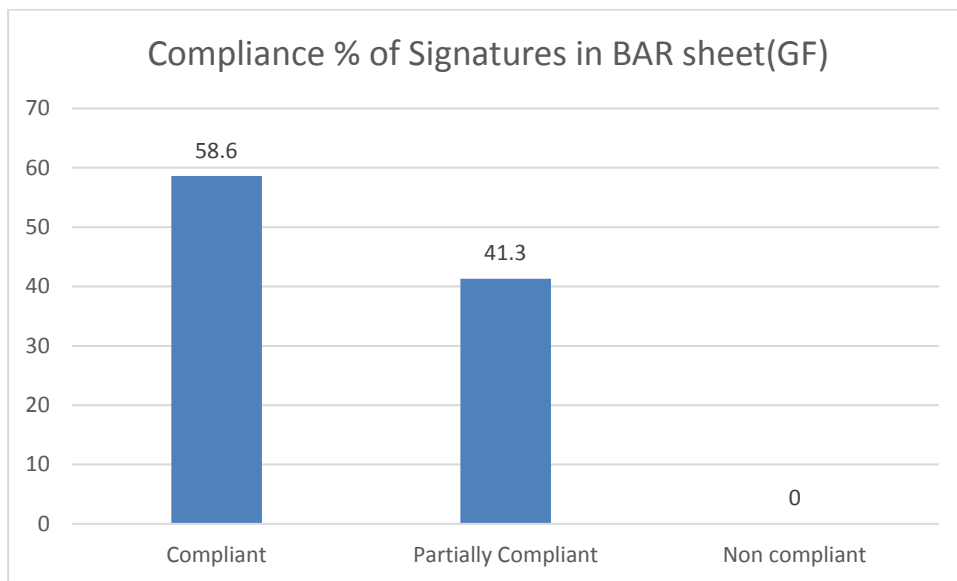
Annex-A: Nurse Audit tool kit

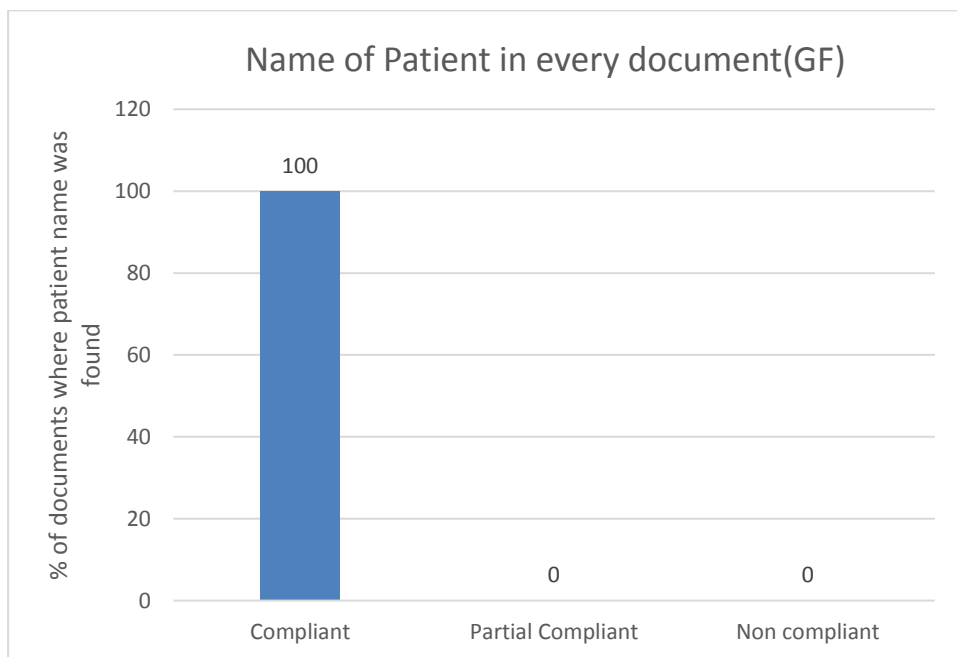
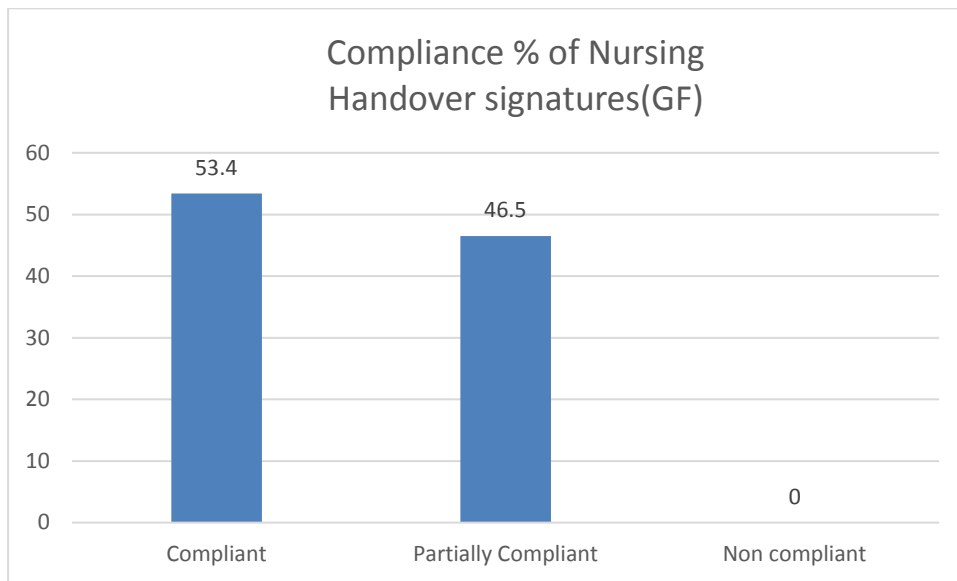
Audit Parameters	Patient name: Huid: DOA: TOA	Patient name: Huid: DOA: TOA	Patient name: Huid: DOA: TOA	Patient name: Huid: DOA: TOA
1.Initial assesment of patient by nursing in 30 mins of admission				
2.Nutritional screening in nurse assessment form in 30 mins				
3.Vital Monitoring and documentation in daily patient record				
4.Nurse sign and counter sign in case any high alert medication administered				
5. Signatures in BAR sheet				
6.Nursing Handover Signature				
7.Documentation of Patients Name				
8.HUID documentation as patient identifier				
9.Patient Identification by ID band				
10.Documentation of Verbal/Stat order				
11.Patient and family education documentation				

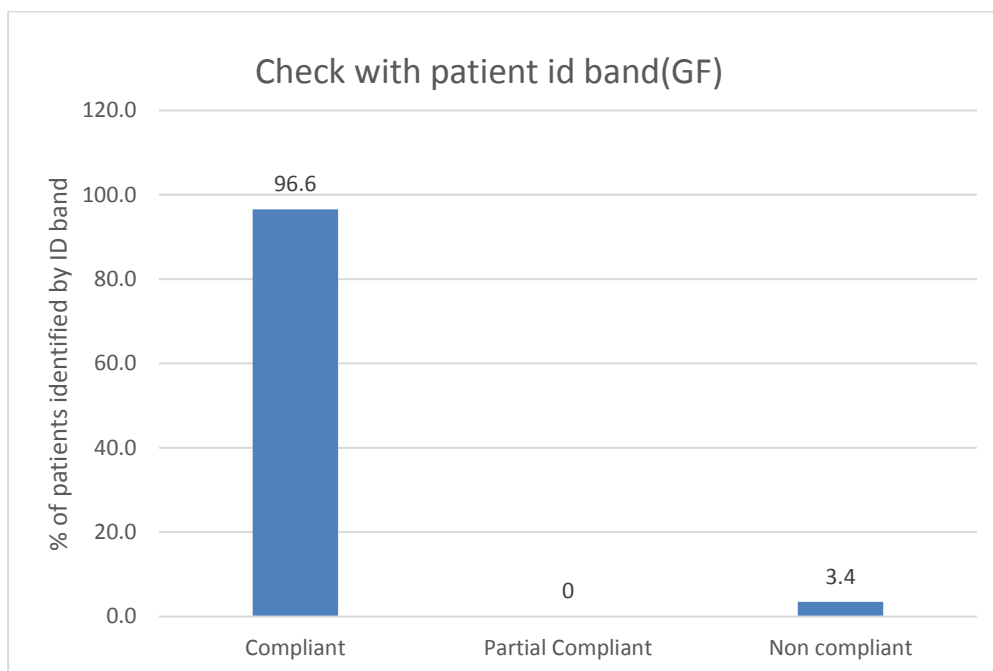
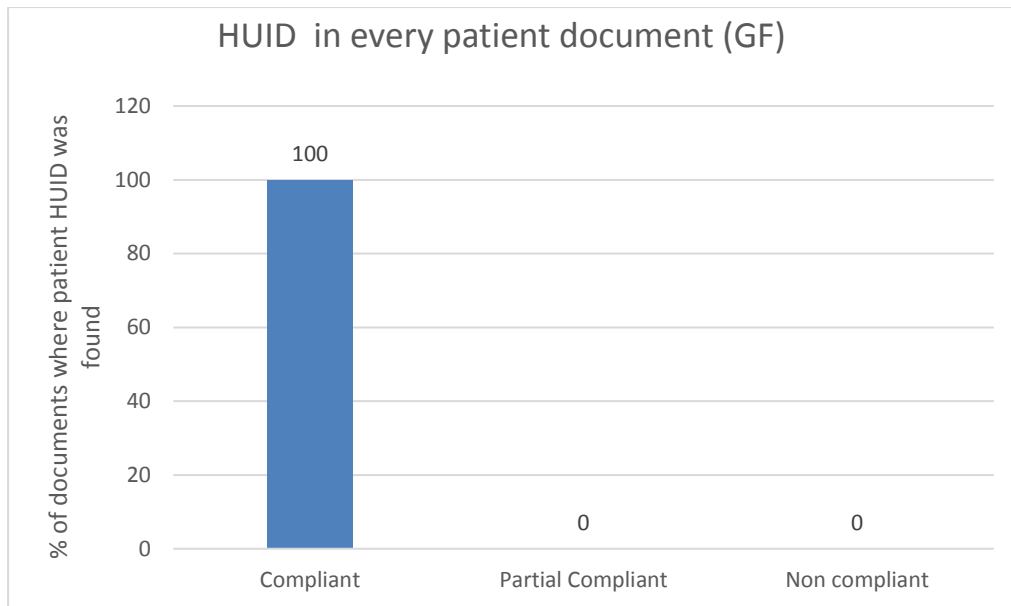
Annex-B: Floor wise graphs showing compliance, partial compliance and non-compliance w.r.t the audited parameters.

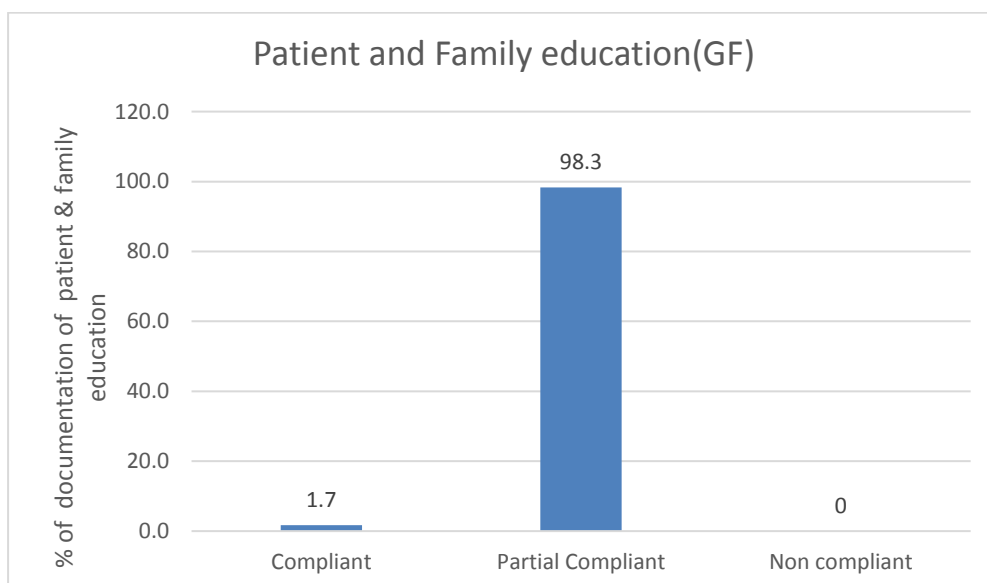
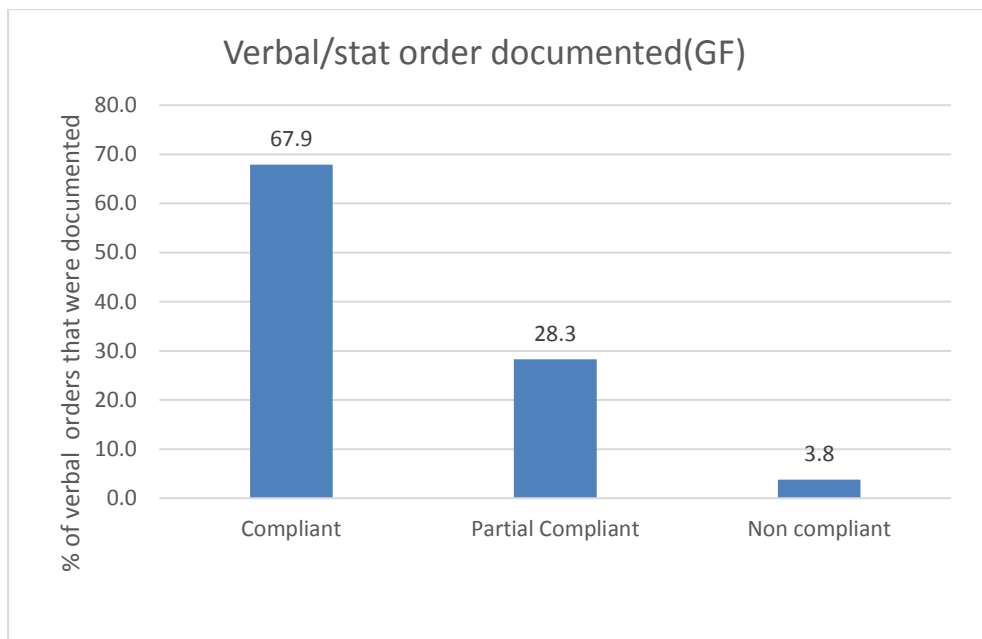
- **Ground Floor**



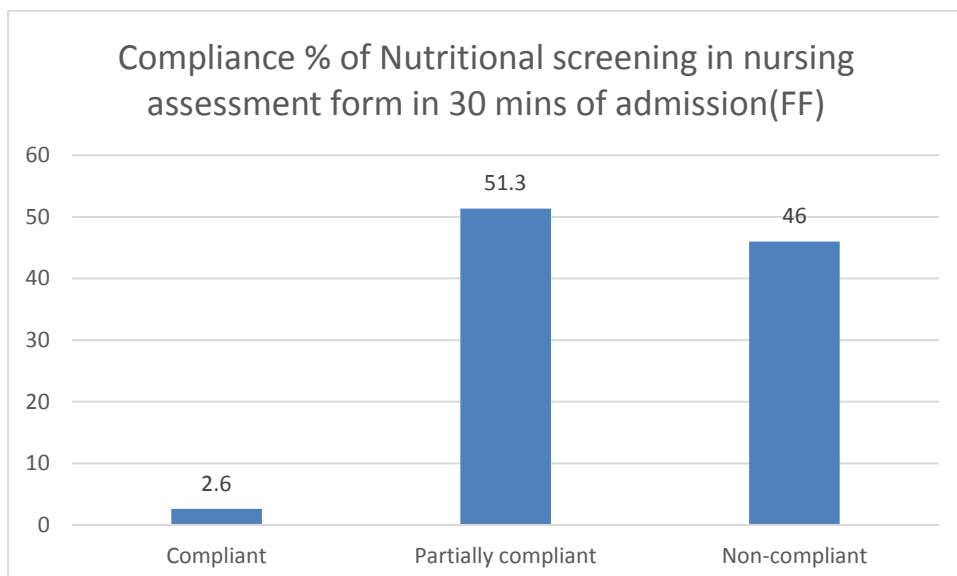
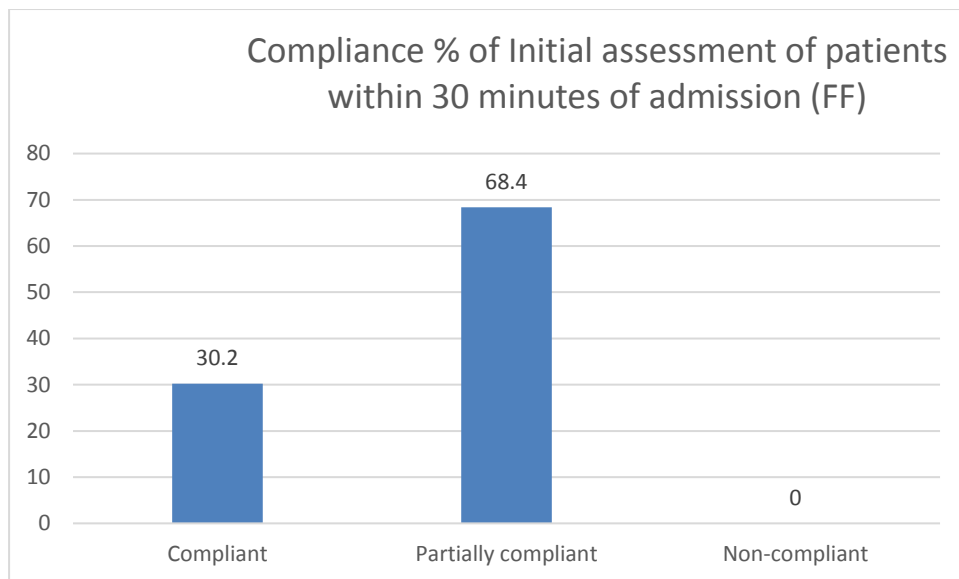


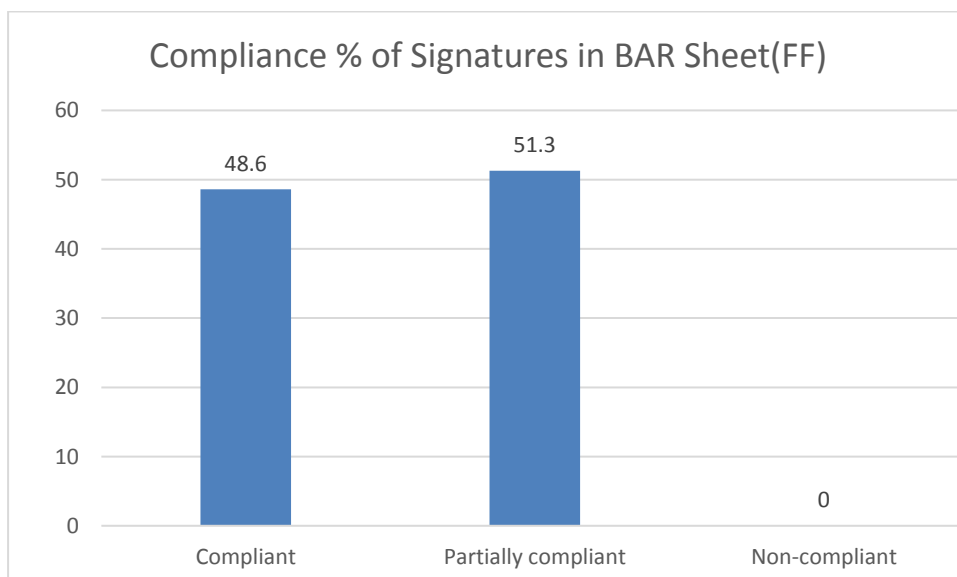
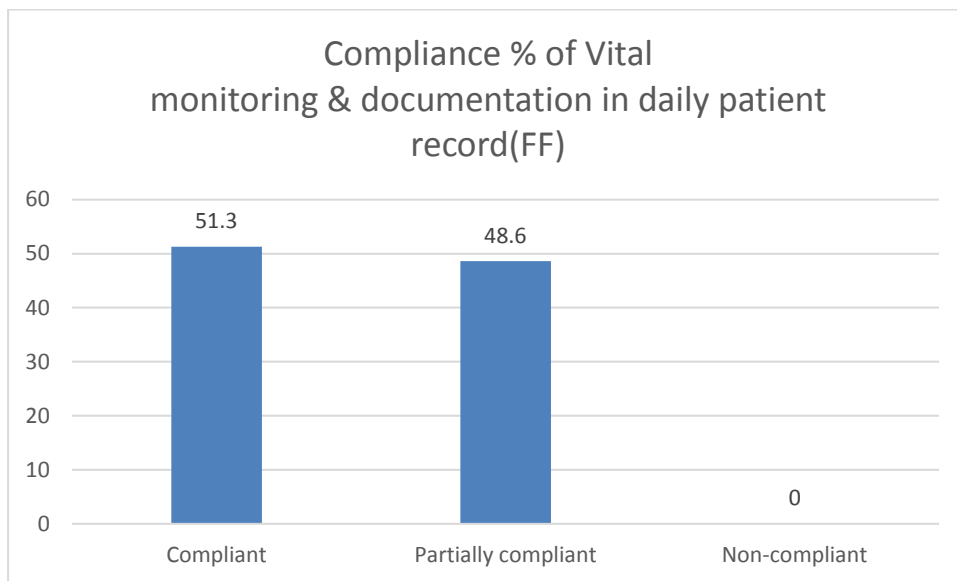


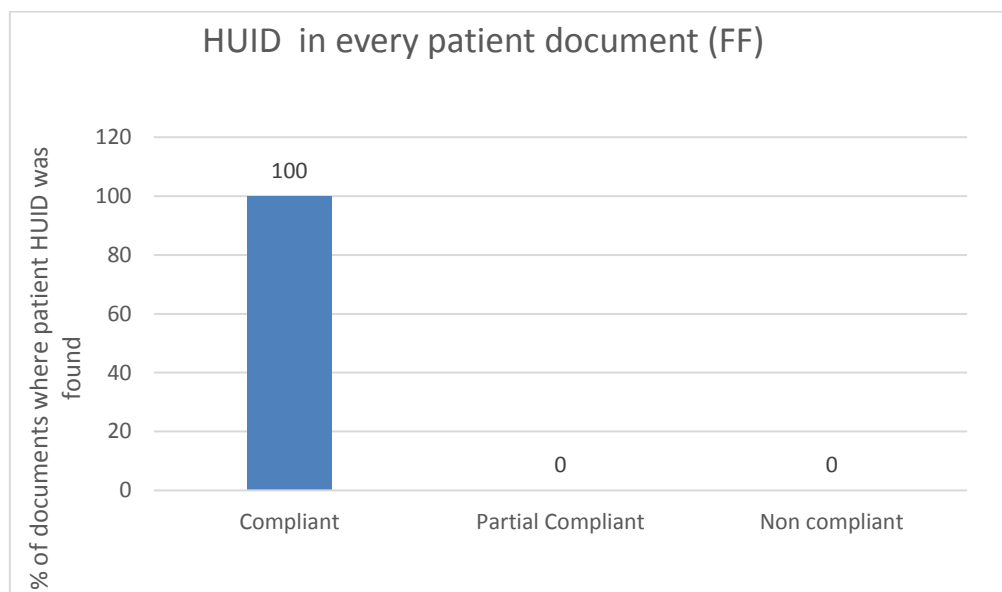
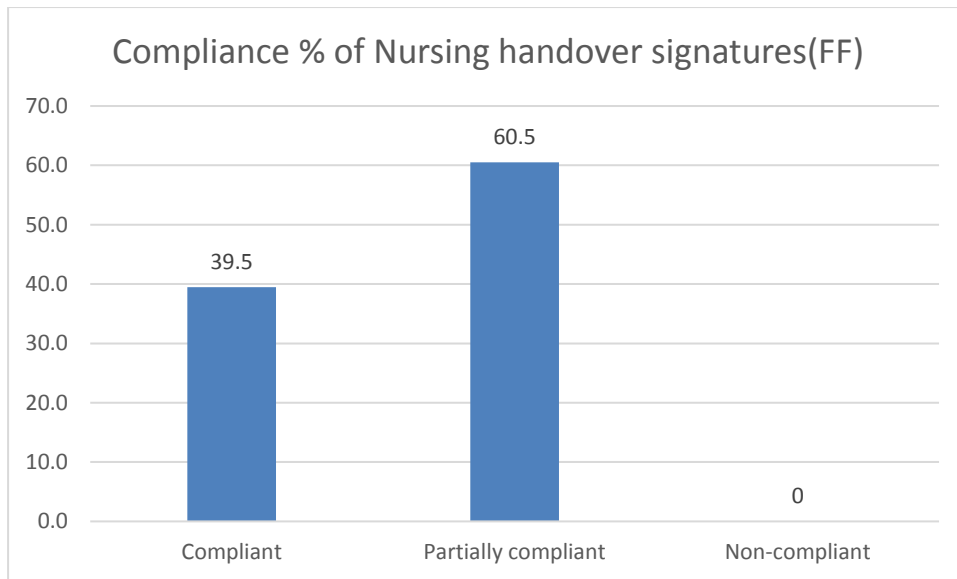


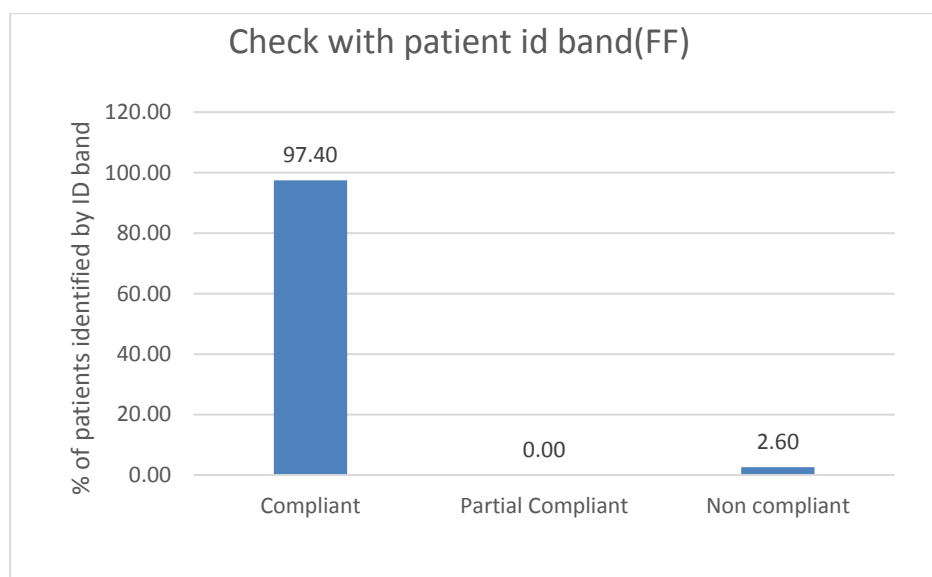
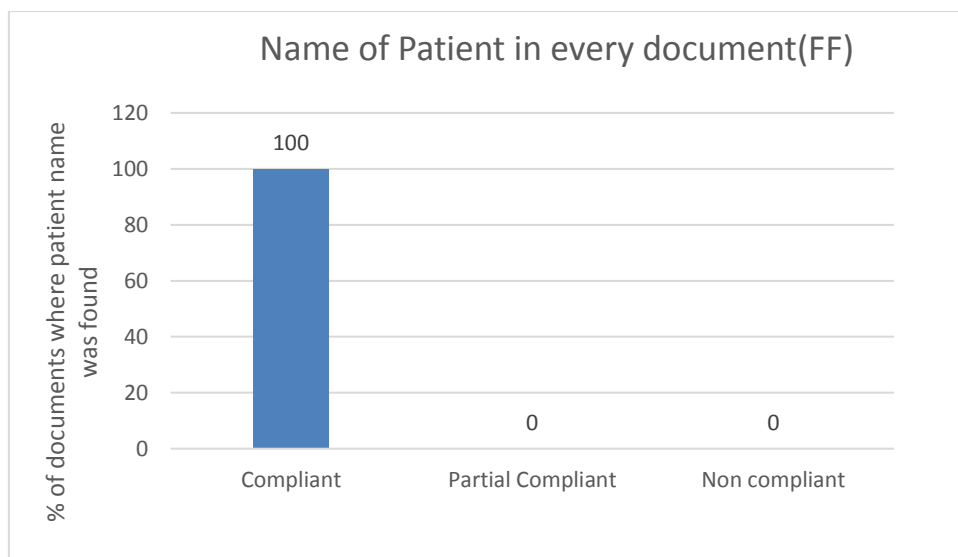


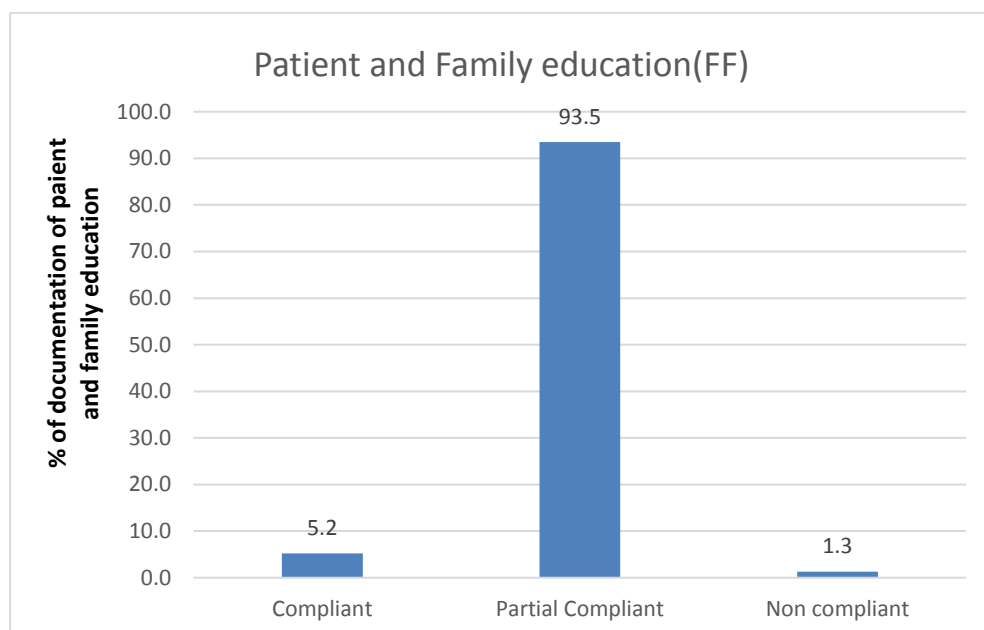
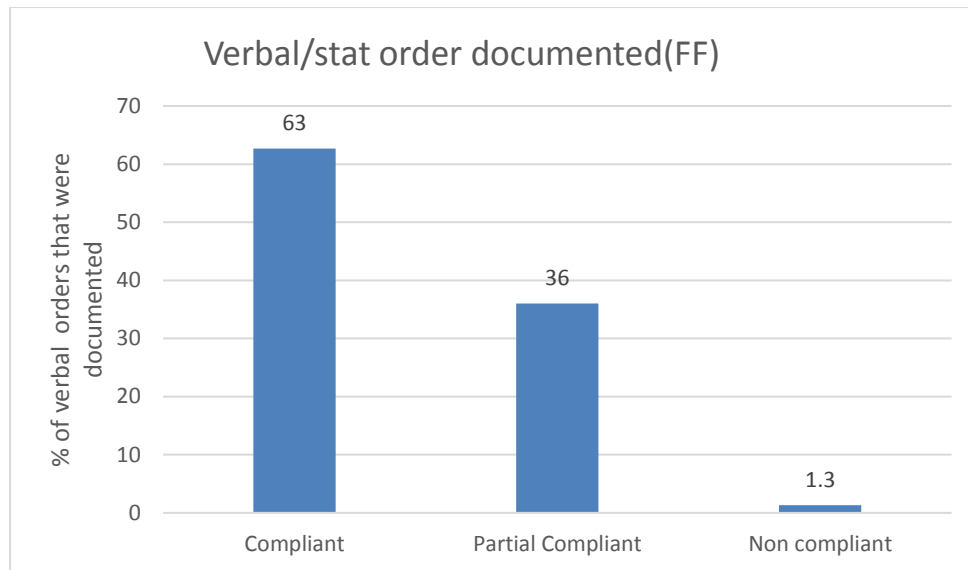
- **First floor:**



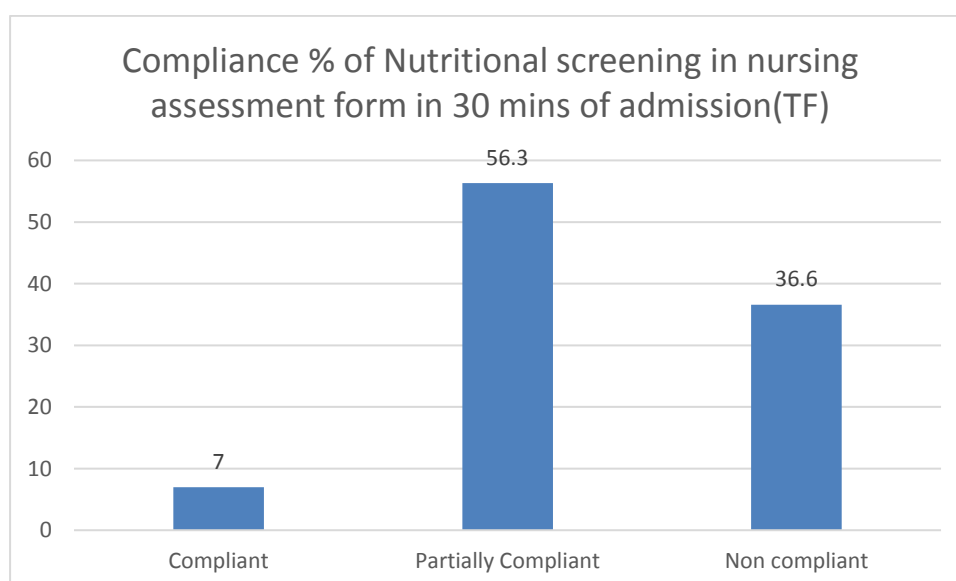
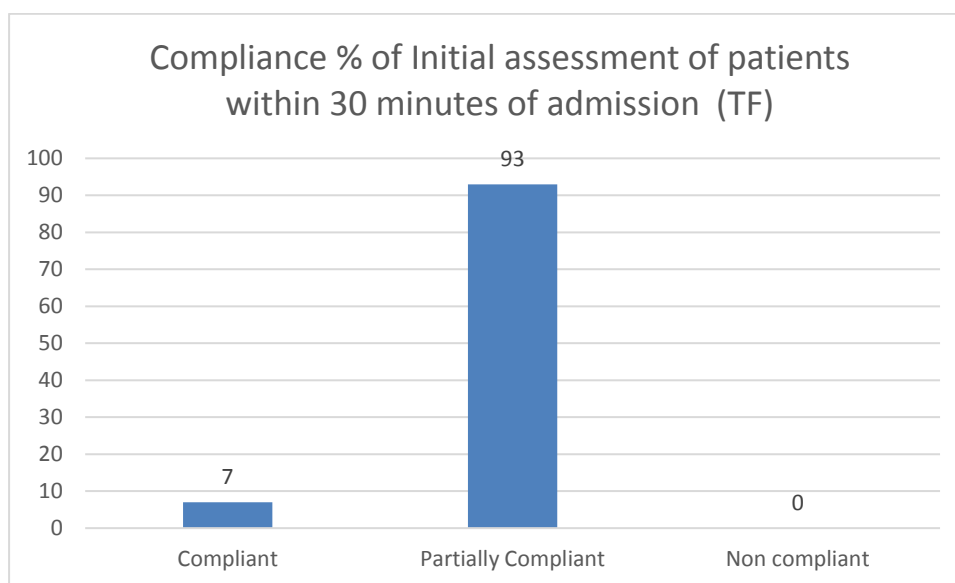


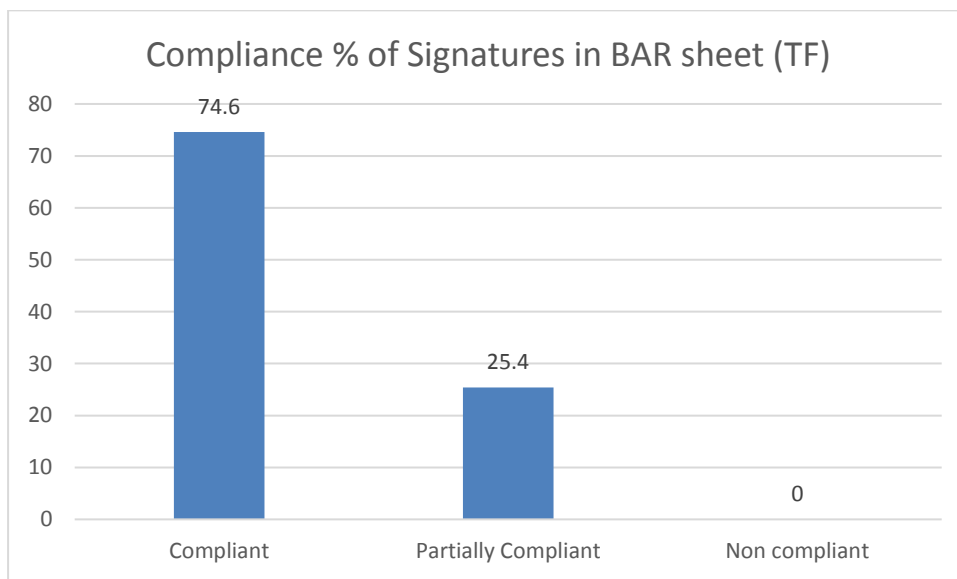
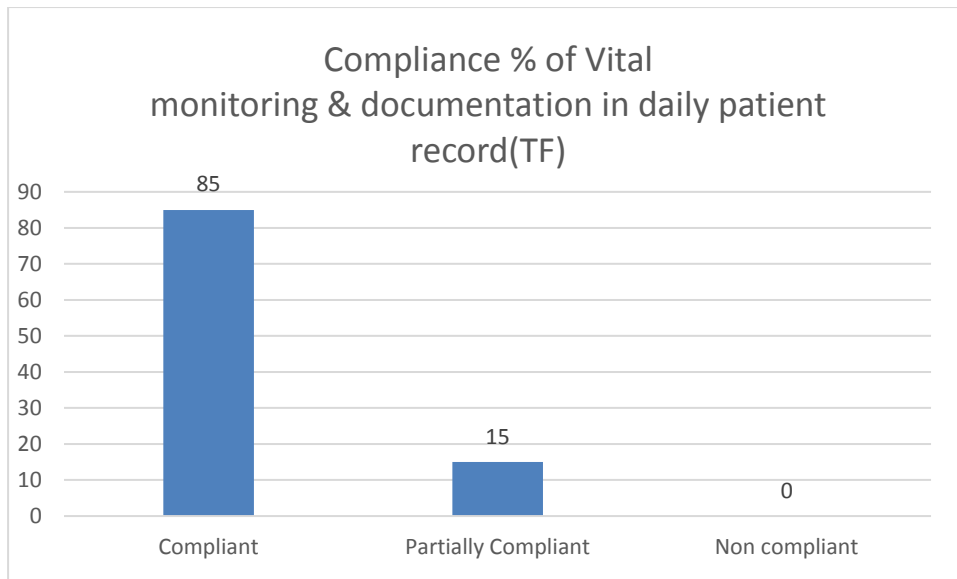


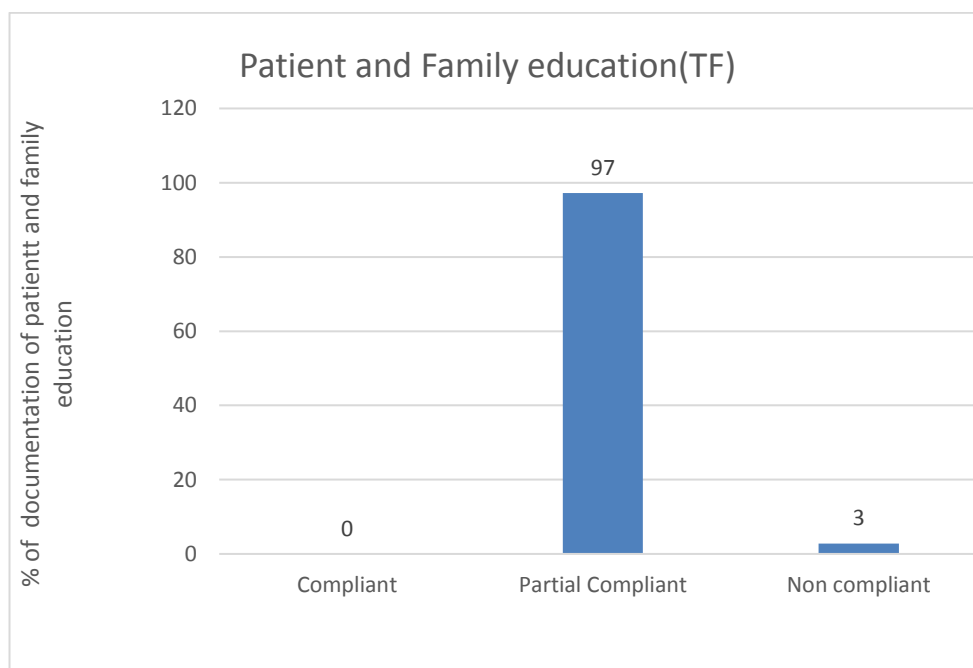
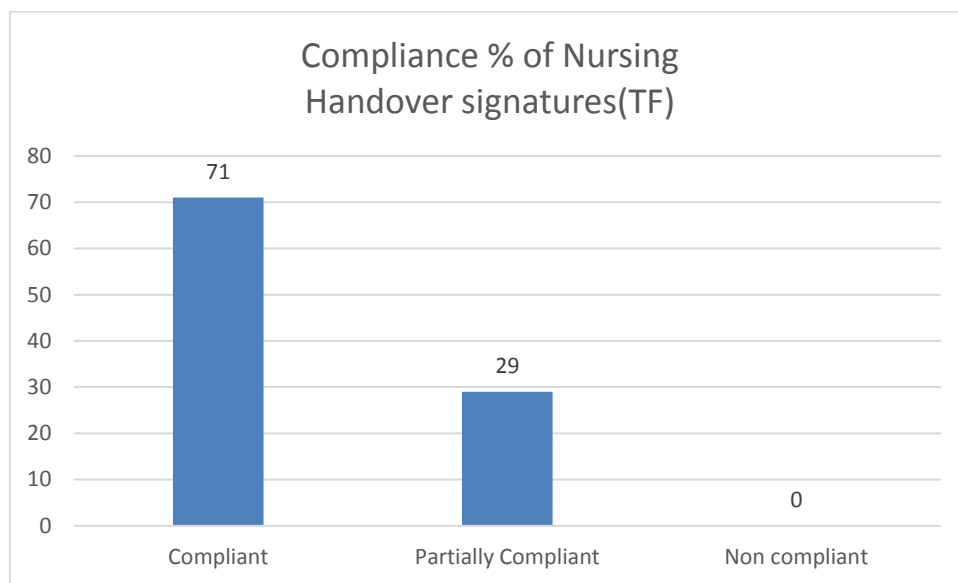


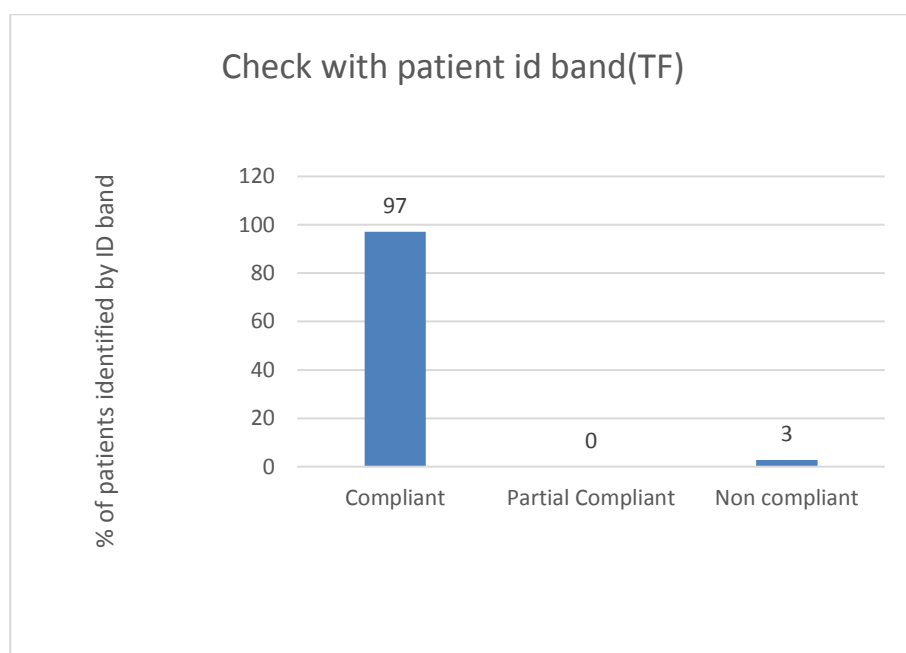
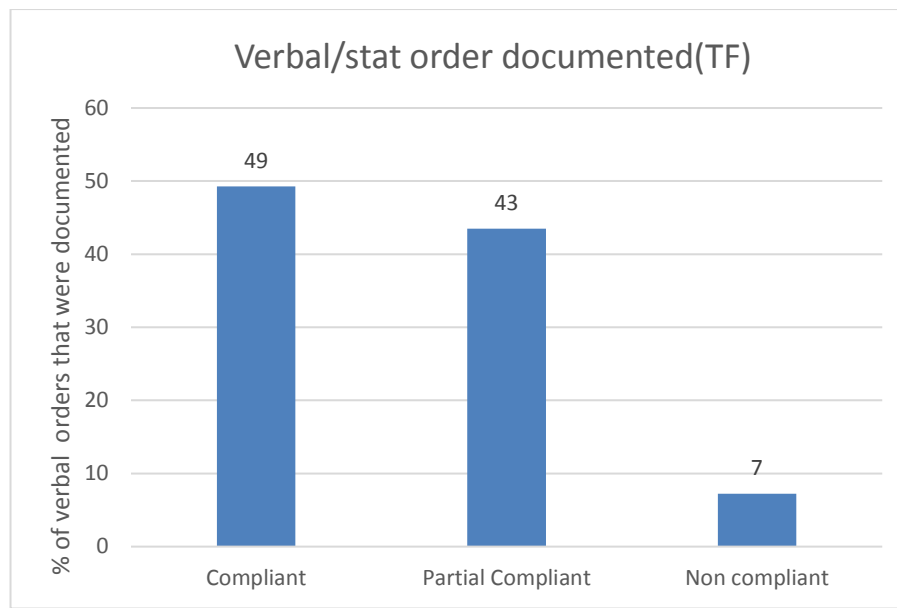


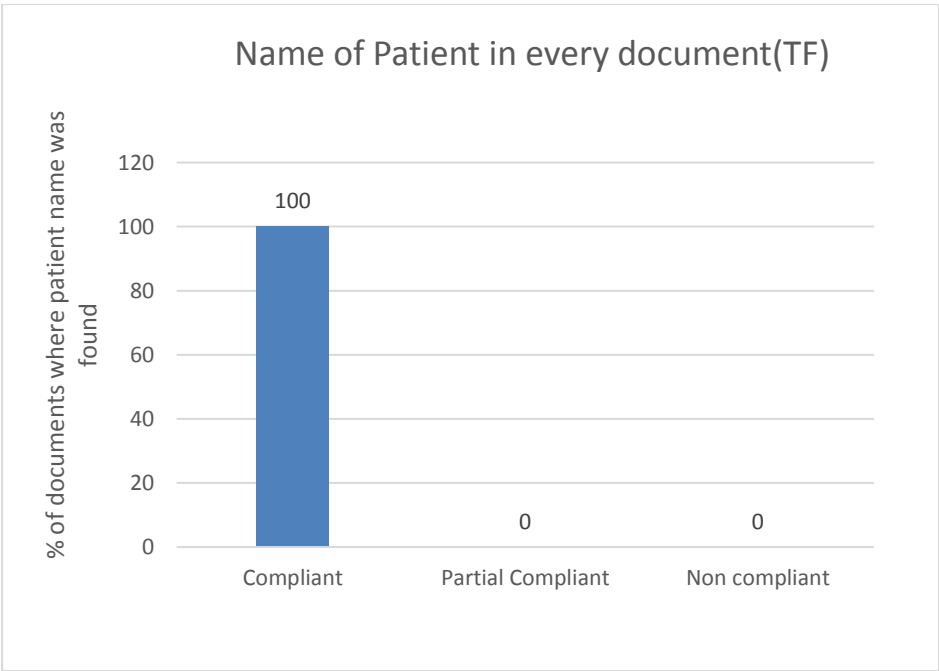
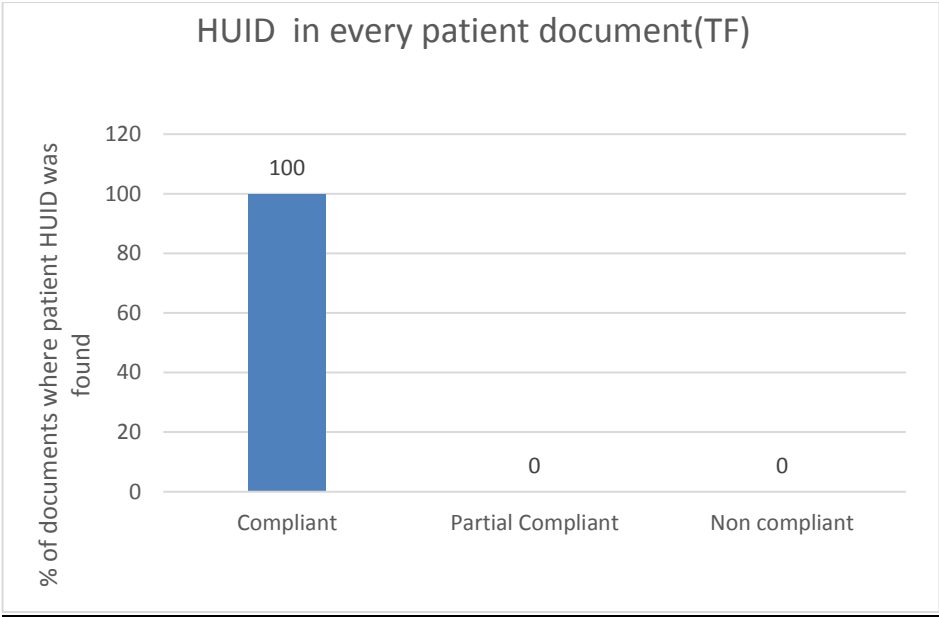
- **Third floor**











International Wing

