

Summer Training at



(9th April 2012- 1st June 2012)

Time Motion Study on Nurses

By

Simrandeep Kaur Brar

**Under the guidance of
Dr. Harish Sihare**

**Post Graduate Diploma in Hospital and Health Management
2011-2013**



**Institute of Health Management Research,
Jaipur
2012**

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Certificate

This is to certify that Miss Simrandeep Kaur Brar from Institute of Health Management Research, Jaipur has undergone Summer Training in Fortis Flt.Lt.Rajan Dhall ,VasantKunj Hospital, New Delhi from 9th April, 2012 to 2nd June, 2012.

The candidate herself carried out the project. Her approach to the study has been sincere, scientific and analytical. This summer training is partial fulfillment of the course requirement is recommended for the award of post graduate diploma in health and hospital management.

I wish her success in all her future endeavors.

Dr. P. R. Sodani
Dean (Academic and Students Affairs)
IHMR, Jaipur

July, 2012

Dr. Harish Sihare
Assistant Professor
IHMR, Jaipur

1st June, 2012

To Whomsoever It May Concern

This is to certify that Ms. Simrandeep Kaur Brar has successfully completed her Internship in the Nursing Department in our hospital from 2nd April 2012 to 1st June 2012.

She has done a project titled Time Motion Study on Nurses.

We wish her all the best in his future endeavors.

For Fortis Flt. Lt. Rajan Dhall Hospital



Renu Bhatia
Head-HR

ACKNOWLEDGEMENT

I take immense pleasure in completing this project and submitting the summer report. The 8 weeks with Fortis Vasant Kunj Flt. Lt. Rajan Dhall Hospital, New Delhi has been full of learning and sense of contribution towards the organization. I would like to thanks Fortis to giving me an opportunity of learning and contributing this project.

I also wish to express my sincere thanks to Chief Executive Officer and Ms. Renu Bhatia (Zonal head-HR) for granting me the privilege to be a part of their hospital and learn from my experience there.

I thank my mentor Mrs. Manju devi tyagi (Chief of Nursing) for being a sincere advisor and support in my project, being a source of encouragement. My heartfelt gratitude to all members and staff of the nursing Department for their understanding and assistance in completing my project.

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I extend my heartfelt gratitude to Mr. Harish Sihare for helping me to complete my project report and for being a constant help throughout the course of writing report.

Lastly , I wish to thanks each and every person who has been a helping hand in my endeavor, in one way or the other and also to my family for always being a much needed inspiration for me.

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ACCRONYMS/ ABBREVIATIONS

ABC	Always Better Control
A/D	Admission/Discharge
ALOS	Average Length of Stay
ACLS	Advanced Cardiac Life Support
ABG	Air blood gas
BMW	Bio- Medical Waste
CPR	Cardio- Pulmonary Resuscitation
CSSD	Central Sterile Supply Department
FOS	Fortis Operating System
F & B	Food & Beverage
GDA	General Duty Attendant
HDU	High Dependency Unit
HIS	Hospital Information System
HRD	Human Resource Development
ICU	Intensive Care Unit
MLC	Medico Legal Cases
MRD	Medical Record Department
NABH	National Accreditation Board for Hospital and Healthcare Providers
NABL	National Accreditation Board for Testing and Calibration Laboratories
IPD	In-patient Department
OPD	Out-patient Department
OT	Operation Theatre
PPE	Personal Protective Equipment
TAT	Turn-around Time
TPA	Third Party Administrator

SOP	Standard Operating Procedure
PHC	Preventive health checkup
MICU	Medical Intensive Care Unit
CCU	Cardiac Care Unit
SICU	Surgical Intensive Care Unit
NICU	Neonatal Intensive Care Unit
CSSD	Central Sterile Supply Department
CPR	Cardio pulmonary resuscitation
ECG	Electro Cardiograph
MRI	Magnetic Resonance Imaging
ENT	Ear Nose Throat
ICD	International Classification of Diseases
HEPA	High Efficiency Particulate Air
SCD	Supply Chain Department
ACLS	Adverse Cardiac Life Support
BLS	Basic Life Support
MIS	Management Information System
CCTV	Close Circuit Television

INTRODUCTION

Summer placement is designed to acquaint students with the hospital, their organogram, standard protocols and functioning of the hospital. It is basically designed to study process, input, output and outcome of the hospital.

It has been quite a learning experience for me and helped me understanding the Hospital industry from a very close view. The process of learning by visiting various departments in the hospital and interacting with the staff has made me clear about the functioning and inter-coordination between the departments of the hospital.

OBJECTIVES:-

- 1) To study different departments.
- 2) To study infrastructure and facilities.
- 3) To study the layout of different departments in hospital.
- 4) To study organogram of the hospital.
- 5) To study the manpower of various departments.
- 6) To study the process flow of the departments.
- 7) To study hospital information system and other record keeping procedures.
- 8) To enumerate managerial systems in various departments of hospital.

HOSPITAL PROFILE



THE VISION AND MISSION

To create a world class integrated health care delivery system in India entailing the finest medical skills combined with compassionate medical care.

Late Dr. Parvinder Singh, founder chairman, Fortis health care ltd.

VIRTUOUS VALUES:-

- **Vision:** Imbibe and share the vision
- **Integrity :** Lead through honesty and integrity.
- **Respect :** Earn respect.
- **Trust :** gain patient trust.
- **Understanding :** commit to compassion, care and understanding.
- **Own :** own quality excellence.
- **Uphold :** uphold innovation and continuous improvement.
- **Share :** develop and share success.

KNOW OUR LOGO: A HEALING PASSION

The Fortis healthcare logo defines our commitment to patient care. The logo reflects our endeavor to achieve excellence in healthcare delivery system by bringing together the best of technology. Medical expertise and patient care. Our logo implies the human values that govern every facet of our organization. The two hands that fuse seamlessly with a human form, express our reassuring approach to healthcare. A constant reminder to all that patient-centric care is fundamental to our ethos. Green is a color of healing and is symbolic of our steadfast focus : To ensure the health and well- being of those we minister to. And red, expressive of the dynamic zeal with which we strive to make it a reality. The Fortis Healthcare logo is the indelible assurance tat our expertise will always be tempered with humanity.

CODE OF CONDUCT:

This code is stated under the stewardship of the Board of Directors and Senior Management of the Company and reflects our affirmation to the way we operate as an organization. It applies to all direct and indirect employees and associates of the company (including Board of Directors), in all situations where the individual is seen as representing or being associated with the company. The term of the Code are deemed to form a part of

every contract involving the organization whether explicitly stated there under or not.

SERVICES PROVIDED:-

1. Health Care:-

Fortis Healthcare is engaged in providing the latest in internationally recognized medical care to patients with a variety of ailments and medical conditions. Our network consists of Super Specialty Hospital Hubs that concentrate on one or more specialties. These hospitals are interconnected to a larger network of multi- specialty hospitals that ensures patient access to expert care for any specialty. This unique network architecture provides expert care to our patients and a level of confidence in receiving the latest medicine has to offer.

2. Telemedicine:-

Fortis Healthcare has built a Tele-medicine network, which connects each of its facilities, so expert care is never out of reach. In addition, Fortis Healthcare facilities are also working with both private and public partners in the Indian Healthcare industry to provide Super Specialty and quality healthcare services. Fortis Healthcare provides services covering ICU

management, ER management, OPD management, Radiology Reporting, Pathology Reporting as well as Training and Education Opportunities. Utilizing our strong HIS backbone and PACS technology we are able to seamlessly transmit patient information in a secure and confidential environment. The use of Tele- medicine has provided a much needed boost to the Indian Healthcare sector. It has also allowed our network to expand its presence by extending quality healthcare treatment to the remote areas of Northern India as well as overseas.

3. RESEARCH:-

At Fortis Healthcare, we believe in continuous learning, innovation and improvement. We encourage medical practitioners and healthcare experts for medical research and studies. For years, Fortis Healthcare has been involved in several healthcare and medicinal study projects and offers societal rewards and benefits to researchers.

4. Corporate Services:-

Healthy employees contribute to a healthy business. The healthcare delivery services in our top hospitals are specially designed to suit employee needs. All patient records are accessible at all our hospitals across India so that employees can access healthcare services at the centre most convenient

to them, choosing from a wide network of our group hospitals.

FORTIS Flt. Lt. RAJAN DHALL HOSPITAL, VASANT KUNJ

Fortis Healthcare was established in 1996 by promoters of Ranbaxy Laboratories. Fortis hospital employs cutting edge technology to provide medical care of internationally accepted standards. The hospital currently has 6 operation theatres and 107 operational inpatient beds, with capacity for up to 200 beds.

It brings a wealth of medical expertise with the finest talents amongst doctors, nurses, technicians and management professionals in an environment that enables them to deliver the highest quality of healthcare through state-of-the-art facilities that aims to leave no stone unturned in perfecting over enhancing patient centric care. Enhanced by the warmth & care of professionally trained nurses and housekeeping staff, Fortis Hospital at Vasant Kunj recreates the comfortable ambience of home within its four walls.

Awards and recognitions:-

NABH Recognized

Location:-

Located at South Delhi's biggest residential complex- Vasant Kunj, Fortis Flt. Lt. Rajan Dhall Hospital, spread over an area of 1,50,000 sq. ft.



MULTI-SPECIALITY:-

- Anesthesiology
- Bariatric Surgery
- Clinical nutrition & dietetics
- Clinical Psychology
- Cosmetic & Plastic Surgery
- Critical care medicine
- Dentistry
- Dermatology & Cosmetology
- ENT
- Gastroenterology
- General Orthopedics and hand surgery
- General surgery and minimal access surgery
- Geriatric Medicine
- Gynecology including Gynaec oncology
- Internal Medicine
- Interventional Radiology
- Medical oncology
- Ophthalmology
- Pediatric surgery
- Physiotherapy including Domiciliary Physiotherapy
- Sports Medicine
- Surgical oncology

SPECIAL CLINIC:-

- Preventive Health Checks
- Wellness centre
- Sleep Lab
- De addiction clinics
- Stress management clinic
- Obesity clinic
- Pain clinic
- Speech Therapy

24 hrs SERVICES:-

- 24 hrs Emergency
- Blood Bank
- Laboratory
- Radiology
- Pharmacy
- Ambulance
- Dialysis

OWNERSHIP

A unit of Flt.Lt Rajan Dhall Charitable Trust.O&M contract by OBLT.A 100% subsidiary of Fortis healthcare limited.

SPECIALITIES

- Cardiology
- Cardiac surgery(adult &pediatric)
- Endocrine &Metabolic diseases
- Joint replacement
- Nephrology
- Neurology
- Neurosurgery
- Pediatrics(including pediatric cardiology,nephrology,pulmonologists endocrinology&urlogy
- Pulmonology &thoracic surgery
- Rheumatology
- Urology including renal transplant

DEPARTMENT VISITED

OUTPATIENT DEPARTMENT

Objectives of department

1. Present correct information and inquiry handling.
2. Perform registration,OPD cash and credit billing within the target time.
3. Scheduling appointment for doctors.
4. Guide patients/attendants/visitors in facility.

5. To drive satisfaction and delightful experience.

Functions

- Function of OPD registration and billing are as follows:
- Registration has been done by the front office assistant and they generate one UHID number for the new patient.
- Billing has been done either for the consultation/investigation.
- They provide the information /enquiry to the patient and attendant.
- OPD daily collection has been deposit to the cashier by the front office assistant,after completion of the shift.
- They provide user ID and password.So, that they can collect laboratories report through internet.
- Maintenance of records.
- Telephonic query handling.
- Counseling regarding package or any details.
- Cash handling.
- To make the FOS.

IN PATIENT DEPARTMENT:-

Department Objectives:-

1. The prime objective of IPD is to “Service with a smile” the prime focus being Customer Delight and Attendant Satisfaction.
2. Being patient centric and develop patient’s loyalty by surpassing their expectations.

Functions of the Department:-

General information and enquiry

1. Registration- to register the non registered inpatients.
2. Admission- to admit the patient for further treatment.
3. Counseling- to give detailed information on the financial aspects and packages.
4. Room Booking- to facilitate timely room allocation.
5. Cash Handling- to receive cash and give receipts, refunds to the inpatients. This is done in billing department.
6. Handling discharge- follow up, receiving and handling the final bills for the inpatients. Also done in billing department.
7. Visitor/ Attendant Passes- handling out various passes throughout the day for inpatients.
8. Payable Report- follow up on the daily outstanding.
9. Reimbursements- preparation of the breakups of bills.

- 10.OP Billing- billing for OP in the Off OPD hours.
- 11.Telephonic Query handling
- 12.Maintenance of reports/ records
- 13.Announcements
- 14.Running Bills- Handed over to the patients for their daily outstanding.
- 15.Clearances- clearances issued for procedures and final discharge.
- 16.Cross functional team coordination.

Staffing of In-Patient Department:-

Nursing Ratio ICU's	1:1	24 hrs
Nursing Ratio Wards	1:5	24 hrs
Nursing Ratio Delux/Suits	1:2	24 hrs
One Discharge Coordinator	24 hrs (Each floor)	
Nursing Supervisor	Morning hours one for each Floor & one for Evening & Night	
3-5 Housekeeping Boys -	Morning/Evening (Night One only each floor)	
4-5 GDA (Male & Female) -	Morning/Evening (Night	

	One only each floor)
One Housekeeping Supervisor-	Morning/Evening (one for 2 floor)
One GDA Supervisor -	Morning/ Evening (one For 2 floor)
Night Manager (Admin.) -	For Night
In House Medical Officer -	24 hrs
Anesthetist on call -	24 hrs

EMERGENCY:-

Hospital has provision was emergent and critical patients in its facility with a separate entrance near the main gate for the accident and emergency section. This department is very spacious and is divided into separate zones including the triage area, bed areas, doctors area, nursing station, janitor's area and the storage area. The facility is well equipped with all the world class life support and emergency equipment to ensure fast stabilization and smooth recovery of the patient. It is supported by a 24 hour ambulance facility which is partly outsourced by the hospital. The procedure for responding to the emergency class is prompt and fast to save as many patients as they can, serving the

community. Positioning of the department is such that it has easy accessibility from the road and to all the inter-related departments in the hospital. The staff is very well trained for emergency life support and is responsible in delivering their services. Department also has a proper waiting area for the patient's attendants for their comfort and counseling is provided for the patients as well as attendants to get them out of shock. It is also easily accessible to the registration and billing area making is convenient for the person accompanying the emergency patient.

OPERATION THEATRE:-

The aim of the department of anesthesiology and OT facility is to provide the highest quality of care for the patients undergoing various types of surgeries. The OT facility is positioned as a tertiary care centre of excellence providing complete services for various surgical specialties. The department is staffed with highly experienced and trained anesthesiologist, surgeons, technicians, nursing and other support staff. The services have state -of-the-art technology and equipments with highest level of environment and quality controls. Protocols based approach for quality pre-operative, intra-operative and postoperative and follow up care of the patients. The department is equipped to carry out various surgeries for stable/critical patients in elective as well as in emergency situations. The facility has 6 operation

theatres located on the 3rd floor providing complete services to the various surgical specialties. The OT complex has a pre and a post operative monitoring room for continuous monitoring of patients who are shifted after the end of surgical procedure. The patients who require intensive care are shifted to Surgical ICU located on the 3rd floor.

INTENSIVE CARE UNIT:-

The hospital has 5 ICU's- CCU, CSICU, MICU, AICU and Ortho ICU.

All these ICU's are supported by a dedication team of experienced Intensivist and Nurses round the clock along with the most advanced monitoring systems and therapeutic equipments.

Isolation rooms are present for highly infectious patients. Every ICU is equipped with Staff lounges and toilets, sleeping and personal care accommodation for staff on 24 hour on call work, housekeeping room and storage area. Every ICU conforms to the spatial requirement in terms of Patient's space, Patient's service, Nursing station, Medication and nourishing areas and Isolation rooms. The performance indicators are appropriateness of admission, medication error, mortality and morbidity, timeliness of discharge (ALOS), Nosocomial infections, CPR efficiency.

NURSING DEPARTMENT:-

This is the area which accounts for maximum number of employs in the hospital. Sufficient numbers of nurses are appointed by the hospital administration to keep the nurse-patient ratio low leading to high patient satisfaction. The appointed staff is well qualified and experienced to do their duties efficiently. The appointed nurse are trained by the hospital according to the type of job they are required to do based on the area where they are deployed in the hospital. Staff includes nursing superintendent , deputy nursing superintendent, floor nursing in-charge, head nurse, general nurses.

IMAGING AND RADIOLOGY DEPARTMENT:-

This is one of the major diagnostic services of the hospital and is located on the ground floor. Its positioning is such that it is away from the general traffic and being in the basement the harmful X-rays radiated are not scattered ensuring the safety of the visitors and the other members who are not availing the facility. It is accessible to both the IPD and OPD patients easily. It provides the following diagnostic services- Radiographs, CT scan, MRI, Digital X-rays, Ultra-sonography, mammography.

The equipment is of latest technology and the staff is well trained to handle all the machines efficiently. Staff includes department in charge, Radiologists, technicians, nurses and GDA's. services are provided to the patients who are advised diagnostic services by the hospital's consultants, by any referring physician or the patient vesting this area are least exposed to the harmful radiations. The radiation dose of the staff is monitored at frequent intervals to ensure their safety.

LABORATORY:-

It is outsourced service of the hospital, being outsourced to SRL Ranbaxy Laboratories. Objective of the department is to give correct and accurate results of all the tests in time to the patients to ensure fast patient turn-over and complete utilization of the facility. Department is located at the top floor with a separate sample collection unit in the basement for the OPD patients. Samples for IPD patients are collected by the nurses from their respected wards and sent to the laboratory through GDA's. after being processed and test completed in the laboratory the reports are sent to the consultants and to the patients. Reports are also made available online to the patients and it reaches the doctors through hospital information system. The test conducted in the hospital premises include routine test- Biochemistry, Microbiology and Pathology. The samples of the tests not conducted in the hospital are sent to the collaborating

laboratories with proper safety and security. The tests conducted within the premises are carried in the automated machines. Staff is well trained to use these machines. Regular calibration of machines and quality checks of test result are done to maintain a standard level of services. Staff include a supervisor, 4 technician and GDA's. It's the policy of the hospital to provide the test result on time to all patients and accurate

BLOOD BANK

Objective of the department is to provide and preserve the blood and its components in sufficient quantity and in good condition. Blood bank of the hospitak is NABH accredited. It is located in the basement where it is easily accessible to both IPD and Emergency. The department is divided unto separate areas which include-Donation room, blood storage room, screening room, refreshment room, sanitary areas and component separation room. Donation of blood is accepted by the voluntary and by the replacement donors. Proper health examinations under all the required criteria are done before any blood donation. The donated blood is then screened for diseases like – syphilis, malaria, hepatitis B & C, HIV is done before sending it for transfusion to the patient. After donation the donor is given some refreshment and asked to rest for some time to avoid shock. Some of the donated blood is stored as it is after screening and for some its components are separated from the plasma and then stored. Blood is stored under refrigeration to preserve it and prevent from spoiling. Special pre-designed bags

are available to be used for donation in which the sample for screening tests automatically separated from rest of the blood and the preservatives are already present within in the bag before donation. Staff appointed is well trained and experienced .

Front office

It is located at the basement for OPD and at the ground floor for IPD and emergency patients. Staff includes front office manager and front office assistant. It is the first contact point of the patients with the hospital.

Its function includes the following:

- 1.Registration has done by the Front Office assistant and they generate one UHID number for the new patient.
- 2.Billing has been done either for the consultation /investigations
- 3.They provide information /inquiry to the patient and the attendant.
- 4.OPD daily collection is deposited to the cashier by the front office assistant after the completion of the shift.
- 5.They provide user ID and password. So that they can collect their laboratories report from the internet.

6.Maintenance of the records.

7.Telephonic query handling

CENTARL STERILE SUPPLY DEPARTMENT:-

The objective of the department is to provide sterilize instruments and linen items to the OT, wards, all ICU and OPD. The department has one in charge, technicians and GDA's. The process of sterilization consists of sterilization through heat (autoclaving) and by chemicals (ETO). This includes Receipt and counting of contaminated instruments, medical devices and pack sets before autoclave sterilization and receipt, counting and sealing of the catheter, balloon, tubing and ventilator circuit before ETO sterilization. Pack is labeled with autoclave or ETO lot no/date of sterilization/ date of expiry. The packed sets are then loaded into the machine and the machine is then made to run s per the programme selected with desired temperature and time duration. The sterile sets are checked for tape color change. The sterilized sets are stored in a sterile zone till dispatch and are issued to the concerned department when required.

Biological indicator test, bowie-dick test and othe tests are conducted daily with the 1st load. The preference indicators are autoclave color tape, ETO chemical indicator, ETO PCD indicator, Bowie- Dick test compliance, biological indicators,

label with chemical indicator on pack, segregation of BMW and occupational injury.

LINEN AND LAUNDRY:-

Linen and laundry department is located in the basement and is easily accessible from the lifts for easy supply of linen to all the departments. Although it is located at the basement but its positioning is such that it is away from the OPD area and is also cut-off from the major route of traffic flow. The objective of the department is to supply clean linen to the user departments at right time and in sufficient quantity. Proper quality is maintained while washing the linen to ensure safety to the staff and the patients. Staffing includes supervisor, technicians and GDA's. It is divided into separate areas for doing all procedures like sorting, sluicing, washing, drying etc. and is also very well equipped. Inventory is maintained in right quantity to ensure availability of clean linen in required amount at all times in the hospital and also some stock is kept for emergency department.

Food and beverage department

Hospital has outsourced this department to the food and beverage industry professionals' i.e. SODEXO. There are separate canteens for the staff and patients and for their

attendants. Staff canteen is located at the topmost floor and for patients and their attendants it was at the basement and at the first floor. Food for the IPD patients is supplied from the same kitchen as that of doctors, according to the food prescribed by the dietician or the controlling physician. Regular health checkups of the kitchen staff is done to prevent the spread of infection through the food. All the IPD patients are provided food in their rooms by the GDA staff in proper covered and hygienic containers. Method of storage followed is FIFO to reduce wastage and spoiling of perishable items.

HOUSEKEEPING:-

Objective of the department is to ensure clean and hygienic environment in all areas at all times in hospital. The staff is well trained to cleaning different areas in the hospital like OT, ICU, wards etc.

It is manned by a manager, floor supervisors and houseboys. Major functions of the department include cleaning of the patient rooms and circulation spaces, ensuring proper cleaning of the sanitary facilities provided for patients and staff, pest control, cleaning of any spillage, handling the wastes and horticulture. Staff is trained for safe disposal and handling of bio medical wastes to prevent the spread of infection. Separate

closets for keeping the equipment are provided at all levels in the hospital.

PHARMACY:-

A separate pharmacy is present at the entrance of the building for all patients visiting the hospital and also for non- patients. The billing of the pharmacy is done at the OPD billing counter for all the hospital prescriptions. Drugs are stored according to the drug formulary and distributed according to the first due expiry. They are stored in proper conditions to preserve their quality and effectiveness. Recording is done by the purchase department which is a part of materials management department. Pharmacy is the last stop for the patient visiting the facility so it is positioned at the right place for access to all the patients while going out of the hospital. Pharmacy is open round the clock and the staff is on shift duty to keep it functioning all through the day and night.

IT department

Information technology is one of the major source of contacting and transferring the information, it is also incorporated in the hospital set up to provide convenient transfer of information and record keeping. This department is located at the second floor

manned by one in charge and few technicians .All the department in the hospital is divided in the modules by the hospital information system. There is a limited access to the information added in HIS by the different departments. Its control the mails sent outside the hospital and received in the hospital to ensure the safety and security of the patient and hospital information.

SECURITY:-

Security is a major issue in the hospital as it is a very vulnerable area. Security department in this hospital is very well maintained and well controlled department. It is manned by a chief security officer, security supervisors for all floors and security guards. The floor supervisors keep patrolling the floors after short intervals. Security guards are deployed at all hospital entrance and exit gates. All people entering the hospital premises have to undergo through security checks before they are provided access. Hospital is under the CCTV supervision all round the clock. Provision are also made for fire safety. Duplicate keys of all the departments are with the chief security officer. The OT and ICU are under tight security of well equipped guards.

PARKING

Hospital outsourced this facility for the manpower but it provides space in the parking within its premises and near- by areas. There are separate parking for the patient and the staff. Patient vehicle is parked by the parking staff after patient is unloaded from the vehicle at the OPD gate. Patients have to pay for the vehicles in the hospital premises hospital is not responsible for any loss or theft of property kept in the vehicle.

MEDICAL RECORD DEPARTMENT:-

This is one of the departments of the hospital which has to be under tight security for the safety of patient records and for the benefit of the hospital. Records for all the patients coming to the hospital are maintained both in hard as well as soft copies. A separate file is been allotted to each patient. All the patient records are the property of the hospital but a copy of the same can be given to the patient on request in legal and insurance clearance cases. Hospital has to preserve the records according to the stipulated guidelines and according to the policy of the hospital. Records for MLC cases death are stored permanently or till the time the case is cleared but the IPD records are preserved for 10 years. Records of the OPD department are preserved only for 3 years. Records after completion of their preservation time are destroyed by shredding or burning.

Departments ensures the completion of the records when it receives it from the various departments and if any shortage or discrepancy is found the concerned department is contacted and the file is sent back for completion or correction. Hospital follows ICD-10 coding for categorization of the diseases. It gives reports to the government health agencies at regular intervals about the pattern of the diseases and the prevalent diseases in a particular area or community. It also gives records of the deaths and births to the government. Records also are an important source of calculating the efficiency and utilization of services and gives base for scope of future improvement by calculating various efficiency parameters form the data.

ENGINEERING SERVICES

These include maintaining and regular monitoring for proper functioning of all the equipment and machines installed in the hospital. It is also responsible for repair when there is breakdown in any machine of the hospital. This department is located topmost floor away from the main traffic. The equipment under their control is HVAC system, all diagnostic and therapeutic equipment, generators, boilers, equipment, used in utility services department etc. Staff includes department in-charge, biomedical engineers, technicians etc. they are also responsible for safe and adequate supply of water and electricity to the hospital. AHU are located at all floors in the hospital based

on the requirement of different departments. Calibration of the equipment is also one of the duties of the engineers.

ADMINISTRATION:-

This department is responsible for the smooth functioning of the hospital and for good inter-departmental coordination. It is located in the basement and is cut-off from the main traffic flow to ensure its proper functioning. It takes care of all the services offered to the patient in the hospital and is responsible for improving the hospital. The department under it are:-

1. Human resource
2. Finance
3. Marketing

FOS :-

Fortis operating system is a department which keeps all other departments on their toes as it keeps regular check on the functioning and the efficiency of the functions provided by all departments. There are certain set of criteria listed down by FOS for various departments. These criteria are measured on weekly basis to evaluate the functional efficiencies of various

departments and weekly results are compared with the earlier performance and set the benchmark. This helps in finding out the areas of improvement and helps in increasing the efficiency. Staff includes one head of the department and few assistants.

MATERIALS:-

Materials management department in a hospital is responsible for maintaining the inventory or stock of various items required by different departments and at different levels in the hospital. This department is broadly divided into 3 sub-departments:-

1. Purchasing Department
2. Receiving Department
3. Stores

Purchasing Department accounts for the purchase orders of all the required items in the hospital. They negotiate for the best buying price to get a best purchase order and take care that the items ordered are according to the specifications asked by the doctor. They forward the details of the purchase orders placed to the receiving department to receive according to the order placed.

Receiving Department is responsible for receiving the delivery of the purchased items. They keep a check that the received items are according to the order placed, checking is under certain criteria like number of items ordered, Quality of the supplied material, specifications of the received items etc. They

are in regular contact with the purchase department to keep a record of the purchase orders placed to be able to receive the supply according to the order placed.

Stores are responsible for proper storage of the inventory. They segregate the items and store them according to the different requirements of different items. They are also responsible for keeping a record of the inventory and issuing the item under indent. They report to the purchase department for stock-outs and for expired items.

All these departments are linked internally with each other and externally with all the other departments of the hospital through hospital information system (HIS). According to the policy of Fortis Hospitals, all the departments have to report to FOS- Fortis Operating System under certain parameters every week. This is done to assess the efficiency of departments functioning and to find the areas of improvement.

Materials management department gives a report to Fortis Operating System department under the following parameters:-

1. IP Pharmacy Sale
2. Wrong return indent
3. No. of local purchases
4. Percentage of stat indents collected within 15 minutes
5. Percentage of New admission indents delayed beyond 1 hour
6. Percentage of routine indents delayed beyond 3 hours

7. No. of Zero issues.

PATIENT WELFARE SERVICES:-

Preventive Health, also known as Preventative Health is best described as “Warding off Disease”. These actions gives your body the best chance of remaining free from diseases. This is a special service offered by the hospital to ensure that the population it is catering remains healthy. They include packages of full body health check-ups for the person to rule out any present or expected problem.

There are following packages, which are as follows:

- Preventive Health packages
- Pre-employment packages
- Corporate packages

TPA:-

Third Party Administrators (TPA) is an important link between Insurance companies policyholders & healthcare providers (Hospitals and nursing homes).

TPA's role is to provide administrative support to the Insurance companies for servicing their insurance policies.

Service offered by TPA for policyholder:

Cashless Hospitalization: Each policy holders is provide with a list of empanelled hospitals where in he/she can avail cashless hospitalization.

ID Card: TPA Provides ID cards to all their policy holder in order to validate their Identity at the time of admission.

Claims Management: On behalf of insurance companies TPA administers & settle claims for hospitals & policy holders.

24 Hours customers support services: TPA provides assistance through its 24 hrs call centre information regarding policy holder's data, provider network, claim status, benefits available with existing cardholder etc. is furnished on request.

TPA Request is of 2 types:-

- Planned TPA request
- Unplanned TPA request

PROCESS OF AVAILING INSURANCE:-

- Obtain pre- authorization form from Insurance Helpdesk 3-4 days prior to the admission for planned hospitalization.
- Pre- authorization form is to be filled in by treating doctor.
- Check about the pre- authorization approval at the Insurance helpdesk within next 24 hrs.
- Avail cashless treatment at the hospital after receipt of written authorization from TPA for the covered.

- Leave back all the original documents and signed claim form with the hospital at the time of discharge.
- Contact local TPA office in case of any query.
- Make payment to the hospital for the expenditure over and above the TPA approved limit and for the treatment not covered under the package.

Guidelines for Availing Cashless Facility:-

- Hospital will facilitate your request with the TPA & try to procure the approval but prime responsibility remains with the patient.
- Hospital cannot influence any decision taken by TPA. Please provide all the relevant details of your insurance policy within 24 hrs of admission so as to timely initiate approval process.
- If there is any discrepancy in the record for e.g. Name & Age we reserve the right not to extend the cashless facility.
- Cashless facility is the subject to prior approval received from TPA.
- In case of unplanned or emergency admission patient is requested to deposit appropriate security amount as per hospital policy.
- Security deposit made at the time of admission would be refunded after receiving final approval at the time of discharge.

- Partial/ initial approval from the TPA would not be honored for setting the bill. Final bill along with discharge summary would be sent to TPA at the time of discharge.
- Only final approval letter would be taken into consideration.
- Amount against all non payable items, change in line of treatment, all non medical consumables, add-on investigations or any specific clause mentioned in the approval letter needs to be settled in cash at the time of discharge.

BIOMEDICAL DEPARTMENT

The main objective of the department is to facilitate the usage of latest technologies in the diagnosis and care of patients. It is also responsible for proper usage and quality performance of these equipments and tools in the hospital. The departments maintains register of the hospital equipments and conduct daily rounds to ensure the equipments working smoothly, responsible for facilitation and identification of equipment requirements, planning technical comparison ,ordering installation and deployment of all other units and new projects, conduct regular preventing maintenance servicing for all equipment at regular intervals, facilitating equipment replacement and

condemnation , whenever required, conducting regular training programme for hospital staff, on usage of equipments. The staff consist of biomedical engineers and biomedical technicians.

PROJECT

INTRODUCTION

I undertook a time and motion study to provide an evidence-based understanding of how medical-surgical nurses spend their time and of the influence of unit architectural layout on nurses' use of time and distance traveled. Documenting the drivers of inefficiency in nursing practice will allow for targeted changes to the work environment to positively influence patient safety and quality of care.

The primary objectives of the study were to identify how nurses spend their time during their shift and to pinpoint environmental variables in the acute-care nursing workplace that can be altered to positively affect the efficiency of nursing care and, ultimately, patient safety.

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Time and motion study have to be used together in order to achieve rational and reasonable results. It is particularly important that effort to be applied in motion study to ensure equitable results when time study is used. In fact, much of the difficulty with time study is a result of applying it without a thorough study of the motion pattern of the job. Motion study can be considered the foundation for time study. The time study measures the time required to perform a given task in accordance with a specified method and is valid only so long as the method is continued. Once a new work method is developed, the time study must be changed to agree with the new method

OBJECTIVES

- To study and understand the workflow of the registered nurses at less busy and most busy wards.
- To analyse the direct care given to the patients by the nurses and to find out the wastage done by the nurses on duty hours.
- To find the area of concern which needs to be improved.

AGENDA

To find the direct care done by the nurses on patients in three duty shifts (morning, evening, night) and to search for other tasks where nurses spend the rest of the time and improve and bridge the gap where required

METHODOLOGY

Data Collection Tool

- Nurses time motion study sheet
- Dividing the nurses time motion study sheet into different categories for obtaining specific results.

Sample Size

- 20 nurses

Sampling technique

- Manually by observing nurses

DATA COLLECTION AND ANALYSIS

TIME MOTION STUDY SHEET

four major categories with 93 small categories were introduced to collect the data and to and to analyse the direct care and wastage

The categoris are:

CATEGORY
<u>Patient Room</u>
Bedside Procedure
Vital Signs
Wound/Skin Care
Incontinence
ADL
Administer Meds

Assessment
Documentation
Admission
Paperwork
Daily Assessments
Transcribing Orders
Writing Care Plan
Meds Paperwork
Teaching
Discharge Paperwork
Other Documentation
Admit/Discharge
Comm w/Care Team
Comm w/Patient
Patient Services
Emergency
Teaching
Care Processes
Admission
Discharge
Student/Resident
Family Services

Waiting Delay

Other

Nursing station

Chart Review

Report

Comm w/Care Team

Comm w/Family

Paging Caregiver

Calling Ancillary Dept.

White Board

Documentation

Admission Paperwork

Daily Assessments

Transcribing Orders

Writing Care Plan

Meds Paperwork

Teaching

Discharge Paperwork

Other Documentation

Teaching

Care Processes

Admission

SDischarge

Student/Resident

Bed Control

Com Data Entry

Copy/Fax Machine

Personal Time

Waiting Delay

Other

On the unit

Care Rounds Team Doc

Deliver Food Tray

Ice/Beverage

Meds Activity

Emergency

Care Conference

Deliver Supplies

Documentation

Admission Paperwork

Daily Assessments

Transcribing Orders

Writing Care Plan

Meds Paperwork

Teaching

Discharge Paperwork

Other Documentation

Teaching

Care Processes

Admission

Discharge

Student/Resident

Admin/Training

Personal Time

Look for Equipment

Look for Person

Look for Supplies

Look for Information

Waiting Delay

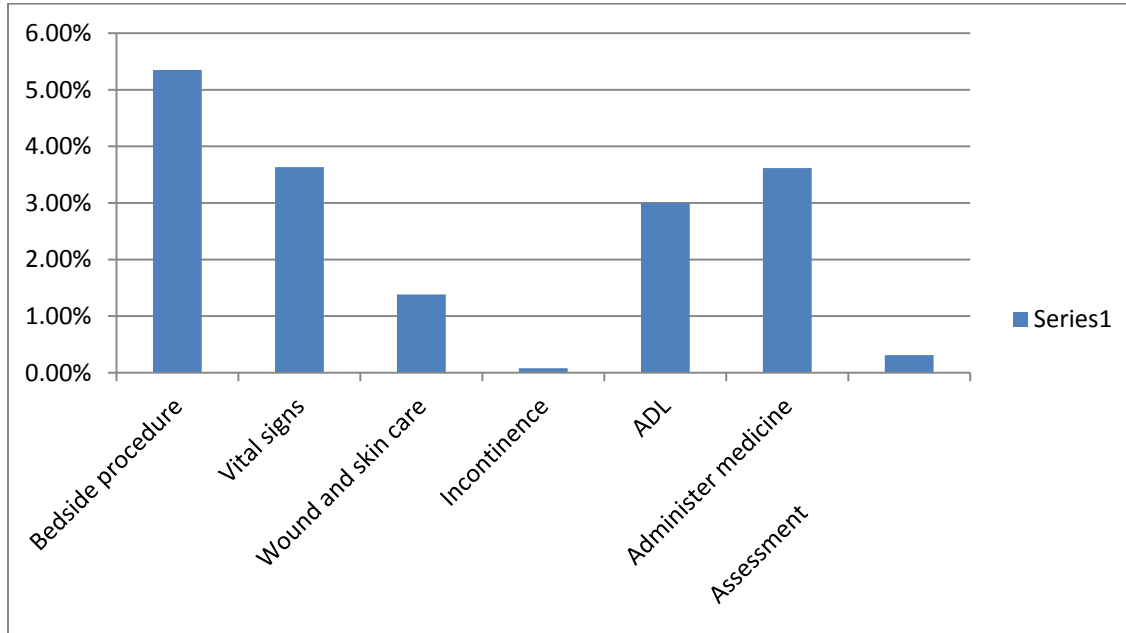
Other

Off unit

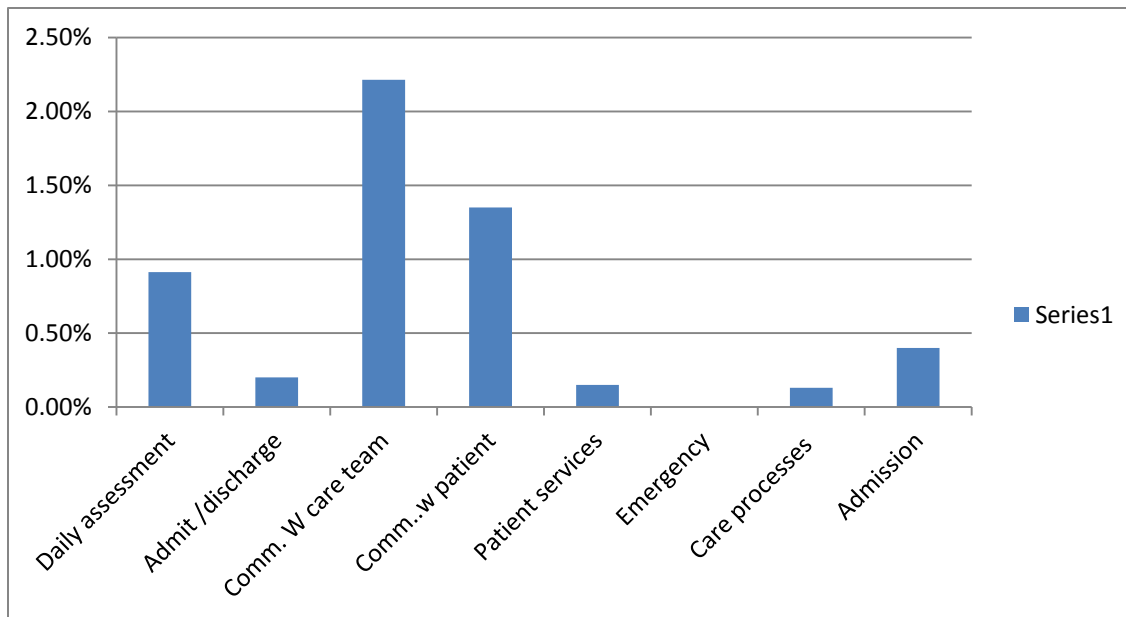
Escort Patient
Retrieve Equipment
Admin/Training
Monitor Patient
Retrieve Supplies
Replace articles
Documentation
Personal Time
Waiting Delay
Other

Bedside procedure	5.35%
Vital signs	3.634%
Wound and skin care	1.384%
Incontinence	0.080%
ADL	3%
Administer medicine	3.617%
Assessment	0.31%

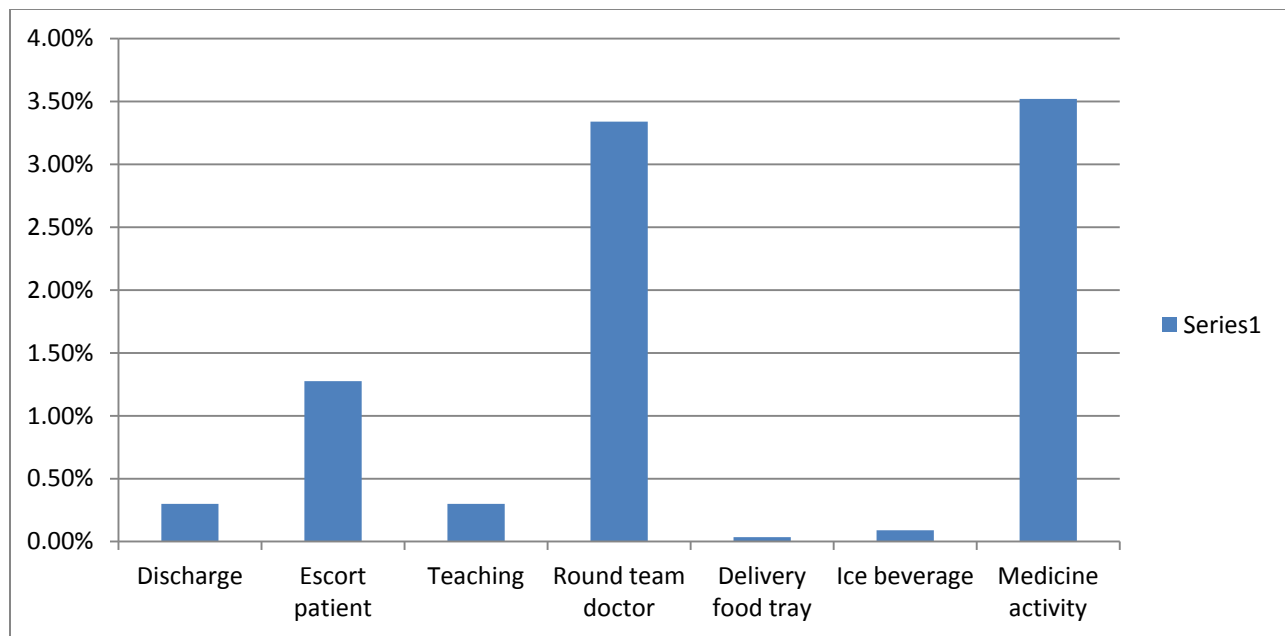
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Daily assessment	0.9125%
Admit /discharge	0.2%
Comm. W care team	2.214%
Comm..w patient	1.35%
Patient services	0.15%
Emergency	0%
Care processes	0.13%
Admission	0.40%

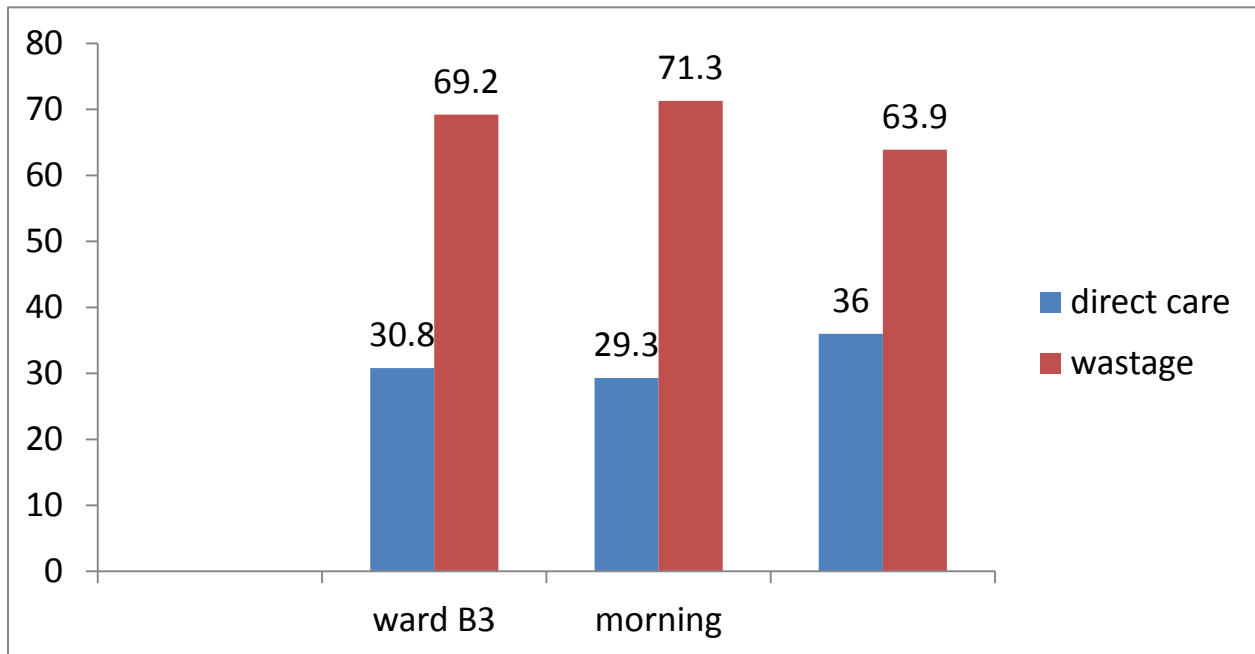


Discharge	0.3%
Escort patient	1.275%
Teaching	0.3%
Round team doctor	3.34%
Delivery food tray	0.035%
Ice beverage	0.09%
Medicine activity	3.52%



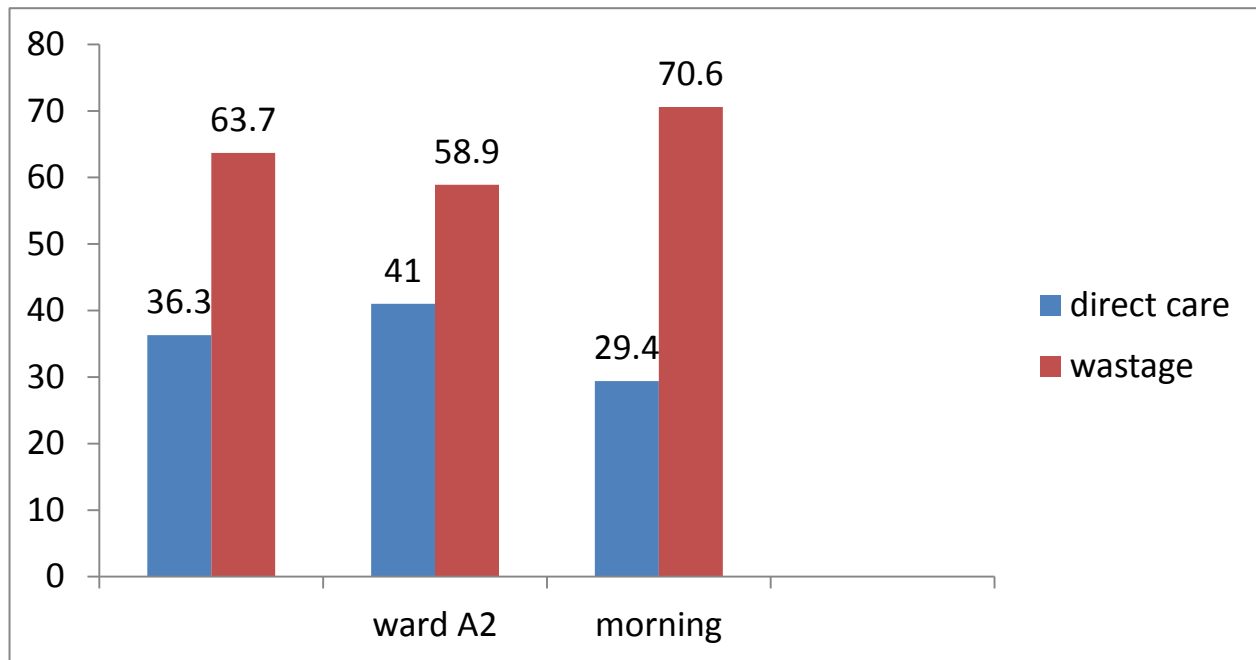
From the total direct care given by the nurses in 20 days and 3 shifts of duty the individual % of the various procedure related to the direct care is as above from which the highest percentile score is of bed side procedure i.e 3.50% and emergency scored the lowest i.e. 0%.

WHAT TO LOOK FOR AND WHERE?

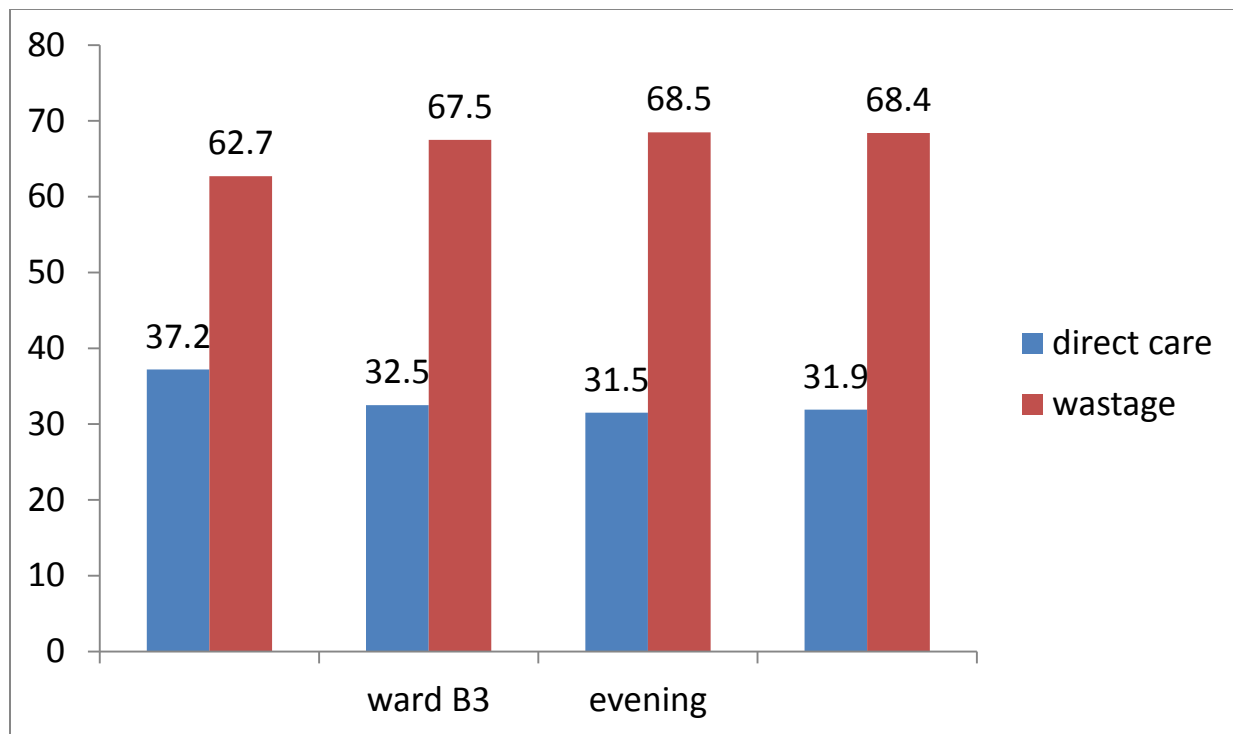


The total direct care and wastage% in ward B3 during morning hours (i.e. from 7am to 2pm) during time period of 8 hours are shown in the graph above.

The wastage is more and the direct care provided to patient is very less the ward is not much busy still the percentile difference is great.

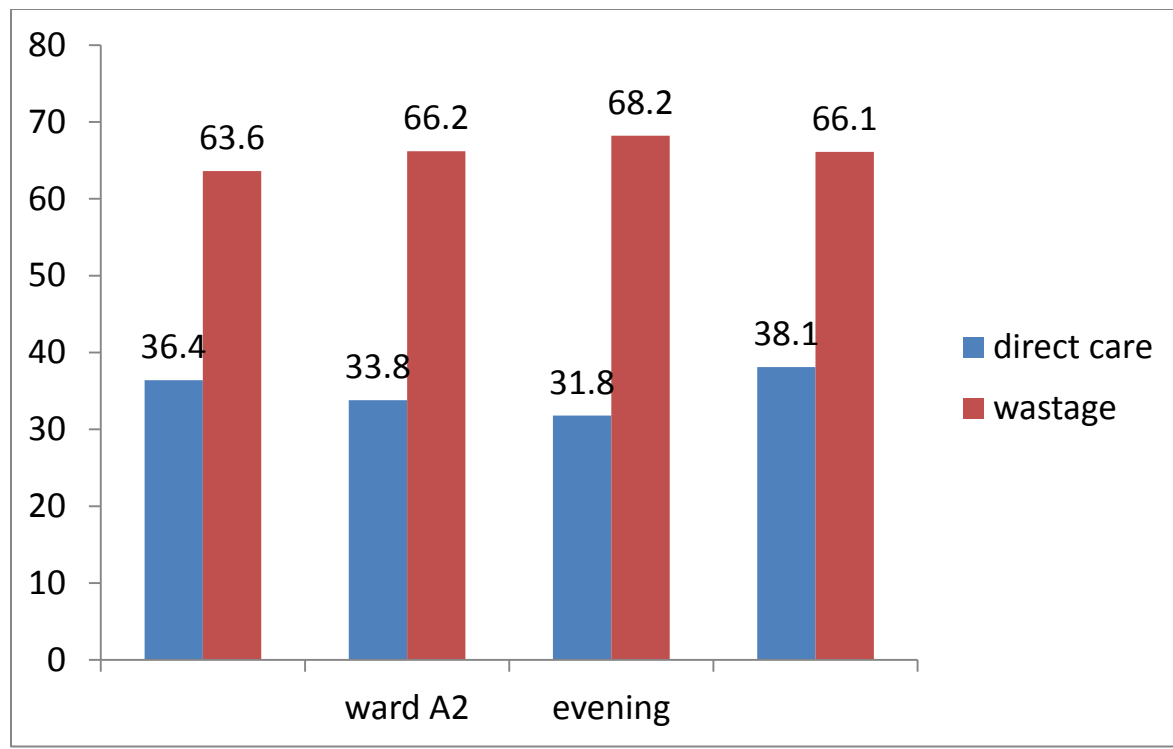


Here also same is observed as ward B3 the direct care % is low and wastage% is more.

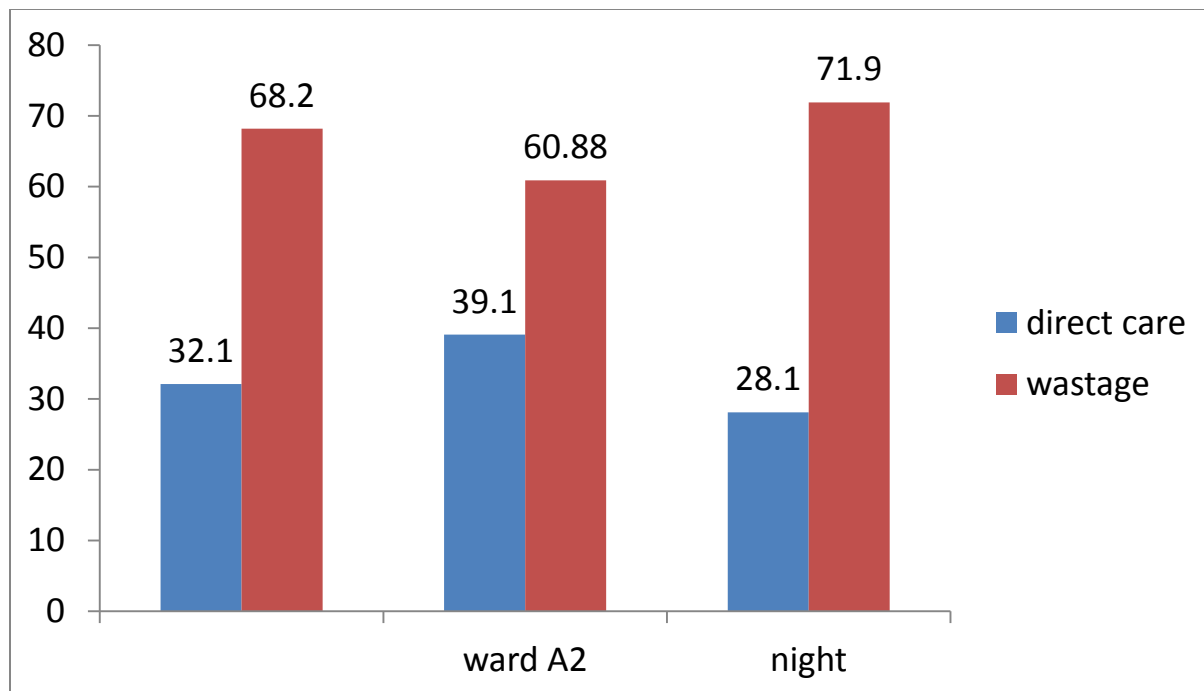


The total direct care and wastage% in ward B3 during evening hours(i.e. from 2pm to 8pm)during time period of 6 hours are shown in the graph above.

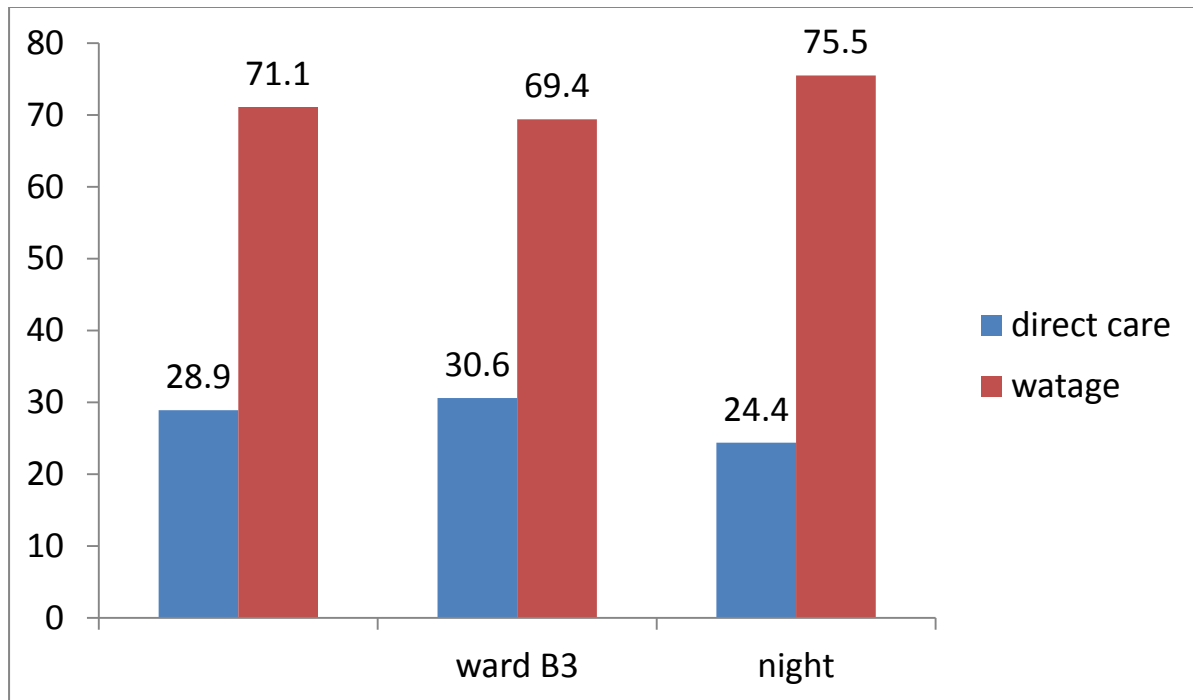
The wastage is more and the direct care provided to patient is very less the ward is not much busy still the percentile difference is great.



In ward A2 evening duty the % of direct care is exactly the same in 4 days.



The total direct care and wastage% in ward A2 during night hours(i.e. from 8pm to 7am)during time period of 12 hours are shown in the graph above.

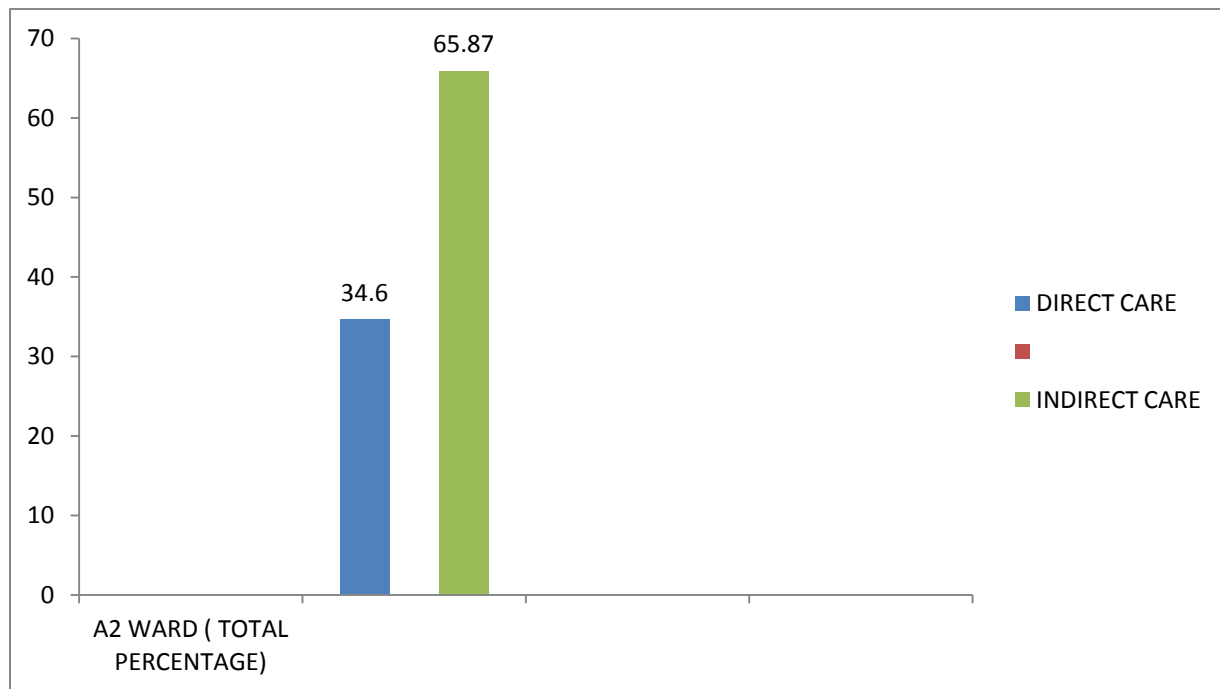


. The total direct care and wastage% in ward A2 during night hours(i.e from 8pm to 7am)during time period of 12 hours are shown in the graph above.

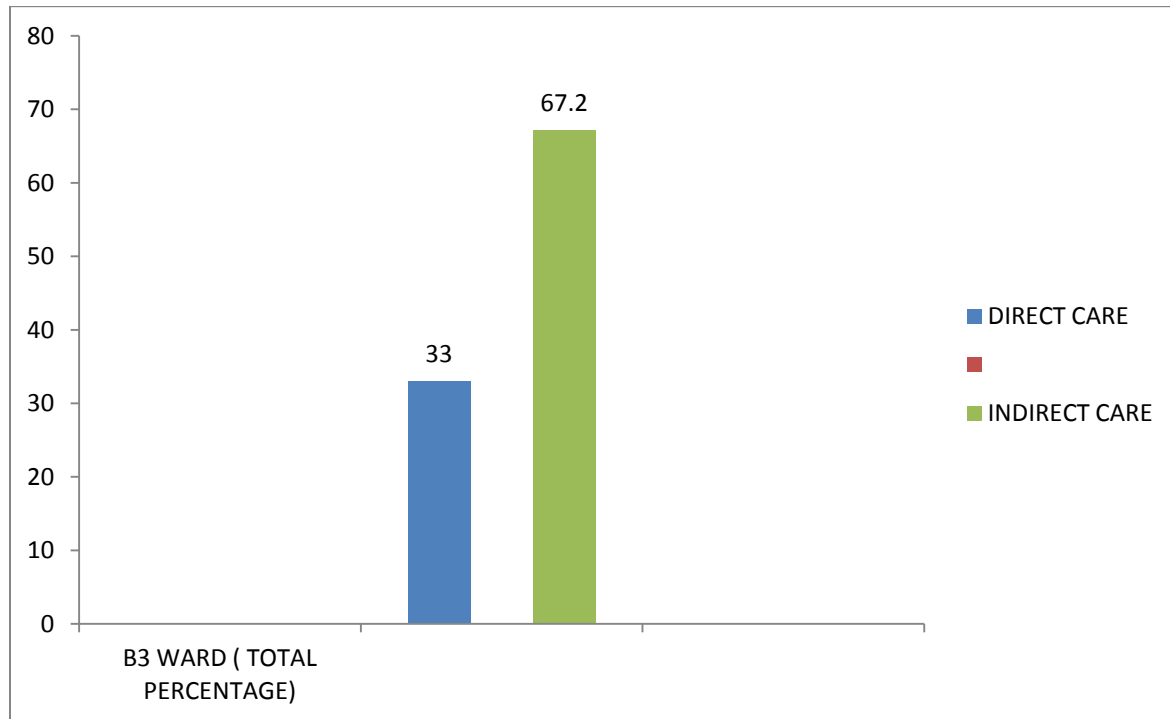
S.no	Ward	Duty	Total%	Direct care%	Wastage%
1	A2	morning	100	37.233	62.766
2	A2	evening	100	37.25	62.75
3	A2	night	100	33.533	66.666
4	B3	morning	100	32.666	67.333
5	B3	evening	100	36.06	63.95
6	B3	night	100	29.21	70.77

The total %of morning, evening and night are above and from here we can see that direct care is % is more in ward A2 as comparison to the ward B3 and the care is given and directly nurse deals with the patient in evening and not in morning and night.

Ward A2

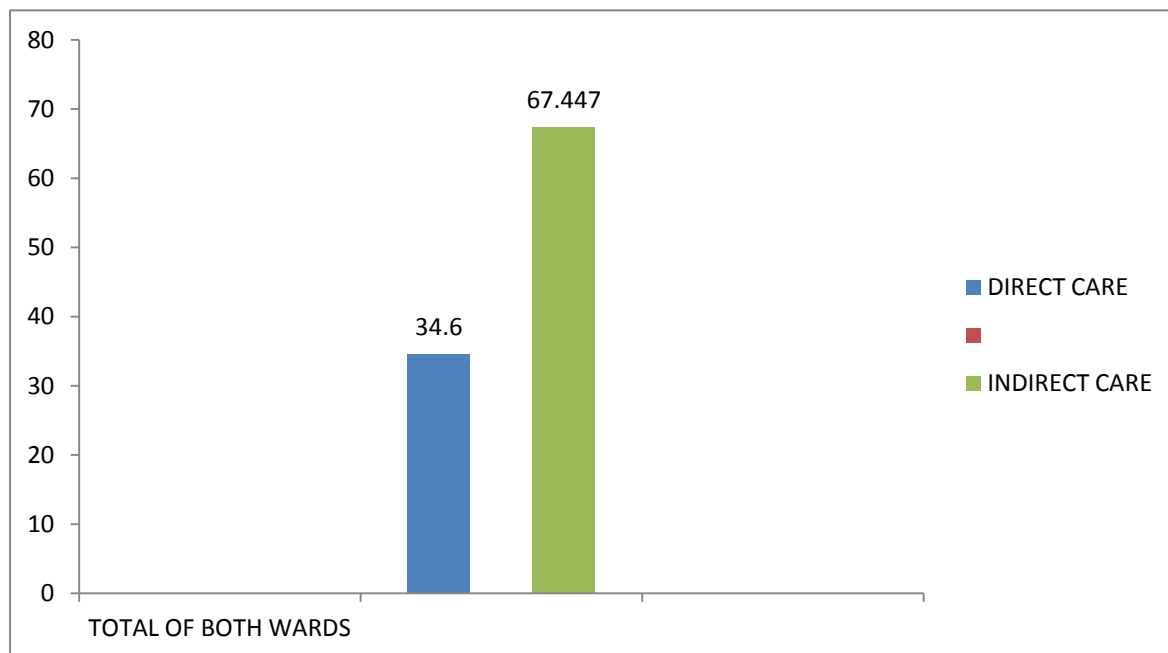


Ward B3



When we look at the total of both the wards in that we can observe that the direct care % of ward A2 is more i.e 34.6 than B3 ward the difference is of

1.6 .and same in the case of wastage the difference between both the wards are 1.32. A2 ward nurses do the less wastage as comparison to B3.



TOTAL OF BOTH WARDS OF 20DAYS

In total the wastage is again more than the direct care in both the wards nurses does the same does not matter the ward is busy or less busy

Results

- After doing time motion study on nurses of ward A2 and B3, the results of importance are
- Major part of concern is a patient's basic care which is neglected due to less experienced staff and pull out of staff from other wards.
- Written documentation is more time consuming as the busy staff have lots of other work to do.
- No fixed time is there for doctors visit.
- Looking for equipment consumes time.
- Patients are very mostly wants one to one ratio of nurses in a ward and wants extra care from a staff of the ward.
- Nurses search for files a lot as files are not at their fixed place this activity is also times consuming.

- During night shift personal time is taken by nurses are more they delay in doing their daily and direct care and this results in wastage.
- Waiting delay is also factor due to which nurse is unable to perform many activities,waiting for services or escorting patients etc.
- According my point of view the main reason of this result could be nepotism nurse from same region donot even say anything on their wrong part,moreover this results in more chatting or personal talks between nurses and inhibit the communication with patient or else.

Recommendations

- To place bachelors in nursing or masters in nursing students as trainees.
- Trainees should not be from local colleges because if they are from outside the city/state they needs

accommodation and the hospital can have financial benefit by providing them accommodation

- Trainees should come with the clinical instructors from their own college to look after them during their training period it will reduce the pressure on hospital faculty. Nurses waste few minutes when they are coming to nursing station to call other ancillary departments so we can provide a kind of walky talky/cordless system to them so they could save time as time is money
- Documentation is most important thing to be considered in nursing but the half documentation is done written and half is on system we can make a system in which the whole documentation is transferred on computers and it will make easy for nurses to review anything from the system rather searching for files.
- When nurses are escorting the patient to other departments it consumes lots of time so if everything is on system one nurse can even give handoff by sending information to other nurse through system

and patient could be transferred with trainees or GDA's

- As the fortis is one of the reputed and well advance hospital their should be monitor attached to the patients in the med-surg wards or nurses should be provided with omron b.p apparatus which could record the pulse and blood pressure of patient because manually results can vary moreover some nurses take more time in recording it manually.

Operational Definitions

Patient Room:

Bedside Procedures - Intervention activities such as IV site changes, urinary catheter insertion, tracheotomy care, incision care, IV insertion, RT Feeding, Vital Signs - Physical signs such as heart rate, respiratory rate, temperature, blood pressure, height and weight, ECG and SpO2
Wound Management - Providing care or treatment to the integumentary system. Example: Decubiti dressing change, Assisting in surgical dressings
Incontinence - Loss of bowel or bladder control in which the nurse cleans the patient, linens or floor.
ADL - Activities of Daily Living - the basic tasks of everyday life, such as eating, bathing, dressing, toileting, oral hygiene and ambulating.
Give Meds - The delivery of drugs to the patient, regardless of route or method.
Assessment - The systematic collection of data about the patient's condition and nursing needs.
Admit/Discharge - Preparing the patient for hospital admission or discharge.
Comm. w/Care Team - Discussing the patient's condition with other healthcare professionals.
Comm. w/Patient - General discussion with the patient.
Patient Services - Non-Clinical, non-ADL comfort measures (i.e. - turning on the TV, etc.)
Emergency - Rapid response team, code or near code.
Family Services - Services not related to the care of the patient.
Documentation - The act of charting or recording.
Teaching - Providing specific education about the patient's condition and nursing needs.
Waiting Delay - Waiting for equipment, consult, lifting assistance, transport, page, or phone call with physician, family, or significant other.
Other - Bedside reports, rounds, handoffs, room cleaning, trash, rash, gowning and gloving

Nursing Station:

Chart Review - Reviewing the medical record (paper or electronic) in search of patient information (i.e. - results, orders, progress/status notes, etc.).
Report - Exchanging information from one team/individual to another direct or telephonically and collecting reports manually or through computer
Comm. w/Care Team - Discussing the patient's condition with other healthcare professionals. als and comm.w nurses in their own language
Comm. w/Family - Exchanging information with the patient's family, guardian, or significant other.
Paging Care Team - Contacting physicians, residents, interns, nursing peers, and physician extenders.
Calling Ancillary - Contacting other departments such as physical therapy, occupational therapy, respiratory therapy, pharmacy, speech therapy, transpo
White Board - Reviewing or updating a status board.
Bed Control - Ordering, waiting or responding to a patient bed assignment.
Computer Data Entry - Computerized entry of patient info, supplies, or ordering.
Copy/Fax Machine - Using the facsimile (fax) machine or copy machine while in the nursing station.
Documentation - The act of charting or recording.
Teaching - Providing specific education about the patient's condition and nursing needs.
Personal Time - Lunch or personal break.
Waiting Delay - Waiting for equipment, consult, lifting assistance, transport, page, or phone call with physician, family, or significant other.
Other - Other activity not included in the category list. list such as handwashing etc.

On the Unit:

Care Rounds - Rounding with the physician(s) while discussing the patient's condition/needs/status.
Deliver Food Tray - Distributing/ setting meals or snacks.
ICE/Beverage - Replenishing ice/water pitchers; providing beverage for patient or family.
Meds Activity - Preparing medications or drugs for administration. Such as obtaining meds from a pyxis/omnicell machine/tube.
Emergency - Rapid response team, code or near code.
Care Conference - A meeting in which nursing, ancillary departments, physicians or physician extenders discuss the patient's condition, needs and optior
Deliver Supplies - Distributing supplies/linen from a cart and supply cabinets./ patient uniforms
Documentation - The act of charting or recording.
Teaching - Providing specific education about the patient's condition and nursing needs.
Admin/Training - Staff meetings or nursing education.
Personal Time - Lunch or personal break.
Look for Equipment - Hunting for equipment such as intravenous pumps, suction pumps, scales, etc.
Look for Person's - Searching for other staff (e.g. nursing, housekeeping, dietary), physicians, or family representative.
Look for Supplies - Hunting for supplies such as housekeeping items, dietary items, dressings, restraints, linens, etc.
Look for Information - Searching for data/information and/or education supplies plies and searching for files for documentation
Waiting Delay - Waiting for equipment, consult, lifting assistance, transport, page, or phone call with physician, family, or significant other.
Other - Other activity not included in the category list. list such as inventory check ck, walking etc.

Off the Unit:

Escort Patient - Transporting the patient from one department/unit/ hospital to another.
Monitor Patient - Assessing the patient while off the unit.
Direct Care - Nursing or medical intervention while off the unit (i.e. - IV pump alarm, catheter repair, suctioning, etc.).
Indirect Care - Calling or paging the physician or ancillary departments.
Documentation - The act of charting or recording.
Admin/Training - Staff meetings or nursing education.
Personal Time - Lunch or personal break.
Retrieve Equipment - Obtaining med-surg equipment such as IV pumps, suction and replacing them after doing procedures
Retrieve Equipment - Obtaining med-surg equipment such as IV pumps, suction pumps, pain pumps, monitors, ,tors and replacing them after performing the p
Waiting Delay - Waiting for equipment, consult, lifting assistance, transport, page, or phone call with physician, family, or significant other.
Other - Other activity not included in the category list. list such as waste management and etc.

Documentation Categories:

Admit Paperwork - Documenting the first encounter with the patient in which the assessment component of the nursing process begins (e.g. - recording
Daily Assessment - Recording the patient's condition, nursing needs, and compliance.
Transcribe Orders - Preparing physician orders for validation.
Writing Care Plan - Documenting the nursing diagnosis, goals, nursing actions and expected outcomes of nursing care plan.
Meds Paperwork - Documenting medication administration.
Teaching - Documenting education to patient, family, and significant other.
Discharge Paperwork - Recording information related to the patient's departure.
Other Documentation - Other charting not defined in the pre-assigned categories.

Teaching Categories:

Care Processes - Providing education about the nursing diagnosis, priorities, goals, outcome criteria and timeframe.
Admission - Providing education about what to expect during hospitalization.

Discharge – Providing education about what to expect at discharge.
Student/Resident – Providing education to a student or resident.