Summer Internship

At

IIHMR, Delhi (April 1 to 31st May 2020)

A Report on

"Time and Motion Study"- Discharge Process

By

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Post-graduate Diploma in Hospital and Health Management

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Declaration

I, Dr Aditi Dhankar, hereby declare that this internship entitled “Time and Motion Study”- Discharge Process, is the outcome of my own study undertaken under the guidance of Dr Nitish Dogra IIHMR- New Delhi. It has not previously formed the basis for the award of any degree, diploma, or certificate of this Institute or of any other Institute or University. I have duly acknowledged all the sources used by me in the preparation of this internship report.

Date: 3 July 2020

Sign: Dr Aditi Dhankar

Postgraduate Diploma in Hospital and Health Management

International Institute of Health Management Research

New Delhi

Certificate of Approval

The following Summer Internship Project title "Time and Motion Study – Discharge Process" at IIHMR, New Delhi is hereby approved as a certificate study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of Post Graduate Diploma in Health and Hospital Management for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn theirin but approve the report only for the purpose it submitted.

Name of the Mentor: Dr Nitish Dogra

Designation: Assosciate Professor Convenor, Centre for Climate Change and Environmental Health

IIHMR, Delhi

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Abbreviations

- CR. No.: Central Registration Number
- CSSD: Central Sterile Service System
- DS: Discharge Summary
- HIS: Hospital Information System
- IPD: Inpatient Department
- LAMA: Leave Against Medical Advice
- MICU: Medical Intensive Care Unit
- OT: Operation Theatre
- PD: Physical Discharge
- RMO: Resident Medical Officer
- SICU: Surgical Intensive Unit
- TAT: Turnaround Time
- TPA: Third Party Administrator
- WHO: World Health Organization

INTRODUCTION TO HOSPITAL

"Rajiv Gandhi Cancer Institute & Research Centre" (RGCI & RC) being one of the Asia's cancer centre offers the advantage of new technology that is cutting edge. The Institute has been accredited by "NABH" (National Accreditation Board for Hospitals & Healthcare) and "NABL" (National Accreditation Board for testing and calibration laboratories) because of the service it provides.

It is a project which is visionary of "Indraprastha Cancer Society and Research Centre" which aims at providing the care which is needed by the patient. Under the "society's registration act", this society was formed in 1994. In spite patient's care which is considered to be the main objective of the society, it also works on the investigation of the disease incidence, distribution, symptoms and the cause.

On 1st July 1996, the institute started functioning and opening was carried by "Hon'ble Smt. Sonia Gandhi". Whereas, formal inauguration was done by, President of India "Dr Shankar Dayal Sharma", where other dignitaries were also present on "20th August 1996".

RGCI & RC pro

vides various services in the field of medical, surgical as well as radiation. Organ specific multi-disciplinary approach is also being practiced by the super specialists to diagnosis and treat the cancer, where Tumour Board acts as another opinion which are more critical as compared to the others.

RGCIRC is considered to be the largest cancer care institute continentally. The outpatient services are on three floors and has 57 consultation rooms, and it also consists of well -designed "Radiation Therapy areas". RGCIRC has 8 modular Operation Theatres and has with three stage air filtration and gas scavenging systems, and also 2 minor Operation Theatres for Day Care Surgeries. The hospital has 27 bedded Surgical ICU and 11 bedded Medical ICU. There are certain supportive facilities such as "Renal Replacement Therapy "are also available.

RGCIRC is ranked amongst 10 Best "Oncology Hospitals of India" and has also won the award for "Best Oncology Hospital in India at Healthcare Achievers Award 2014"

'Vision'

"To Prevent and Treat Cancer by Providing Affordable Oncology Care of International Standards in India"

‘Mission’

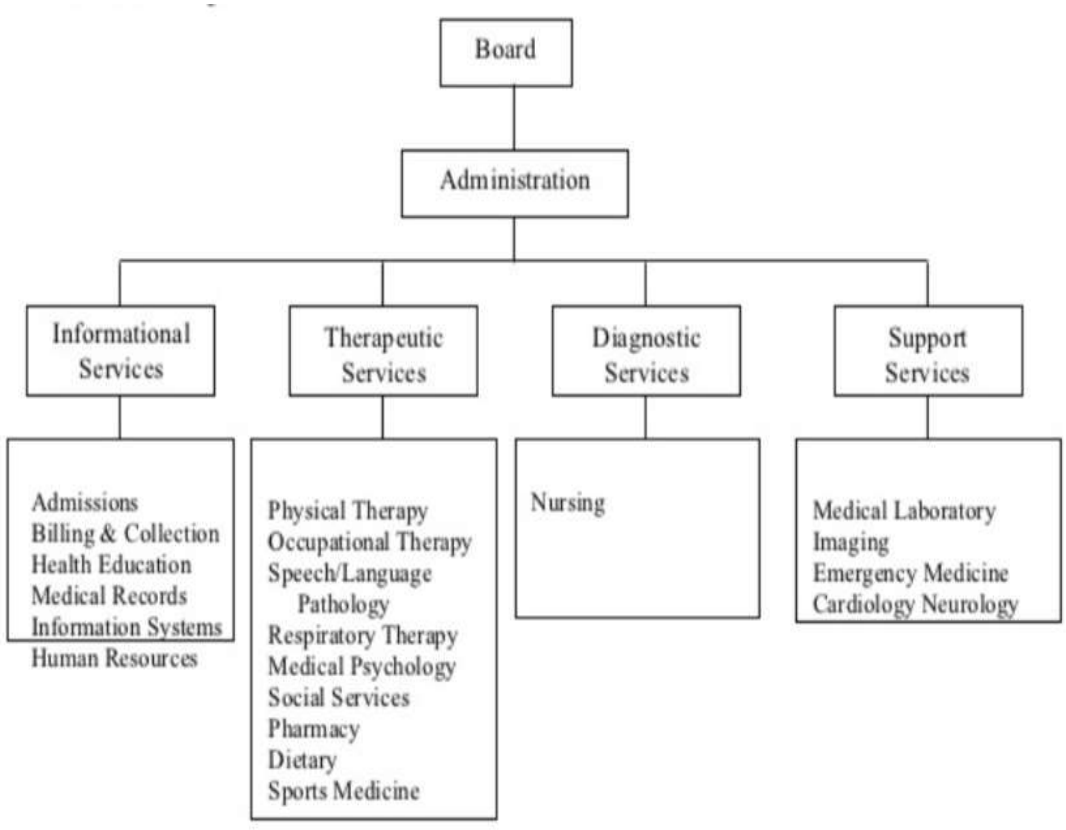
“To be the largest Cancer Care Provider by 2020”

- “Offering Comprehensive Services from Prevention to Palliation at an Affordable price”
- “Based on Core Values of Quality, Ethics, Compassion and Respect to All”

‘Values’

“RGCI & RC always holds its patients who come for diagnostic and therapeutic treatment, in high esteem. It also encourages treatment, mutual respect and trust among the Management, consultants, resident doctor, medical, paramedical and staff of supportive services. Transparency, proper diagnosis, proper treatment and correct advice to the patients are the hallmarks of this institute”

Organogram



Management Team

1. “Mr. D.S. Negi - Chief Executive Officer – “He is an IAS officer of 1975 Batch, retired as principal secretary (Health & Family Welfare), Govt. of NCT of Delhi”. He also had service record at state and national level and is strategy maker and plans everything. He has written books, policies, articles and many other things. He became CEO thirteen years back. He has also worked on the new priorities and also implemented programs in taking care of the patients, their academic and also prevention of the cancer”.
2. “Dr Sudhir Rawal who is Medical Director and Chief of Uro -Gynae Surgical Oncology”
3. “Dr Gauri Kapoor- also Medical Director, Nitibagh and Director Paediatric Haematology & Oncology”
4. “Dr Pinkie Yadav is Medical Superintendent”
5. “Dr Sunil Khetarpal is Chief Transformation Officer”
6. “Mr. Rajesh Thacker is Chief Financial Officer”
7. “Mr. J.P. Dwivedi is Chief information Officer”
8. “Mr. Debasis Routray is Sr GM-Materials”
9. “Mr. Basant Kumar Panda is GM-Human Resources”

Green OT Certification

The operation Theatres at RGCIRC have been successfully certified by Bureau Veritas for Green OT measures

(13 February 2020).

Quality Policy

“To do things right first time, every time with empathy”

Policies of HR

- Employee can bring to an end any employee relationship whenever he wants
- Laws related to the non-discrimination can be formally forbidden
- Distinguishing the employee on the basis of their working time
- Rules of the company like if an employee needs leave which is family related or the law
- Duration of the break’s employee takes

- Time the employee has been investing in the company which is accurate is taken into consideration
- Procedures which are urgent and are to be reported immediately
- Employee is supposed to follow the scheduled timings of reaching and leaving the place
- Forms which helps to know whether the Candidates are qualified during the hiring process
- Request submission regarding the leaves
- Employees are set free regarding the accommodation which is reasonable
- Reviews of the employee annually
- Expenses which related to the business are to be submitted in written

Services

Standards	International
Emergency department	Yes
Beds	302(Rohini), 30(Nitibagh)

Other Services

- Telemedicine
- Pharmacy
- Prevention
- Preventive
- Physiotherapy
- Palliative
- Day Care
- Emergency
- Counselling
- Multispeciality

Rules and Responsibilities

- While in the stay at hospital, the patient should feel safe and secure.
- By following certain rules, the quality services can be provided to the patient.
- Patient's privacy, confidentiality, his dignity should also be maintained.
- Before the patient is being administered with the anaesthesia, there be an informed consent stating what procedures will be carried out.
- Surroundings of the hospital are to be cleaned ang there should be usage of the garbage bins.
- At the time of admission, only the visitor's pass is issued.
- As stated by the law, confidentiality rof the records and the communication have to be maintained.
- Every individual has its own belief system, their cultural practices and their religion, they are supposed to be respected,
- If a patient wants to be discharged without the consent of the doctor, its being stated that doctor will not be responsible for the patient's medial consequences.
- If patient doesn't want to go under any research, it will not hamper his access towards the services which are to be provided by the hospital.
- Its responsibility of the staff members or the hospital that if the patient is undergoing any research protocol, there should be an informed consent.
- The cost of the treatment is to be known by the patient.
- Patient should not suffer from any kind of abuse or injury.
- Before the patient undergoes any specific treatment, the patient is supposed to pay prior.
- As soon as the treatment or the surgical procedure is completed, the attendants are supposed to leave the hall. After that the attendants are asked to proceed to waiting halls.
- Individuals who are suffering from any kind if communicable disease should not visit the hospital.
- Patients information such as privacy and the confidentiality should be maintained.

<u>The staff role in the hospital is divided into four areas which are discussed below:</u>

- “Doctors” (medical staff)
- “Nurses”
- “Allied health professionals”
- “Supportive staff”

Roles and responsibilities of a doctor

Based on their level of experience there are different roles and responsibilities of the doctor.

The roles are:

- “Senior consultants”-doctors who see the patient at a particular time.
- “Registrars”-doctors who are seniors and they supervise interns and residents.
- “Residents”-they looks after the patient who are in the ward and they are specializing in particular field.
- “Student doctors”-medical students who are pursuing their graduation.

Roles and responsibilities of Nurse

It includes:

- “Nurse unit manager”-nurses who are highly skilled and are undergoing advanced training.
- “Associate nurse unit manager”-the main role is to help the unit manager and to behave as a nurse unit Manager when the actual manager is offsite.
- “Nurse practitioners”-nurses who are highly skilled and are also undergoing advanced level of training.
- “Registered nurses”-they provide some high level of minor procedures and some day to day care.
- “Enrolled nurses”-under the supervision of senior nurses they perform some minor procedures.

“Allied Health Professionals”

They are educated practitioners who work as part of multidisciplinary healthcare team. Their work is to assess, diagnose and treat disease and disability. Few examples include:

- “Dietitians”
- “Occupational therapists”
- “Pharmacists”

- “Physiotherapists”
- “Podiatrists”
- “Speech pathologists”

Hospital staff

- “Clinical assistants”- ward housekeeping is taken care off by them.
- “Patient services assistants”-drinks and meals are brought by them
- “Porters”-patient transport and material lifting
- “Volunteers”-ward visits
- “Ward clerks”- ward reception desks are staffed.

Medical Director: responsibilities

- medical protocols are developed by them.
- Medical staff members and doctor’s performance is taken care off.
- hospital records are prepared.
- Medical care quality is monitored.

Director of Operations: Responsibilities

- Define policies and systematic workflow of hospital.
- The information regarding overall functioning of the hospital is reported to the CEO and Board.
- Changes regarding how the hospital efficiency can be improved are recommended.
- Operational management of the hospital is taken care off on day to day basis.

Director/Head of Finance: Responsibilities

- financial aspects of the hospital, capital expenditure and revenue are looked into by them.
- financial records of the hospital are maintained.

Treatment of Cancer

- “Blood Cancer Treatment”
- “Bone Cancer Treatment”
- “Bone Marrow Transplant”
- “Breast Cancer Treatment”
- “Cervical Cancer Treatment”
- “Head & Neck Cancer Treatment”
- “Liver Cancer Treatment”
- “Lung Cancer Treatment”
- “Pancreatic Cancer Treatment”
- “Paediatric Cancer Treatment”
- “Prostate Cancer Treatment”
- “Mouth Cancer Treatment”
- “Throat Cancer Treatment”
- “Urinary Bladder Cancer Treatment”
- “Brain Tumour Surgery”

Strategies

“RGCI&RC has executed strategic alliances with internationally renowned institutes such as Thomas Jefferson University; this has catapulted RGCI & RC into global league of select hospitals that are pioneers in a new approach to treating cancer”.

Academics:

Regardless of providing patients care, they are also into the research studies and collect scientific reports on the cancer and investigate its “incidence, prevalence, distribution, cause, symptoms and to promote its prevention and provide cure”. The academic programs of the institute are as follows:

- “DNB program accredited by National Board of Examinations, Delhi”
- “Fellowship Programs recognized by Indian Medical Association-Academy of Medical Specialties, Hyderabad”
- “Fellowship Program in Oncology Radiology”
- “B.Sc. Program in Medical Technology”
- “Diploma Programs recognized Indian Medical Association, Delhi”

- “Nursing Aide Course “
- “Oncology Nursing Course (Autonomous)”

Path Breaking Initiatives

- RGCI&RC introduced a breakthrough electrical technology called “Nano knife”, a minimally invasive cancer treatment.

The Nano knife allows radiologists to treat the tumours that were difficult to treat in the past due to their location.

“Dr Shivendra Singh” who is a senior consultant & chief of GI Onco Surgery & Liver Transplant Services, RGCI &RC said, “The Nano knife target tumours that are small, say less than 5 cm in size and the tumours which are difficult that can’t be removed just because of their specific location, or the tumours that have not shown any improvement to the treatment which is conventional.

- RGCI&RC organizes various programs that spread positivity with Cancer Survivor Children Cancer survivorship in an inspiring testimony to the spirit of never-say-die in human.
- The hospital resilience and their determination to fight against the cancer.
- “TRUEBEAM” is considered as a breakthrough technology which is a system of radiation therapy which is image guided for cancer and radiosurgery. It can also be used to treat cancers in the body regardless of their location as in for head and neck, lung, breast, cervix, prostate, oesophagus, etc.

Conclusion

RGCI & RC is a unique in Northern India; It is a cancer care set- up consisting of all facilities of diagnostics and providing treatment to all the types of cancers. It has highly qualified doctors and staff members and experienced team which is the hallmark of the hospital. Its research program helps in continuous improvement in providing all types of treatment and care.

References

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ROLE OF RAJIV GANDHI CANCER INSTITUTE AND RESEARCH CENTRE IN PREVENTION OF "NON-COMMUNICABLE DISEASES"

Overview

A 'Non-Communicable disease' is that disease which isn't transmitted from one individual to other. They are one of the leading causes of death. It includes autoimmune diseases, heart diseases, cataracts, Alzheimer's disease, Parkinson's disease and many more. Most of them are non-infectious whereas there are few 'non-communicable diseases' that are infectious such as parasitic diseases in which their life cycle doesn't include direct host-to-host infection. 'Metabolic' and 'Behavioural' risk factors are considered to be the most common cause of noncommunicable diseases and the most important risk factor include 'smoking, blood pressure, unhealthy food diet, inactivity, overweight, obesity, hypercholesterolemia, diabetes and blood sugar and alcohol'. The 'macroeconomic impact of NCDs' is profound as they cause loss of productivity and decrease in the gross domestic product as it is the major public health problem in India.

Key Facts

- 41% of the people lose their life due to Non-Communicable diseases which is considered to be "71% of all deaths globally".
- Almost '15 million people die' with it in the age between '30' and '69' years.
- The greatest number of deaths are accounted under cardiovascular diseases which is followed by 'Cancers, Respiratory Diseases and Diabetes'.
- Total of 80% deaths are accounted under these four diseases.
- Key components of the response include detection, screening and palliative care.

Cancer

It is generally described as the "uncontrolled growth of abnormal cells in the body". Anything that causes normal cell to develop abnormally has a tendency to be cancerous. They are of different types and grade of the cancer whereas signs and symptoms are not specific. Cancer types can also be influenced by number of factors like age, gender, race, local environment factors, diet and genetics. The signs and symptoms include loss of appetite, fatigue, recurring infections, indigestion, difficulty in swallowing, lump in the breast, testicles or elsewhere in the body, unusual bleeding, cough or hoarseness.

“Preventing and Controlling Non-Communicable Diseases”

The prime way to control ‘non-communicable diseases’ is to focus on how to reduce the risk factors that are associated with them. ‘Low cost solutions’ exist for governments and other stakeholders to reduce the risk factors that are modifiable.

‘To reduce the impact of NCDs on people and society’ a comprehensive strategy is required for everyone including education, transport, finance, agriculture, planning and further promoting the ideas that intervene or interfere to prevent and control them. ‘Primary health care approach’ can help to strengthen the e

arly detection and treatment within the time. Expensive treatment need can also be reduced only if the economic investment is provided early to the patient.

Countries who have ‘inadequate health insurance coverage’ are not able to provide universal access to essential NCD interventions.

“Non-communicable diseases” (NCD) enforce significant burden on health development. They are considered to be ‘one of the major causes of death’. WHO Western Pacific Regional Office supports Member states in the prevention and control of NCD to:

- Raising the Priority through international advocacy.
- Strengthening the national capacity and partnerships.
- Reducing the Risk Factors which includes usage of alcohol, tobacco, unhealthy diet, ill effects of alcohol.
-
- Implementation of legal Frameworks.
- Orienting health systems by people centred approach and Universal Health Coverage.
- Promotion of Research and Development.
- Evidence Based Interventions which would help achieve global, regional and national targets.

The Regional Office’s work was guided by number of plans which were put forth by regional commitments of member states. It was concluded that actions which would help in preventing the NCD lie outside the health sector which include certain policies for education, trade, food and urban development. Health-in-all-policies approach will contribute on health in general.

Government Schemes; The ways Indian Government helps pay for cancer treatment

"There are some government schemes that can help fund cancer treatment" which are enumerated below:

1. "Health Minister's Cancer Patient Fund" (HMCPF)-"The Ministry of Health and Family Welfare" offered this scheme under Rastriya Arogya Nidhi. There are number of 'Regional Cancer Centres' under the scheme:
   - "Kamala Nehru Memorial Hospital, Allahabad, Uttar Pradesh"
   - "Kidwai Memorial Institute of Oncology, Bangalore"
   - "Regional Cancer Institute, Chennai"
   - "Cancer Hospital & Research Centre, Gwalior"
   - "Post Graduate Institute of Medical Education & Research (PGIMER), Chandigarh"
   - "Regional Institute of Medical Sciences, Manipal, Imphal"
   - "Regional Cancer Centre, Thiruvananthapuram, Kerala"
   - "Gujrat Cancer Research Institute, Ahmadabad, Gujrat"
   - "Tata Memorial Hospital, Mumbai, Maharashtra"
   - "Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow"
   - "Cancer Hospital, Tripura"

2. "The Health Minister's Discretionary Grants": This was also Under The "ministry of Health and Family Welfare". According to this scheme Rs50,000 is offered to the poor people in the areas where medical facilities are not available. The family whose annual income is Rs 1.25,000 and below are eligible.

3. "The Central Government Health Schemes" (CGHS): This scheme is valid and applicable for the Central government employees who are considered independent and are retired. They include freedom fighters, retired judge of supreme court, railway board employees, post and telegraph department employees, pensioners of certain autonomous bodies, ex-wise presidents.

4. "National Health Protection Scheme": Total coverage of about Rs 5 lacs per family/year is provided by "Ayushman Bharat" and "The National Health Protection Scheme".

5. "The Prime Minister's National Relief Fund": It was targeted onto the victims of natural disasters and this scheme also provides coverage for surgeries of heart, Kidney transplantation and cancer treatment comes along.
6. "State Illness Assistance Fund": Coverage of Rs1lacs is offered for cancer treatment at government hospitals within the state.
7. "Bonus: The Chief Minister's Relief Fund": The financial assistance is provided to the poor for cancer treatment under this scheme.
8. "The National Policy for Women" : Aadhar linked Health Cards provided under this scheme to single widowed, medially weak and elderly women, can be used to avail subsidized cancer treatment.

"National Cancer Control Programmes" (NCCP)

It's a 'Public Health Programme' which is aimed to 'reduce the number of cancer cases' and 'improving their quality of life'. This is carried out by implementing systematic, evidence-based strategies for early detection, diagnosis and treatment. Cancer control planning requires accuracy in data, cancer registries, monitoring and evaluation programs. "

'WHO' STEPWISE FRAMEWORK

'Planning Step 1'- Investigation of the cancer problem and cancer control services and programmes.

'Planning Step 2' -Formulating and adapting the policy (target population, goals, objectives)

'Planning Step 3' -Identifying the steps needed to implement the policy. This step includes further three planning phases that is core, expanded and desirable.

- The National Cancer Control Plan includes Prevention, Early Diagnosis, Screening, Diagnosis and Staging, Treatment, Palliative Care and Survivorship Care.

Events Conducted by RGCIRC: For Prevention and Awareness of Cancer

1. **International women's week:** This program was organized on March 07-March 16th. In this event special screening tests were made available free of cost which included PAP smear test, Clinical Breast Examination, and preventive Doctor Consultation.
2. **Cervical Cancer Awareness Campaign**: This Campaign was carried out from 11th to 30th November 2019. It was conducted within the hospital where individual had free

PAP smear test as PAP smear is considered to beat the cervical cancer and free clinical Breast Examination was done and the Mammogram was @ Rs 500/-

3. **Celebrating life**: The main goal and the focus was onto raising the awareness among the childhood cancer survivors about how to keep yourself healthy after beating the deadly disease. The event was organized for the people who have survived and on the other hand for the people who have recently diagnose. It was step towards the outreach of the community and gathering the support of the families. It was organized on 2nd November 2019 at Hotel Crown Plaza, Rohini, Delhi.
4. **Survivor's Meet**: It was organized at Pearl Ballroom, Hotel Crowne Plaza, Rohini, Delhi 28th September 2019 with the aim meeting all the individuals who have survived and number of experts were present including Dr Rupinder Sekhon & Dr Rajeev Kumar.
5. **World Head & Neck Cancer Day:** It was organized on 27th July 2019.
6. **International Women's Day:** It was celebrated as cancer prevention week from 8th to 16th March 2019.The aim of this was to create awareness among women to put forth their health and well-being as their first priority and get themselves screened to save lives.
7. **Metastatic Breast Cancer Partnership (Breast Cancer Partnership Programme)**: This programme was held on 2-3 February 2019. It was comprehensive programme especially for the Indian Practitioners which included case studies and discussions. The agenda for this was that all the oncologists would remain up-to-date and so that they could gather information and that could further be used in their routine clinical practices. The focus was on:
    - How patient outcomes along with the treatment can be optimized
    - Sharing their respective experiences on the real world
    - Discussing contemporary clinical data on targeted therapies.
8. **Curing Cancer in Children**: This was conducted on September 01-30, 2018. As everyone know cancer is rare and uncommon in children and accurate incidence of occurrence is not known, the reason being either they have poor access to healthcare or primary health care workers dare not aware and they don't recognize symptoms of paediatric malignancy. But, today almost 70% of the childhood cancers are curable and this is possible due to three important therapeutic modalities-Chemotherapy, Surgery, Radiotherapy. This was achieved through number of clinical trials conducted by

multidisciplinary teams in America and Europe and then came out with new innovations. *This is emphasized in a consensus statement published in 1998 by the American Federation of Clinical Oncologic Societies.* They also stated that "**Timely referral for treatment increases the opportunity for optimal outcomes. The interval between the time of diagnosis and initial treatment should be minimized"**

Warning Signs of Cancer in Children:

- Pallor plus Bleeding
- Bone pain
- Localized Lymphadenopathy
- Unexplained neurological signs
- Unexplained mass
- Eye changes; particularly loss of vision

9. **World No Tobacco Day**: This programme was held in May 24-June 07, 2018 with the agenda of awareness and screening campaign which included Free oral cancer screening and Free Tobacco Cessation Counselling
10. **World Cancer Day 4th February**: The aim of this was to "Dispel Damaging Myths and Misconceptions about Cancer", under the tagline: "CANCER – DID YOU KNOW"

Myth	Truth
Signs and symptoms of cancer	Warning signs and symptoms and benefits of early detection
Contagious disease	Lifestyle disease
It is a disease of developed countries	Global Epidemic

'Cancer' is my fate	The appropriate strategies, it can be prevented

RGCIRC Launches drive to raise awareness about Sarcoma Cancer

- This program was launched on 10th July 2018.
- The agenda and the main focus of this was to create awareness among people about this cancer which is the cancer of bone and soft tissues to save their life and limbs.
- *Sarcoma* is considered to be very rare and are of different kind because' they occur in different kind of tissue' 'they grow in connective tissue' (cells which connect other kinds of cells in the body). They are certainly common in bones, muscles, tendons, cartilages, nerves and blood vessels.
- The major impact which was being observed was in a child developing a cancer and who is required for the amputation and is left disabled for his complete life.
- Generally, these type of cancer gets unnoticed in limbs and an inappropriate surgery is carried out which further leads to damage and major risk of losing the part of the body. So, awareness was much needed and there was need to preserve the function and ultimately cure the cancer.

"Rajiv Gandhi Cancer Institute launched Screening and Awareness programme against Tobacco"

- RGCIRC conducted program for the 'screening and awareness' regarding the ill effects of consumption of tobacco and which is also considered to be one of the major cause of cancer in the world. It was conducted on May 26, 2018.

- *"According to the Latest Hospital Based Cancer Registry at RGCIRC, more than 40% cancer cases were in males and 12% cancer cases in females were linked to tobacco usage during the period 2011-2015".*
- On account of celebrating the "WORLD NO TOBACCO DAY" ,'Preventive Oncology Department at RGCIRC conducted Free Oral Cancer Screening From 24th May to 7th June 2018' for people who are 'smokers' and 'tobacco chewers' so that it would help in detecting the cancer in the initial stages and the further treatment could be started. "Healthy Lifestyle" is the key for Cancer Prevention.

  "Preventive Oncology Department at RGCIRC" provides screening for three most common cancers: *Breast, Cervix and Oral Cancers.*
- Counselling session for the tobacco chewers who are addictive was also conducted, they were motivated and supported to overcome this habit and finally it would help them to quit.

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COMPARATIVE ANALYSIS OF DISCHARGE PROCESS IN HOSPITALS AFTER INTERVENTION

Introduction

"The Discharge Process is generally defined as the point at which the patient leaves the hospital and either returns home or is transferred to another facility which includes Nursing home or Rehabilitation Centre". Discharge may be categorized in three broad types:

1. LAMA (Leave against medical advice): This is the time where patient requests for the discharge from the particular consultant at their own contingency.
2. Death
3. Normal Discharge

❖ Well-Planned or appropriate discharge leads to:

- Patient satisfaction gets increased
- Length of stay at the hospital decreases
- Hospital is shown in the positive lime light
- Wasting time gets reduced for the admission of the new patients

The main aim of this study is to compare the discharge process of various hospitals which is considered to be one of the important factors contributing to the patient's satisfaction. Delay in the discharge process create restrictions which could further convey that is imparts negative and false impact in the satisfaction of the patient, capacity of the hospital and the financial performance.

Abstract

There is growing instigation to recognize the discharge from hospital process to decrease the readmission and costs which is avoidable. The agenda of this study is comparing the operational problem amongst certain hospitals and their improvement in discharge process after number of interventions being done, provide understanding of the hospital discharge problem and their causes and giving a summary of the solution that can be taken into consideration by the hospitals; as this problem consists of number of provocations that could result in limiting the equivalency of the solution.

The Organizations included were:

- "The American University of Beirut Medical Centre (AUBMC)": It is 386 bedded "tertiary teaching care hospital" which located in Beirut, Lebanon and it provides care to almost 35000 inpatients annually.
- UK Hospital
- Acute Care Hospitals and Primary Care in five different countries which included: The Netherlands, Spain, Poland, Sweden and Italy
- M.S Ramaiah Hospital which is a tertiary care hospital
- Sheri-Kashmir institute of medical sciences (SKIMS)

Variables

There were number of factors which were taken into consideration in the discharge process which included Financial Problems, Six Sigma methods were introduced, improvement in the administrative processes, single-piece flow, removing the requirements of complete health need assessments, progress made daily through multi-disciplinary situation reports, registers were kept in ward and billing office after they were designed and various confounding variables.

The six-sigma technique was proven to be an effective method and a change management tool to improve the discharge time. This method reduces the patient's length of stay (LOS) and it improves the overall management of the hospital. It focusses on the root cause of the problem by defining the problem, measuring the defect, analysing the causes, improving the processes and controlling method so that the problems doesn't recur.

1. "The American University of Beirut Medical Centre (AUBMC)"

It is 386 bedded hospital with a series of "si

x sigma intervention" over ten-month period. Quantitative preintervention and postintervention study was carried out. The aim being assessment of the effectiveness using "six sigma methods" which would improve the patient discharge process. The "six sigma" is managing tool which helps in the improvement of discharge process. Their Focus was to understand the delays in the process from the ground level and they should start with the adoption of core principles of six sigma in spite of other interventions that may be specific to institution only. The study was carried out from August 2012 to December 2012 that is five months preintervention period and it was compared with postintervention period which was from

November 2013 to March 2104. In this study, for hospital analyses i.e. preintervention 8494 and postintervention 8560 were targeted.

Interventions were conducted from August 2012 to October 2014. This method focusses on the main cause of the problems using 'DMAIC' i.e. by defining the issue, defect measurement, cause analyse, process improvement by eliminating the major causes and process controlling which makes sure that it doesn't recur. From the time where the order is written till the time patient leaves the room was taken into consideration and steps mapping was carried out. Through extensive decisions; electronic stamps were also introduced. Variables included were the age group and the gender specifications.

Outcome were observed according to which patients whose order of discharge was handed to them before the noon, by noon and after, "length of stay (LOS)" and LOS of the admitted patients. The discharge time during the preintervention phase decreased by 22.7% which is 2.2 hours to 1.7-hour postintervention. Patients who were discharged before noon in the specific postintervention period was found to be more in number. Statistical difference was not observed whereas slength of stay was reduced from 3.4 to 3.1 days i.e. postintervention.

2. "U.K Hospital"

It is "U.K National Health Service" and is also specialist "Tertiary centre for Cancer, Oral and Maxillofacial surgery and Pathology". This hospital provides services for almost 3,00,000 population for general and emergency services. This Hospital also became "Foundation Trust in 2009". It is 500 bedded has 14 Operation Theatres and 3000 employees. The study was carried out from January 2013 to July 2014.

Interventions was "Soft System Methodology" in which first initiative was simplified consuming paperwork: second was "through daily multi-disciplinary situation reports" and last was focussed on the social care practitioners with social care needs. Outcome of the second intervention resulted in almost "41% decrease between the patients who were stable and the ones who got discharged" whereas the third initiative resulted in "20% decrease in total length of stay"

There were many other options which were also considered for improving "financing and healthcare delivery "includes: reduction in duplication, avoid errors, balance of services between hospital care and acute hospitals, simplifying the administration and introduction of uniform standards. "Effective Communication" was considered to be the most important

facilitator of the discharge process; for example, inclusion of family, communication between health care workers and family, and support after discharge. According to Hospital, discharge on time could be achieved by "proactivity, effective communication and letting the process moving. There was "series of 20 structured interviews" there were certain problems encountered that included communication which was ineffective, slow paperwork processing, planning was limited, absence in the clearity of the ownership of the processes and care was delayed. Other interventions included "HNA" i.e. Health need assessments (by decreasing the time needed for the health assessment), "Sit Rep" (daily report of the specific situation is extended), and "Front Door" (by increasing the flow of the patient).

Outcomes were observed individually of all the initiatives i.e. there was no impact when the "Health need assessment" training was carried out for Nurses; when HNA was removed that is it was carried out on 24 patients in 2 wards which was trial procedure in a period of 6 weeks extended from February 2013 to August 2013. Delayed patients were reviewed daily which overlapped with the elimination of "HNA"; but the discharge timing got reduced from 37% to 28.1 days but this was for 2 wards on trial and hospital reduction declined from 47.8 to 28.2 days.

3. **"Acute Care Hospital and Primary Care in five different countries"**

   In this hospital "Intervention Mapping framework" was used. "Intervention Mapping is a six-step process that helps to develop an intervention based on theoretical, empirical and practical information. First improvement observed under this was "causes and the consequences of ineffective hospital discharge" was done; second was "performance objectives" and third was "systematic review of effective discharge interventions" A group of 26 focus interviews and 321 were the people under the interventions.

   Methods were "Problem analysis" in which study carried out was qualitative in 5 different countries i.e. "Netherland, Spain, Poland, Sweden, Italy". Data collected included focus group intervention and various map process and artefact. Its outcome was that one among 5 patients had experienced adverse effects in first 3 weeks after he was discharged from the hospital. Out of this three of them faced disability which also included death. Another method was "Performance objectives" in which checklist was prepared step by step i.e. accuracy and discharge on time and its results came out to be as that patients started to be aware and also started participating in the discharge process. Next method was "Selection of Theory based methods" it was done from the literature review in which consultation of international resources and policy makers were taken into consideration "goal setting was

its outcome. Next method included "developing the interventions" in which suggestions for its intervention design and target group was also considered; ita outcome was discharge process of the patient was enhanced by following the calls, visits which were home based, self-management. And the last method was "Implementation and Evaluation" and its outcome was awareness among people and they started up taking the policies and the protocols.

4. "M.S Ramaiah Hospital (Tertiary Care Hospital)"

This hospital provides 2 kinds of services that is inpatient and outpatient. The study was carried out in Iran and Tertiary Care Hospital. Data collected was secondary data that is through questionnaire which was distributed among 300 patients and then the data was analysed. and observing. The average waiting time calculated for all the wards was 4.93 hours. The reason thought of delay was due to summary incompletion, no guidance to the staff and absence of hospital information networking system. Time motion study was carried out and then it was compared with NABH standards (National Board of Accreditation for Hospitals and Healthcare Providers). Total of 1872 patients were taken for the study. Delay was due to the billing process was lengthy billing process and summary writing.

Interventions were that they hired the ward secretaries to decrease the billing tiome, staff which was trained was hired for the summary writing, patients were counselled. Results were 49% of patients were discharged in 180 minutes; 40.4% in 181-361 minutes and 10.4% in 362 minutes. Outcome of this study was that average time was 218 minutes i.e. 3 hours 38 minutes. Variables taken into consideration were Total time which was taken for the discharge and P value (probability of obtaining the results)

5. "SKIMS (Sheri-Kashmir institute of Medical Sciences) and NABH"

The Hospital is in Srinagar and is 783 bedded Tertiary Care hospital. Observational study was carried out in general and surgery wards. The patients included were all irrespective of the gender (between 10 am to 4 pm) . They came out with the data that 710 patients were delayed out of which 417 were from general surgery department and 293 from general medicine department. The discharge time was more when the data was compared with the NABH. Interventions included were "policies were made, feedback forms were prepared and departments were supposed to staffed adequately"

Comparative analysis of the studies

Name of the Hospital	Intervention	Participation Group	Outcome Variables
"The American University of Beirut Medical Centre" (AUMBC)	● "E-form request to manage timely needed medical report for financial clearance" ● Electronic pending charges were facilitated ● Transport Team Rounds were increased	● Preintervention -8494 patients ● Postintervention – 8560 patients	● Discharge time was strengthened ● Patient Satisfaction was improved ● Length of stay of hospital was dropped
U K Hospital	● "Simplified time-consuming paperwork"	● Trial was carried out on 24 patients across 2 wards	● Reduction in length of stay of hospital ● Reduction between patient

	• Regular reviews of patient's progress • Social Care needs	in 6 weeks period	being stable and discharged
Acute Hospital Care Hospitals and Primary Care in 5 different countries	• Intervention mapping framework • Practical strategies	• 26 focus group interviews • 321 induced interviews with patients and relatives	• Awareness of the patient • Goal setting • Uptake of policies and protocols • Patient satisfaction
M.S Ramaiah Hospital (Tertiary care hospital)	• Hospital information networking system • Questionnaire was developed • Patient were counselled for date of the discharge • Trained staff for summary writing • Analysis of the feedback form	• 1872 patients	• Average time was improved • Length of stay improved • Billing time reduced • Effective communication and coordination

Sheri-Kashmir Hospital (SKIMS)	● Introduction of the policies ● Feedback form ● Department staffed adequately	● All patients irrespective of age group	● Discharge time strengthened ● Patient satisfaction ● Billing process faster

Conclusion

By reviewing number of articles on Discharge Process, it is evident that it is multiples process which involves cooperation, coordination and effective communication of all the members in staff working in hospital as well as patients. There are various interventions and changes required in the organisation time to time. In the above studies the maximum time invested was in the billing and delay in the summary writing, so to overcome certain challenges, hospital had yo tale steps for their smooth flow of work. This was achieved when the hospital themselves carry out the "Time- motion study" and they should also take feedback forms from the patients to get to know their area of improvement. Overtime, better understanding of the impact of interventions could take place which would further help organization to grow.

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NARRATIVE REPORT

"TIME AND MOTION STUDY- DISCHARGE PROCESS"

Introduction to the Study

In today's world, we are being flooded by information from various sources pertaining to each and every field. The need of the hour is to cite the information available and usage of that information and data for the development. The modern concept of hospital goes far beyond the conventional idea of the hospital as a place for the treatment of the sick. It visualizes hospital as one part as a comprehensive system of preventive and curative medicine covering the primary care and public health and the other part as an institution devoted not only in providing tertiary care treatment but also providing medical education and research.

As an integral part of PGDHM course, the summer internship helps us understand the overall functioning of a hospital from a managerial point of view. The main area of study was "Discharge process" which is considered to be one of the factors that is concerned with patient satisfaction. Discharge is release of hospitalized patient from the hospital by admitting physician after providing necessary medical care to the patient. Discharge from hospital may be defined as the point at which patient leaves the hospital and either returns home or is transferred to another facility such as rehabilitation centre or a nursing home. Delay in the discharge or "bed blocking" terminologies are used to describe the inappropriate occupancy of hospital beds. Discharge planning is essential to the concurrent patient care review system conducted as a part of hospital's utilization management effort. If discharge planning is delayed, patients stay can be unnecessarily extended. Discharge planning is centralized, coordinated effort, to ensure that each patient has a planned program for needed continuing care and follow-ups. This is long standing and one of the most common problem faced by the patients. They also have negative import on the hospital's ability to deliver the healthcare facilitates effectively and efficiently. The time and motion study "measure the time required to perform given task in accordance with specified method and is valid only so long as the method is continued". Discharge may be of three broad types:

1. Leave against medical advice- its that point when patient under his own risk asks for the discharge from the concerned consultant.
2. Death
3. Normal Discharge

Discharge process involves a series of sub-processes to "facilitate transfer of an individual from the hospital". Slow or unpredictable discharge translates into reduction in efficient bed capacity and admission process delays. A well-planned discharge leads to increased patient satisfaction, decreased length of stay, positive impression of the hospital and reduction in wait time for new admission patients. Discharge delays create limitations that have negative impact on patient satisfaction, capacity of the hospital and financial performance. Effective discharges can be achieved when their when there is a perfect handshake among the various departments of the hospital with timely and regular communication among them.

Rationale

Though there have been extensive studies on improving discharge process that is unique and different to each hospital with multiple complexities, so the findings of any study cannot be generically applied to every hospital. The study highlights the Turnaround Time for processes which may be studied deeply to make feasible changes in the existing processes, as a part of change management with the best interest of the organization. Decrease in the discharge turnaround time would benefit the patients as well as the organization.

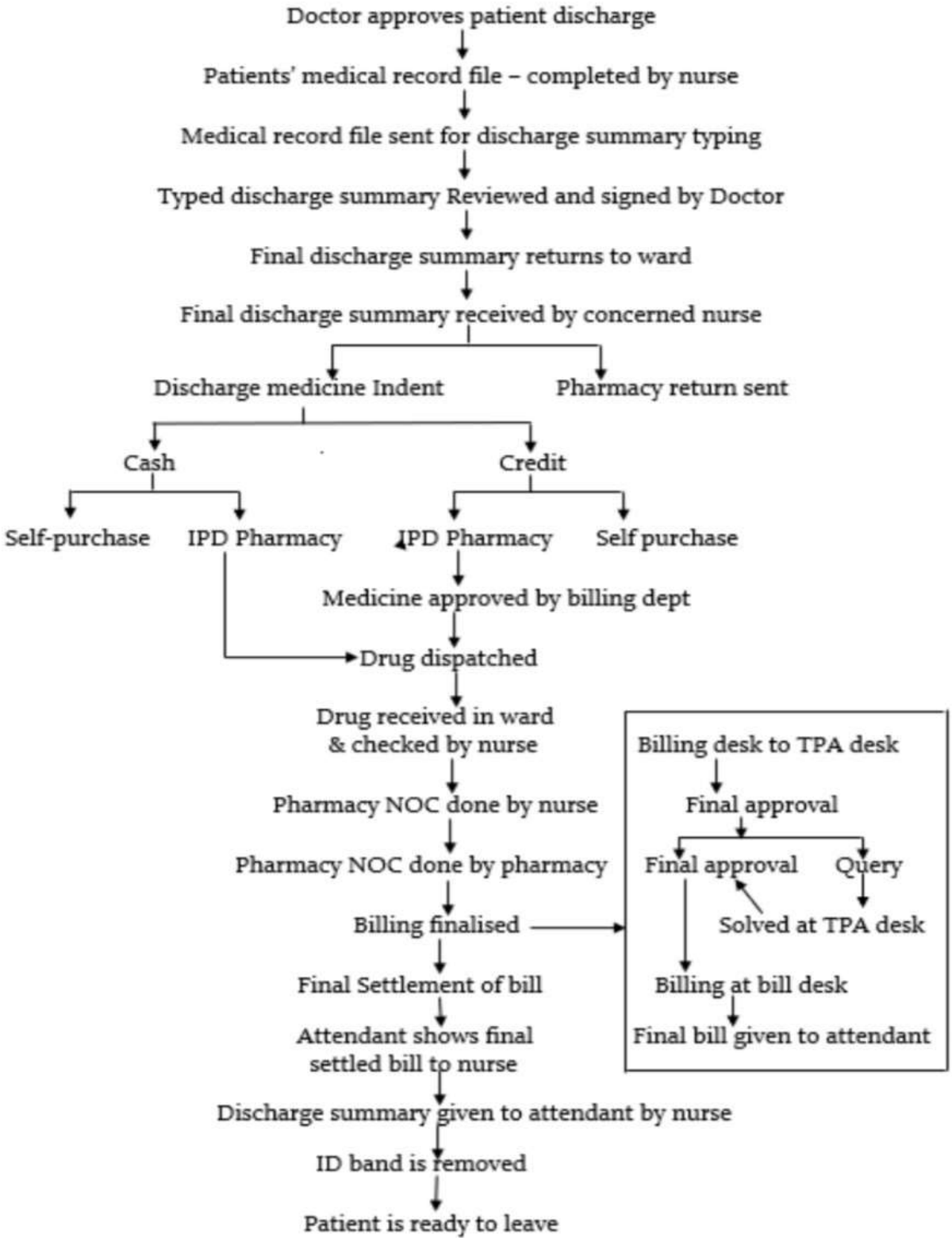
Research Question

What is the average time taken for the discharge of patients and the reasons associated with the delay of the discharge process?

Objective

- To study process of discharge in case of TPA (Third Party Administrator).
- To record the average time taken for each step in Discharge Process.
- To critically analyse the contributing factors impacting Turnaround Time.
- To identify unnecessary steps and remove them from the process.
- To find feasible solutions to reduce time lags between various steps in the discharge process.

Discharge Process Flowchart



Methodology

The study was carried out in various hospitals and the records were maintained in various departments to "calculate the average time taken for the discharge process for each patient". The Secondary data was collected by available resources taken from related Books, Journals, Research article and Various Websites. Various questionnaire was framed including Socio-demographic profile, time taken for discharge process, patient satisfaction on discharge process.

Key Words- Discharge Planning, Discharge Process, Turnaround time, Patient satisfaction, Quality

Databases- PUBMED, Google Scholar

Results

Average time distribution includes 9% in billing, 23% approval to billing time. 21% pharmacy time, 30% discharge summary preparation time and 11% in updation desk. Data was analysed including Discharge summary preparation time, pharmacy time, medicine check time, TPA time, approval to billing time. Maximum discharge turnaround time was around 5 hours and minimum were around 2 hours.

Depending on the payment type it was found that cash patients were more than three times the credit patients. In case of advance summary, the percentage of patients indenting in-house medicine is much higher than compared to same day summary for both cash and credit patients. It was also observed in various studies that the very few numbers of discharge summary was prepared in advance whereas for the cash patients the discharge was decided only after the consultant came on rounds for that day. It was also observed that some patients indented discharge medicine inhouse from the hospital's IPD pharmacy, while some preferred self-purchase of the discharge medicine.

It was also observed that cash patients with advanced summary prefer in-house purchase of discharge medicine. Patients having same day discharges prefer self-purchase of discharge medicine.

Root Causes

- Consultant did not give written confirmation. The consultant on their part thought that follow-up medication and written confirmation can only be given during the rounds on the day of discharge because the discharge criteria have to be fulfilled and checked by them. Therefore, the consultant factor was considered to be the major aspect which the result of the lack of discharge planning.
- Due to lack of accountability, discharge summary was not updated regularly.
- Too much time by Resident medical officer to type out the discharge summary, this was due to the slow typing speed due to lack of training.
- Increased approval to billing time.
- Increased pharmacy time because high OPD load, lack of coordination of duties.

Recommendations

Quality care at every level is to be improved for the better functioning of the organization.

- Policy level change- Standard Operating Protocol for the discharge process must be prepared and implemented. This will help in answerability, coordination and smooth
- flow of the process and regular feedback from the employees and the patients should be considered.
- Discharge Summary, Pharmacy clearance and draft bill of the patient's should be ready on the night prior to day of actual discharge.
- Every consultant should be directed to submit tentative list of the patients to be discharged the next day.
- File of the In-Patients should be updated on daily basis.
- Call for dietician, physiotherapist for advising patient should be allotted a day before the discharge.
- By providing Computer systems with user friendly software programs at every nursing station and other places the patient data can be entered by health care provider such as doctor, nurses to facilitate and build up Electronic medical record.

- Various Doctor Engagement programs could be initiated n form of: Doctor of the patient award, Doctor with best hand hygiene, Doctor with best clinical documentation.
- Regular training sessions should be carried out for improving the proficiency.
- Staff should involve the patient and the relatives at the time of discharge planning process.
- Implementation of File Tracking System-provides real time updates on file location. This would avoid flocking and disturbing the nurses.
- Summary should be sent along with the file from the summary room, approximately one hour is wasted tracking the file according to the studies.
- Minimizing the physical movement of file.
- Adoption of Automated Transport System for delivery of discharge medicine through a pneumatic tube
- Real time comparison of medicine required, with the medicine inventory system.
- Current discharge process is too long, due to subsequent sub-processes, therefore there is need to make few sub-processes parallel, like ind
- enting of medicine and getting discharge summary simultaneously.
- An integrated HMIS, with login access to the consultants should be introduced.

Reasons which led to Increase in Turnaround time

- Files lying on the Nursing station before they are sent to summary room.
- Lack of communication -attendants doesn't get regular updates regarding the patient discharge status.
- Attendant side observations- dates of laboratory reports get mismatched.
- Errors on billing slip-extra visit charges and medicines are billed twice.
- Ward boys are not available sometimes.
- Doctors approval takes time after discharge summary is printed.
- No segregation of received files.
- In advanced summary, signature was found to be missing.
- Attendant takes time to reach the IP billing station.
- Pharmacy does not update unavailability of discharge medicine, until the nurse explicitly calls up the pharmacy after waiting.
- At some points, discharge summary was mixed up.

Literature Review

- Webster Medical Dictionary defines discharge as “to formally terminate a person’s care in and releasing from, a hospital or health care facility”
- Wikipedia says “patient discharge is formal ending of inpatient care”
- Tracey M. Minichiello, Robert M. Watcher, Andrew D, Auerbach did a study to discover caregiver’s perceptions of motives for discharge delays at Moffitt-Long Hospital. The findings confirmed that nurses tended to miscommunicate and assign delays with respect to rounds and various other conferences. Physicians, however, cited delays caused by availability of sub-acute beds and testing. Almost all residence personnel and attending had assumptions that selection of discharge were generally made in the morning time and more than half of the people felt that discharge orders had been typically written earlier than noon. In contrast, none of the nurses thought that the orders were normally addressed earlier than afternoon. It confirmed that caregivers within the same organization perceived limitations to discharge and believed that discharge related activities being ordered at unique times. Therefore, to facilitate medical institution discharge, “communication gaps need to be addressed and usual morning routines ought to be re-examined”.
- Sima Ajani abnd Saeedh Ketabhi did a case learn and analyse the discharge procedure at “kashani Hospital in Esfahan, Iran”. This study observed 448 patients and 40 medical institution staff. Hospital team of workers included “physicians, nurses, secretaries and personnel from accounting section, the social centre, the cashier’s office, and para clinical wards in the Hospital”. The study established that the average time to complete the discharge method was 4.53 hours. The medical institution personnel involved identified the foremost factors affecting the average waiting time as patient’s economic problems and the distance between different wards. The reasons for delays have been that the doctors does not visit patient’s on time, interns taking time in finishing the documentation summary sheet (Discharge summary), absence of networked Hospital Information systems and lack of patient’s financial ability to pay their bills on time. The study recommended ways to decrease discharge time by punctual attendance vis physicians, real-time updates for personnel involved in the discharge process, deciding a particular discharge time, enforcing Hospital Information System networks, in-

service coaching for personnel, and well-timed documentation by means of interns of the summary sheet.

- Dr. Arun. M. Seetharaman, Dr Sudarkar Kantipudi, Dr Somu G. and Mr. Jibu from "department of Hospital Administration, Kasturba Medical College, Manipal University" did a study on creative methods to improve efficiency of the hospital by the use of "Pneumatic Transport system"(PTS) in Kasturba Medical College and Hospital, Manipal with an aim to provide faster quality services, they installed a pneumatic transport system in "two critical blocks of the hospital covering 650 beds, including central medical ICU, multidisciplinary ICU, orthopaedics triage and post/pre-operative ICUs". Data was than collected by observing directly and then it was compared with existing conventional human based transportation, for a period of three months. This study showed that PTS saved an average of 94.6 minutes for the sample transportation.
- In a study by Maloney et.al, a software patient track tool was developed and implemented." Following the implementation of the software, the number of cancelled surgical procedures decreased, the average number of inpatient admissions increased and the median emergency department length of the stay decreased".
- Sakharkar B.M., in his book on "Principles of Hospital Administration and Planning defines Discharge as "the release of an admitted patient from the hospital".

Name of the study	Method	Result	Conclusion
"MDR-TB in Puducherry, India: Reduction in attrition and turnaround time in Diagnosis and Treatment Pathway"	Retrospective cohort study based on record review.	TAT from eligibility to testing from a 'median of 11 to 10 days and in TAT from diagnosis to treatment initiation from a	Implementation of findings resulted in improving outcome of the programme.

		median of 38 to 19 days'.	
"An Audit of VDRL Testing from an STI Clinic in India: Analysing the present scenario with focus on estimating and optimizing the turnaround time"	Consecutive 200 VDRL requests were received at the serology laboratory of a tertiary care health facility from clinic of linked hospital and then analysed.	The mean absolute turnaround time of VDRL test was 8 days, the reason considered was interval from specimen receipt to performance of the tests.	Need of shift to alternative testing methods.
"Quality Improvement Can Revolutionize TB care in India: A Review"	Evidence based method of quality improvement to addressed quality issues ranging from delayed turnaround time to low patient satisfaction.	5 step learning approach was proposed at district level.	A major programme shift was necessary that is shift from quality assurance to quality improvement.
"Diagnostic Reliability of Architect anti-HCV Assay: Experience of a tertiary care hospital in India"	A total of 78788 consecutive sera were screened from 'anti-HCV antibodies using architect'	Architect was compared with ortho and HCV-PCR and then the level of agreements were assessed.	Architect can be used as screening assay because of high sensitivity and short turnaround time.

"High Prevalence of Multidrug Resistant Tuberculosis in People Living with HIV in Western India"	Cross sectional study was undertaken.	Longer turnaround time leading to risk of amplification of resistance to empirical regimen	WHO recommendation of performing routine rapid molecular resistance testing prior to initiating the treatment
"The Obstacles Facing Scientific and Medical Publishing in Saudi Arabia"	Key performance indicators were developed and analysed	The average turnaround time for review came out to be 79 days	Low response of the reviews was the main reason for the delay

Limitations

- This study is descriptive study
- Since the data collected was based on reviewing of the articles, therefore observation study was not taken into consideration
- Study period was very short

Conclusion

Conclusion of the study is that increase in planned discharge with the preparation of the advanced summary would decrease the Turnaround Time. Planned and timely discharges would also increase in patient turnover over bed, thereby increasing the efficiency and the revenue of the organization. Modern Health requires a system of Running Reviews for two main reasons. The first is to ensure the greatest possible effectiveness of its procedures, the second is to ensure that the best possible result is obtained from resources. With the great vision, perfect planning, efficient utilization of resources and well-coordinated effort from all the service providers regarding the decision of discharge of patients by completing all the required formalities in time area are essential for minimizing the unnecessary stay of patients after discharge. The Hospital performance is not improving in terms of patient's turnover when

compared with the bed strength. The reasons which could be responsible for this may include both the internal and the external environment of the Hospital. The external environmental factors include increasing number of hospitals and nursing homes in the twin cities with increasing competition as well as the change in the public demand. The internal factors are considered to be the bottlenecks that affect the speedy discharge of the patient which further results in the improper utilization of the hospitals bed which ultimately affects the revenue and the patient's turnover. The issues related to this problem mostly revolves around the factors like admission, availability of beds in certain specialities, discharge policies, unnecessary prolonged stay at the hospital and so on. To improve the bed utilization and overall performance of the hospital, these factors must be stressed upon and measures are to be taken to minimize them.

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Certificate of Completion

The certificate is awarded to

Dr Aditi Dhankar (PG19/05)

In recognition of having successfully completed her internship in the department of Hospital has successfully completed her project on "Time and Motion study- Discharge process"

Date: 3 July 2020

Organization: IIHMR, Delhi

She has been found to be committed, sincere and diligent student who has strong drive and zeal for learning.

We wish her all the best
for future endeavours

Dr. Pradeep Panda
(Dean Academics & Student Affairs)

Dr. Nitish Dogra
(Mentor)

Feedback Form

Name of the Student- Dr Aditi Dhankar

Summer Internship Institution- IIHMR, Delhi

Area of Summer Internship- Hospital

Attendance-

Objective Met-

Deliverables-

Strengths-

Suggestions for Improvement-

Signature of the Officer-in-Charge (Internship)

Date:

Place: