MEDICAL AUDIT (2007) IN THE DEPARTMENT OF MEDICINE AT SIR GANGA RAM HOSPITAL, NEW DELHI

Submitted by:

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CERTIFICATE

I certify that this project entitled “Medical Audit (for the year 2007)” in the department of Medicine; Sir Ganga Ram Hospital is the bonafide work of Dr. Anuradha Sethi done under my guidance and supervision.

She has been a dedicated worker , her efforts are appreciable and would prove beneficial to the organization.

I wish her the best for her endeavor.

Dr. Byotra
Chairman of Medicine
Sri Ganga Ram Hospital

CERTIFICATE

This is to certify that Dr. Anuradha Sethi, student of PG DHA (Post Graduate Diploma in Hospital Administration) – 2008, has successfully completed the project report title “Medical Audit in the Department of Medicine, Sir Gangaram Hospital, New Delhi) under my supervision.

Her efforts are appreciable and she has displayed sincerity and hard work in completing this project. I wish her every success in her future endeavors.

Place: New Delhi

Date: June 24, 2008

Dr. Pramod Gandhi

Program Coordinator, YMCA

MBBS, MD, CHA, MBA

HCA, DNBE

ACKNOWLEDGEMENT

I wish to express my since thanks and gratitude to Dr. Byotra; Chairman of Medicine Department, Sir Ganga Ram Hospital. It was a boon to work for a person who is so meticulous, has an eye for details and the knowledge for scientific methodologies and above all is extremely human.

I would like to thank Dr Nalini Kaul Director Medical Sir Gangaram Hospital for her support and encouragement.

I also acknowledge, with thanks the invaluable guidance and cooperation extended to me by my teacher and mentor Dr. Pramod Gandhi. He is a visionary and his teachings have helped me gain a lot of knowledge during my interaction with him and I am sure his philosophies on life will always guide me in my future.

I extend my since thanks to Dr Sunil Jain, Dr. Atul Kakkar, Dr. Atul Gogia, Anish Malhotra, Mrs. Rekha, Aditi ,Ishaan and Konark Malhotra for their invaluable cooperation, encouragement and expert opinion.

I thank the staff of the Medical Record department and Hospital Information System at Sir Ganga Ram Hospital for there immense support.

I thank my husband Dr. Ashish Vashistha for being the pillar during my course, without whose constant moral support and optimism nothing would have been possible. He is my friend, philosopher and guide in the true sense. I would like to dedicate this report to my sons, Ayush and Abhishek, from whom I took away time to write this report.

My since thanks to all of them.

Dr. Anuradha Sethi.

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1 Introduction

1.1 What is audit?

Audit in the wider sense is simply a tool to find out what you do now; this often to be compared with what you have done in the past, or what you think you may wish to do in the future.

Medical Audit (MA) has a more specific meaning, and this is vital for the measurement of the quality of care given to the practice population. MA requires standard setting, data collection, comparison with standards, review of data and standards, review of current practice, change in that practice and further data collection and comparison with the original data.

This can be summarized in the Audit cycle as depicted below. As a tool it leads to reading around a subject, searching for evidence or best practice for the standard setting, use of IT to collect data and communicate with patients. Changes have to be negotiated with the various members of the practice, and primary health care team. Finally the resultant audit is a valuable tool for the practice when looking at quality issues. There is also scope to seek financial help for such an audit from the Health Authority, savings and other sources.

1.2 Medical Audit

The study of some part of the structure process and outcome of (clinical) care, carried out by those personally engaged in the activity concerned, to measure whether set objectives have been attained and thus assess the quality of care delivered.

1.3 Audit involves

- A systematic examination
- Comparison of results against set criteria
- Assessment of quality of care with a view to improvement
- Monitoring the effect of audit-induced changes

1.4 Why audit?

- Educational value for participants
- Improve effectiveness and efficiency
- Reassure consumers

1.5 What to audit

- Structure
- Process
- Outcome

1.6 How to audit?

1. Define the **standards** which you should be able to realistically reach of the area which you intend to audit. Standards should be
    - Realistic
    - Owned / own-able
    - Parallel to existing standards - "one country, two systems".
2. Set the **criteria** by which you will measure those standards.
3. Compare your results against your defined standard. Is change needed?
4. Review the results of any changes made.

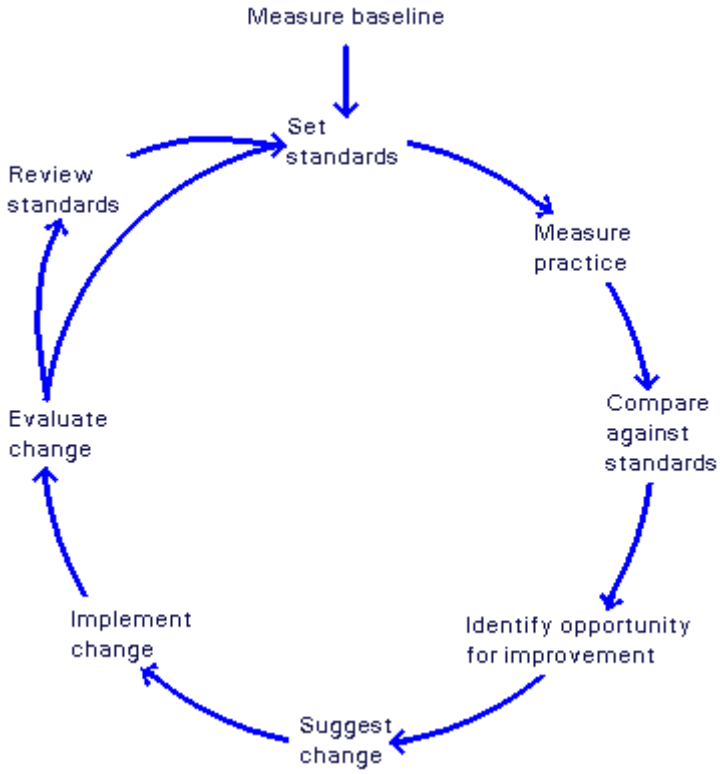
1.7 How to define standards?

- Talking
- "Good practice is..."
- "What is acceptable..."
- "What is unacceptable..."
- A level of detail rather than a level of generality
- Clear

1.8 Key questions in medical audit

- What do we do?
- Do we do what we think we do?
- What should we do?
- Are we doing what we should be doing?
- How can we improve what we do?
- Have we improved?

1.9 The audit cycle



1.10 Types of sampling

- Random sampling - using some form of random number generator.
- Systematic sampling – e.g.: every second patient.
- Stratified sampling - according to similar characteristics e.g. male.
- Cluster sampling – e.g. only 2 of 6 partners audited and results related to the whole practice.

2 List of Abbreviations

1.	ALOS	Average length of hospital stay
2.	LAMA	Left against medical advise
3.	PUO	Pyrexia of unknown origin
4.	ICU	Intensive care unit
5.	GW	general ward
6.	PICU	Peadiatric intensive care unit
7.	HAI	Hospital acquired infection
8.	OPD	Out patient department
9.	IPD	Inpatient department
10.	DM	Diabetes Mellitus
11.	ARF	Acute renal failure
12.	CRBSI	Catheter related blood stream infection
13.	COPD	Chronic obstructed pulmonary disease
14.	Approx.	Approximatly

3 Summary

Medical audit was conducted in the Medicine department of Sir Ganga Ram hospital.

The Medicine department of Sir Ganga Ram hospital comprises of three units and a separate chest clinic unit.

3.1 Scope of this project

- The study was conducted for the year of 2007
- The following parameters for patient care, in this department were studied in this report.
  - ✓ Bed allotment for the department
  - ✓ Number of free patients in the general OPD.
  - ✓ Number of admissions in the 3 units
  - ✓ Number of day care admissions
  - ✓ Number of LAMA in each unit
  - ✓ Average length of stay (ALOS) of the patients in each unit
  - ✓ Gross death rate
  - ✓ Net death rate
  - ✓ Causes of death
  - ✓ HAI
  - ✓ Antiobiotics resistance
  - ✓ Number of patients seen in specialty clinics like Rheumatoid arthritis clinic
  - ✓ Publications and conferences conducted by the department

3.2 Findings

- After close monitoring of the above parameters, it was found that only 24 of the 650 beds are allocated to the medicine department though the load is far more.
- All the three units are functioning efficiently in terms of seeing free patients in the OPD.
- The Unit II has the maximum number of IPD patients; due to more inter department reference and referrals from other hospitals.

- The ALOS for all units is approx. 6.5, which is far more than the ALOS for the whole hospital which is 3.5. This could be due to more sick patients getting admitted in the medicine department and since Sir Ganga Ram hospital is a tertiary medical center, they have more referral practice.

- The number of LAMA is not very high as Sir Ganga Ram hospital has a facility of transferring the patients from paying wards to non paying wards, in case the patient's bills rises high due to their long stay.

- The LAMA patients are generally terminally ill patients who do not find any advantage of staying in the hospital anymore and their attendants prefer to take them home.

- The antibiotic resistance is seen with
  - ✓ Staph aureus
  - ✓ Staph CNS
  - ✓ Enterococcus sp
  - ✓ Strep. Pneumoniae

  This could be due to injudicious use of antibiotics

- The academic level of consultants is very high in terms of international paper presentations. They are as follows
  - Gogia A, Kakkar A, Gupta PS. Skeletal tuberculosis mimicking seronegative spondyloarthropathy
  - Sureka RK, Sureka Rohit. Prevelance of epilepsy in rural Rajasthan – A door to door survey
  - Jain N, Duggal L, Malhotra S, Sharma A, Garg A. Pleural cryptococcosis in AIDS – unusual presentation
  - Gogia A, Kakar A, Sureka R, Byotra S, Prakash V. Alveolar hemorrhage in systemic lupus erythematosus.

- The gross death rate is higher than the whole hospital but lower than the ICCU.

4 Review of Literature

4.1 History of medical audit

McWhinney pointed out that interest in medical audit was first awakened in North America by the appalling condition in many American and Canadian Medical School. This was revealed by the Flexner report in 1910. First to act was the new American college of surgeon, which in 1916 recieved a grant to conduct a survey of the hospitals in USA & Canada.

The college was heavily influenced by earnest Codman – a pioneer of medical audit who founded his own hospital on the principles of out come evaluation. In Codman's hospital an abstract of every case was published and every patient discharged from the hospital was reviewed the enthusiastically emphasized the fact that the professional efficiency of the hospital could not be properly evaluated without good medical records.

According to Mac Eachern, it was in 1918 that George Gray Ward, a Gynaecologist Women's hospital in New York City, gave consideration to medical audit in a systematic review and analysis of all patient going through his service.

This was probably the first organized medical audit.

In 1928 Thomas R. Ponton, presented a plan called 'Professional service accounting' which is presently used by some institutions. The first step in this plan was to record the risk of each patient on admission.

A most successful plan of medical audit along these lines with some modification, has been carried on under the leadership of Frederic T. Hill, of Waterville, Maine. Hill, the then Medical Director of Thayer Hospital, has manifested distinctive leadership in this work.

The regular systematic and thorough review has been most effective in keeping the professional work on a high quality level and has also been of educational value for all medical staff members.

McWhinney adds that in 1952, the joint commission on accreditation of hospitals (JCAH) succeeded the American college of surgeons os the accrediting body. The work of college and (JCAH) has been a potent influence in raising hospital standard. In the last two decades, however, it has gradually been appreciated that the evaluation of the organization of hospital is not enough.The hospital may comply with all the standards requested for accreditation and yet may full short in the quality of care it provids. Hence the renewed interest in medical audit.

Abbott states that medical audit has gained increasing acceptance in recent years. The federal government of USA has esponged the medical audit concept and has mandated the performances of such audits. Implementation of the recently passed Medicare – Medicaid amendments of house resolution 1.- will help make the medical audit more prominent. The professional standards review organization section of P.L. 12 – 603 makes review of the quality of patients care just as important as review of costs.

The medical audits currently required by federal regulation.

(a) May examine either medical or administration aspects of patents case. (b) Are intended to be education in thrust, and (c) Should aim at benefiting patient care. In the future as professional standards review organization (PSRO) come into existence, the hospital will be required to develop professionally recognized standards regarding quality of hospital patient care and to review hospital records to determine the extent of professional compliance. The fact that exiting methods do not meet the need is indicated by Myer's statement that "no other organization (than the hospital) exist in which management is so truly frustrated and so ineffective because of its incapacity to judge the quality of its products.

4.2 Medical Records

Dodu emphasizes that the recording of medical information as a part and parcel of patient care is now accepted as an essential responsibility of practicing physician. In hospital this responsibility often on the junior doctor who is expected to provide a record of the complete 'work up' of the patient, but unless the senior physicians are themselves overtly interested in the quality care of records, there is a danger that this important, responsibility will be discharged only as a routine. When this happens, the completion of medical record becomes an irksome duty which is in accurately and incompletely executed and the record itself loses much of its value as a scientific document. Any future attempt to use record compiled in the way is likely to be a irritating and frustating adventure.

The medical record is of value to the patient, the physician and the hospital and for 'teaching and research' in the following way: -

1) As a complete personal medical history in present & future illnesses.
2) For the assessment of the quality and volume of work done both by doctor and hospital as a whole.
3) As a legal document for medic-legal needs of patient, physician and hospital.
4) As a source of medical information for the education and training of medical staff.
5) As a scientific document to guide teaching and for research.

The quality of medical record reflets the quality of patient care and since the main objective of good medical practice is to provide a high standard of care, it is evitable that the physician should assume the primary responsibility for the quality of medical record complied on patient under his care.

By "auditing" the completed case records complied on patient, it is possible to access a physician's contribution to the care of his patients and to draw conclusions on the quality of that contribution. Medical auditing thus provides an additional incentive to good medical care which in turn improves the quality of medical record.

Dodu suggests that one way of improving the accuracy and completeness of record is by increasing the motivation of young doctor for writing good record. This can be achieved by using the currant medical record at staff meetings and mortality conferences, which provides immediate feed back to the physician on the quality and volume of his records. It is also likely to heighten its motivation for improving the quality of his documentation because he can see that his efforts are not merily being stored away but are actually being used in a practical way to improve by educating the physician to appreciate the necessity and value of medical record according is medical audit.

4.3 Failure & Success in Audit

Capstick goes on to answering a querry. What does one do with a doctor who fails the audit? The answer is to educate or reeducate him and reassess him. Together with the better care records of hospital patients, it is hospital doctor and hospital medicines which are more in need of assessment and audit.

Acceptance of medical audit as part of doctor continuing professional responsibility would be easier if we were all highly motivated and prepared to carry out self evaluation.

Morehead writes, that the two major question that arises when studies of quality of medical care considered are, “what is quality medical care?” and how can it be adequately measured?”.

One excellent definition of case has been given by Esselstyne : “standards of quality of care should be based on the degree to which this case is available, acceptable, comprehensive, continous and documented as well as on the extent to which adequate therapy is based on accurate diagnosis and not on symptomalogy”.

4.4 Criteria construction

Payne writes that the practice of medicine has always required a physician to construct his observation of patient in a system of differential diagnosis. One of these diagnosis – the one selected – enables the physician to make the best sense of his observation – for diagnostic purposes, as a guide to therapeutic management and as an indication of when medical care can be terminated in making his diagnosis and treatment plan, the physician has compared his findings with criteria he has developed as a result of his training and experience, and as modified by his professional interests and competencies.

The same type of comparison between observation and criteria is seen in the functioning of medical staff committees charged with evaluating patient care, such as tissue committee, medical record committee, and utilization committee. In this case, the committee acts to pool the criteria of its members in arriving at decisions. The exactness of criteria varies, from diagnoses to diagnosis depending in large part on the body of knowledge available with in each diagnosis.

The criteria is no sence represent a 'final' statement in evaluating patient care or appropriateness of hospital use, rather they represent a consensus of opinions of team of clinicians.

4.5 Utilization review

Payne lists 6 steps in the methodology of utilization review.

1. Criteria development
2. Selection of cases with in diagnosis
3. Work sheet preparation
4. Care evaluation
5. Tabulation of evaluation
6. Presentation of reports

JACH - Recommendation

JCAH follows retrospective medical audit to evaluate the hospitals.

Medical care evaluation conducted by medical staff is a condition of accreditation. Hospitals that donot sufficiently demonstrate an acceptable method of conducting retrospective medical audit can expect to receive a less favourable accreditation decision until such time as an acceptable system implemented.

4.6 Indian View

Park J.E pointed out that the increasing demand for medical and health care services in the face of limited resources, has brought out the need for careful planning and management of health service. Planning and management our considered essential if higher standards of health and health care are to be achieved.

Planning includes: -

1) Plan formulation
2) Execution
3) Evaluation

In a study by Timmappaya A and Ramaah I J. it is pointed out that there exits wide variation in average length of stay between Various Hospitals in Delhi and Various specialties in same hospital.

Mudaliar committee has rightly emphasized the need for medical audit. It says that in our country medical audit is a new concept. It should be encouraged in every hospital. It is review of the professional work in the hospital that could take place whuneve medical staff meets to analyse the hospitals clinical work.

Medical audit throws the light on: -

1) Standard of administration of hospital.
2) Inadequatly equipped physical plant
3) Lack of essential services needed to support care for patients
4) Lack of competent personnel for proper supervision of patients
5) Deficient personal policies effecting morale

The medical audit can be conducted by specialist in medical audit or by committee, representing the major clinical service. The members of committee should look at the medical record room evaluate the results and be well informed on the work going on in hospital.

The following items should be looked after in medical audit: -

1) The average bed occupancy
2) The average length of stay
3) The gross results of patient care
4) The death late
5) Consultation
6) Infection
7) Complication in clean surgical, obstetric and medical cases
8) Unnecessary and incompetent surgerg
9) Autopsy rate
10) Staff conferences

Joshi pointed out that a bold and progressive step in this respect has been taken by the past Union Minister for health, Govt. of India announcing that “Medical audit will be introduced in every hospital”. Adopting medical audit in the evaluation of care is the regulatory function of the hospital administration and those providing the care. The impetus should come from the medical staff itself as they are progressive, scientific group. of people always looking for never way of care.

Inaugurating the eight meeting of the council of common wealth medical association and common wealth scientific meet at N. Delhi 5th Dec. 1976 Dr. Karan Singh Union

Minister for health and family planning said that there was a need for restructuring of our entire health system of integrating medical colleges.

In short, it can be said from the foregoing that need for continuing education is appreciated. It is recognized that there are sensitive areas in medical practice and that the difficulties inherent in medical audit all region, but the medical profession cannot neglect a responsibility for continual striving for excellence inpatient care.

Now the time how come when our records and information system should be of highest standards and the benefit will be immense. The more the doctor has the information about his own working method and the out come of his action, the greater his self knowledge will be. The more opportunities he will have for identifying and remedying his own short comings.

There for, medical audit need not be feared as a mean of curtailing clinicians rights to practice, rather it can be better be looked as a weapon in the hands of doctor to make the health services more efficient.

5 Profile of Organization

Sir Ganga Ram Hospital is a 650-bed multi-specialty state-of-the-art hospital in Delhi. It provides comprehensive health care services, and has acquired the status of a premier medical institution. It is the only hospital in the private sector that has maintained nearly 100% bed occupancy due to its reputation of providing the highest level of medical services to patients from Delhi and neighboring states.

The hospital was founded initially in 1921 at Lahore by Sir Ganga Ram (1851-1927), a civil engineer and leading philanthropist of his times. After the partition in 1947, the present hospital was established in New Delhi on a plot of land approximately11 acres. The foundation was laid in April 1951 by the then Prime Minister of India Shri Jawahar Lal Nehru and inaugurated by him on 13 April 1954.

Sir Ganga Ram Hospital in New Delhi continues to maintain its charitable character in accordance with to the wishes of its founder. Funds generated from the hospital services are partially utilized for providing free health care to the poor and needy patients. All development activities of the hospital are financed from internal resources, with no financial assistance provided by the government or other external agencies.

The hospital is governed by a Board of Management comprising medical consultants of eminence, some with an international standing. The Board of Management operates under the overall guidance of the Sir Ganga Ram Trust Society of which Dr. Bharat Ram, an eminent industrialist is the current chairman.

The Sir Ganga Ram Hospital is committed to make available 20% beds of total strength for admission of indigenous and financially weaker section of the society. On these beds all facilities (boarding, lodging, investigations, medicine and operative procedures are free.

In addition to that we are running regular OPDs for all disciplines where patients are seen free of charge.

40% of all the investigations in the OPD, are free of charge. These facilities are provided strictly on a first-come first served basis.

5.1 Department of Medicine

The department of Medicine initially covered all specialties till super-specialties like Gastroenterology and Nephrology were created, to which Neurology was added and are now working as full fledged departments. The department continues to have specialties such as Oncology, Respiratory and Sleep Medicine and Endocrinology. It has consultants who are capable of diagnosing and treating complicated medical problem in the fields of diabetes and endocrinology, rheumatology, pulmonology, clinical hematology, medical oncology, infectious diseases, HIV and AIDS and primary immunological disorders.

Rheumatology

A consultant of the department runs a rheumatology OPD with advanced laboratory back-up geared to diagnose and treat rheumatological problems such as rheumatoid arthritis, systemic lupus "hematosus, progressive systemic sclerosis, sero negative spondyloarthropathy etc. Joint aspirations and intra articular injections are given on an out patient basis. A large number of patients are on disease modifying antirheumatic drugs (DMARDS) with good results.

HIV & AIDS

HIV positive and AIDS patients are treated in the hospital. ELISA (by three different assays) CD4 counts and viral loads are available for diagnosis, managing opportunistic infections and instituting antiretroviral therapy. The department has a consultant on the panel of National AIDS Control Organization for national guidelines for anfiretroviral therapy.

Clinical Haematology

The department of haematology is experienced in diagnosing and managing various blood disorders including nutritional and haemolytic anaemias, haemoglobin disorders (haemoglobinopathies), myelodysplastic syndromes, bleeding and clotting

disorders. Bone marrow aspirations and biopsies are being routinely carried out at the bed side. Clinical haematology is backed by haematology laboratory.

Pulmonology

The department of Pulmonology has a senior pulmonologist with his team. It is equipped with the latest machines to carry out various pulmonary function tests and has expertise in giving respiratory support with different modes and equipment. Fibreoptic bronchoseopy and transbronchial biopies are also done.

Sleep Medicine

The department of Sleep Medicine is equipped with a two-bed sleep centre with a polysomnographic machine. Investigations and management of patients suffering from sleep apnoea syndrome and other sleep disorders are carried out.

Intensive Care

Since time is crucial for patients with life threatening infections (septicaemia), the department has a back-up of microbiology with its rapid diagnostic culture, techniques (BacT/Alert) which help in the management of patients. Sick patients are treated in the ICU where there are critical care specialists (including anaesthetists) who coordinate with the medicine department utilising state of the art equipment such as respirators, cardiac monitors, pulse oximeters and defibrillators. Assessment of patients and their efficient monitoring is done with advanced blood gas analysers.

Teaching / DNB

The department runs an active teaching programme for the Diplomate National Board postgraduates. All consultants of the Department of Internal Medicine as well as of allied specialities participate actively in the teaching activities. In the post graduate teaching programme the emphasis is on training in services, besides this, regular clinical demonstrations are conducted. Every week clinical meetings and journal review meetings are held alternately. At a given time, there are six postgraduate students in medicine and there is high success rate in the final Diplomate National Board Examination.

Faculty (as in 2007)

Chairman: Dr. K. P. Jain

Co-chairman: Dr. S.P. Byotra

Teaching Coordinator: Dr. P. S. Gupta

Unit 1

- Dr. V.P. Sachhar
- Dr. Lalit Duggal
- Dr. Neeraj Jain
- Dr. Atul Gogia

Unit II

- Dr. Ved Prakash
- Dr. S.P. Byotra
- Dr. Atul Kakkar

Unit III

- Dr. K.P Jain
- Dr. Sunil Jain
- Dr. P.K Aggarwal
- Dr. Puja Khosla

6 Methodology

6.1 Objectives

- To conduct a medical audit in the department of medicine at Sir Ganga Ram Hospital for the year 2007.

- To identify the measures for adequate patient care practices by viewing various parameters.

- To develop norms of adequate medical care and test the flexibility of their implementation by the medical and other staff and access its impact on the quality of medical care.

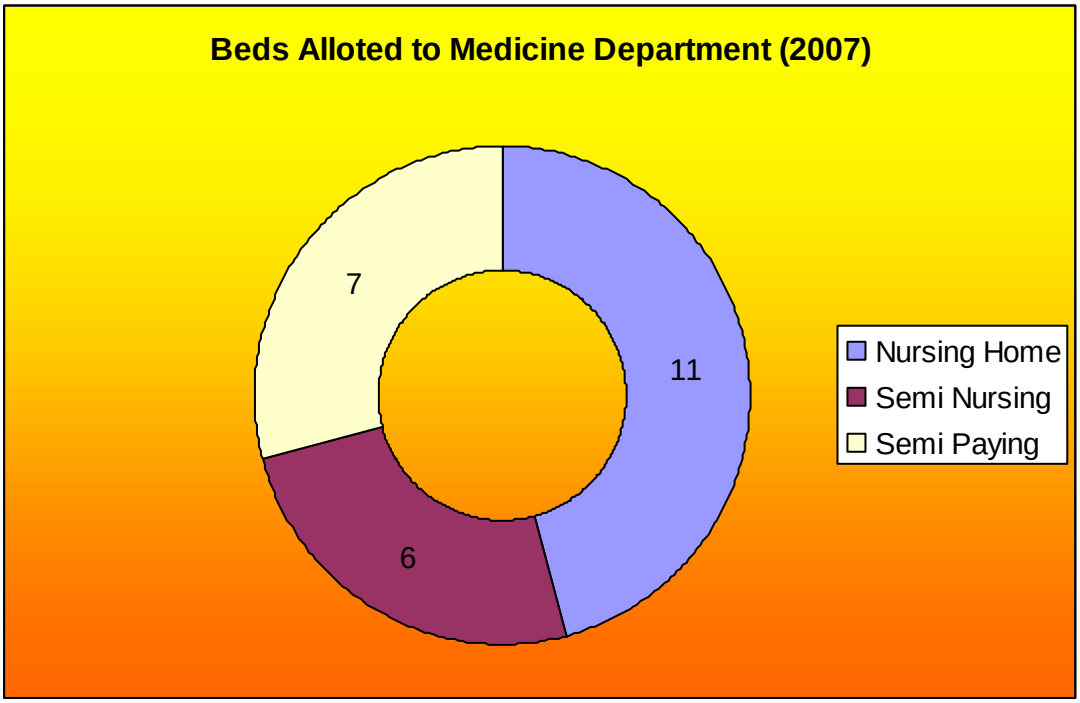
This project was undertaken under the supervision of Dr.Byotra, the Chairman of Medicine department, Sir Ganga Ram Hospital.

The medical audit was conducted retrospectively by viewing medical records for the year 2007 for following parameters.

- ✓ Bed allotment for the department
- ✓ Number of free patients in the general OPD.
- ✓ Number of admissions in the 3 units
- ✓ Number of day care admissions
- ✓ Number of LAMA in each unit
- ✓ Average length of stay (ALOS) of the patients in each unit
- ✓ Gross death rate
- ✓ Net death rate
- ✓ HAI
- ✓ Antibiotics resistance
- ✓ Number of patients seen in specialty clinics like Rheumatoid arthritis clinic
- ✓ Number of conferences conducted by the department

7 Findings and Inferences

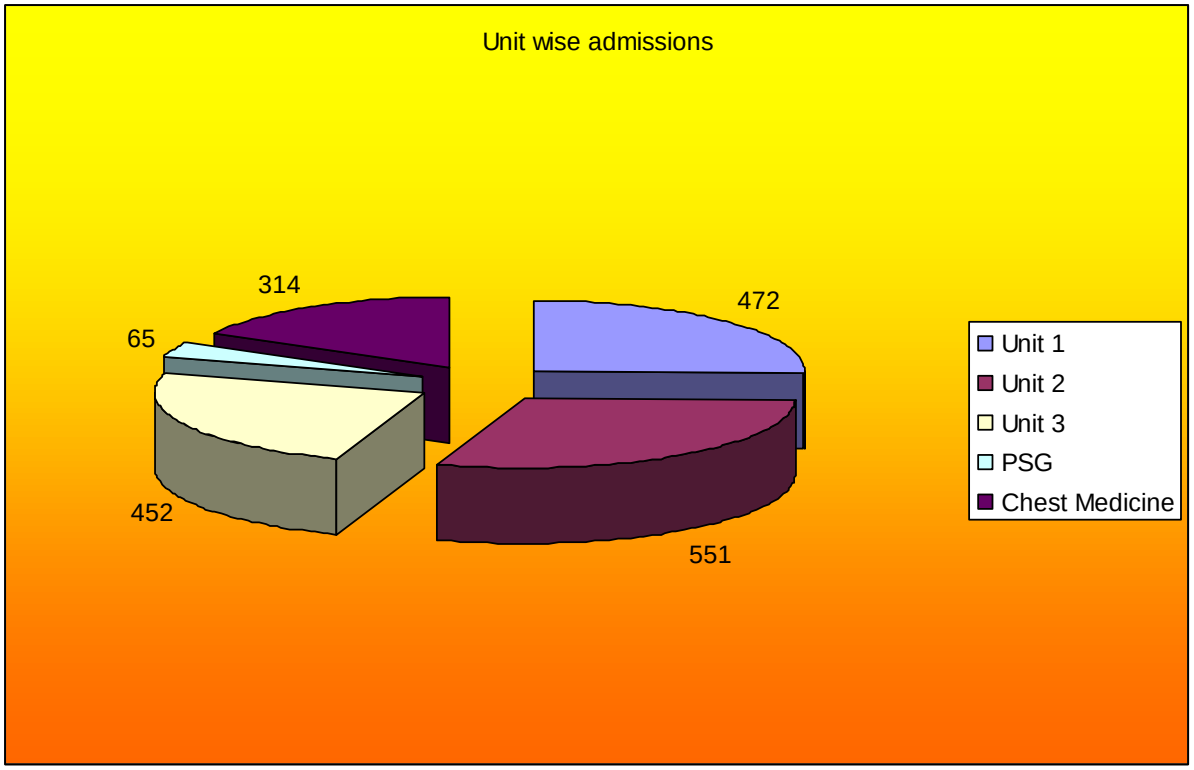
7.1 Bed Allotment



Inferences

- After close monitoring of the above parameters, it was found that only 24 of the 650 beds are allocated to the medicine department though the load is far more.
- The bed occupancy rate for the medicine department is 104 and the ideal is 90 – 95%
- The patients are refused from the emergency room due to non availability of beds. This leads to the under utilization of the potential of the consultants working in the department.

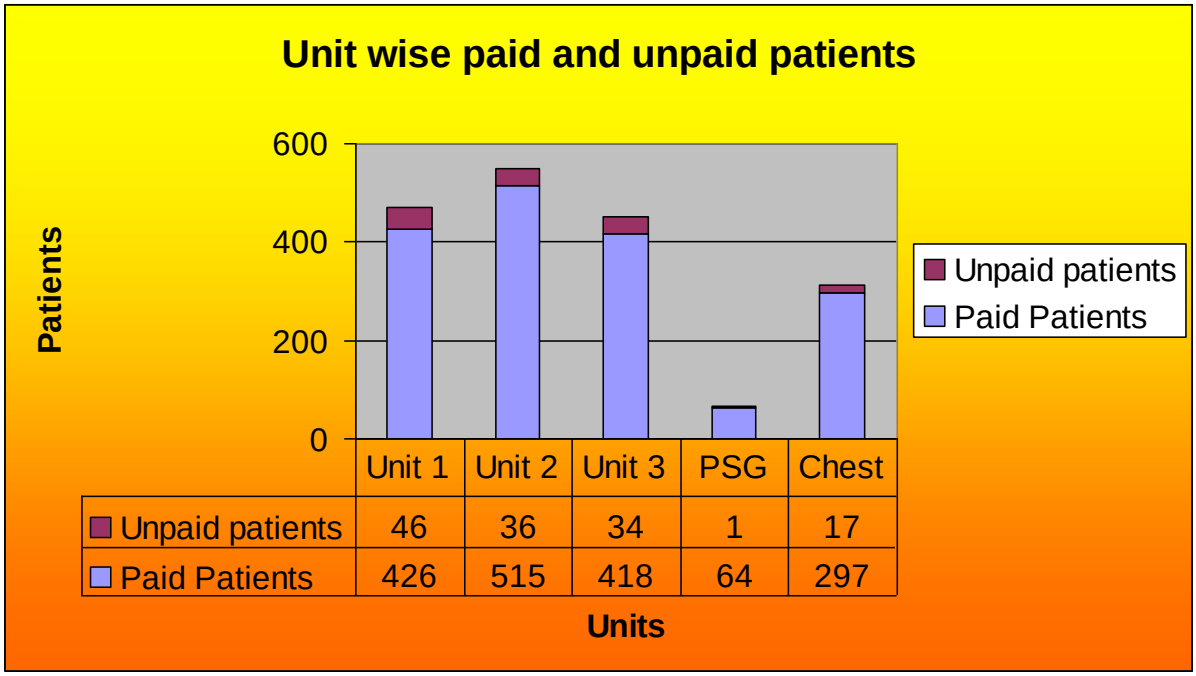
7.2 Unit wise admissions



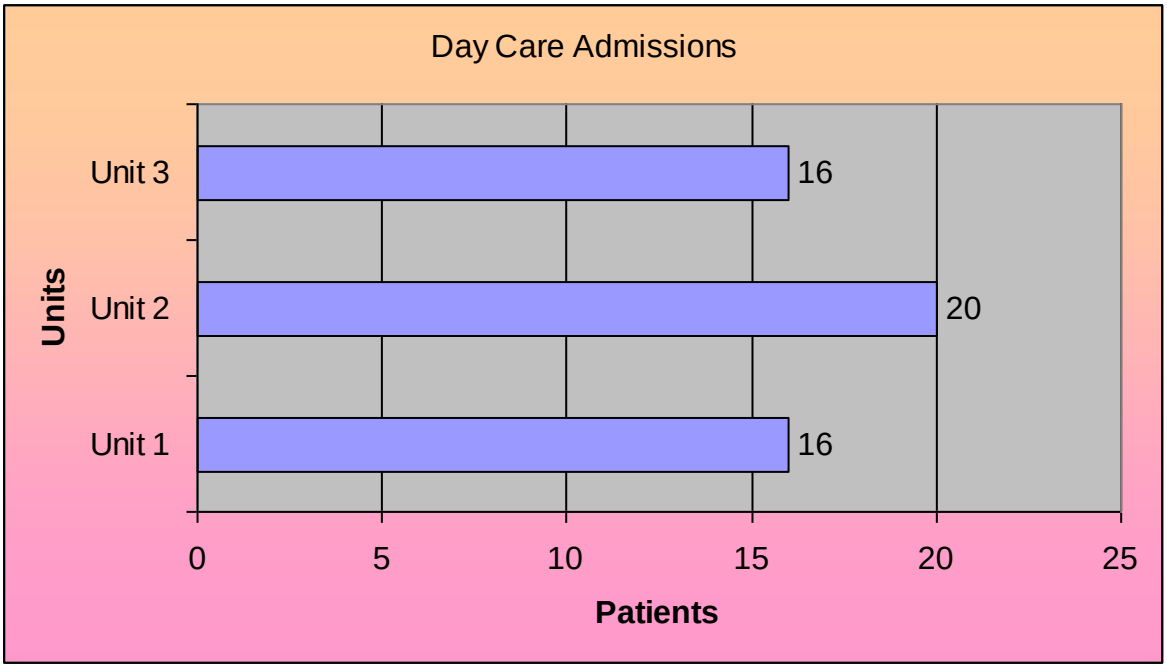
Inferences

- The Unit II has the maximum number of IPD patients; due to more inter department reference and referrals from other hospitals.
- The patient satisfaction rate may be higher as compared to others

7.3 Paid Unpaid



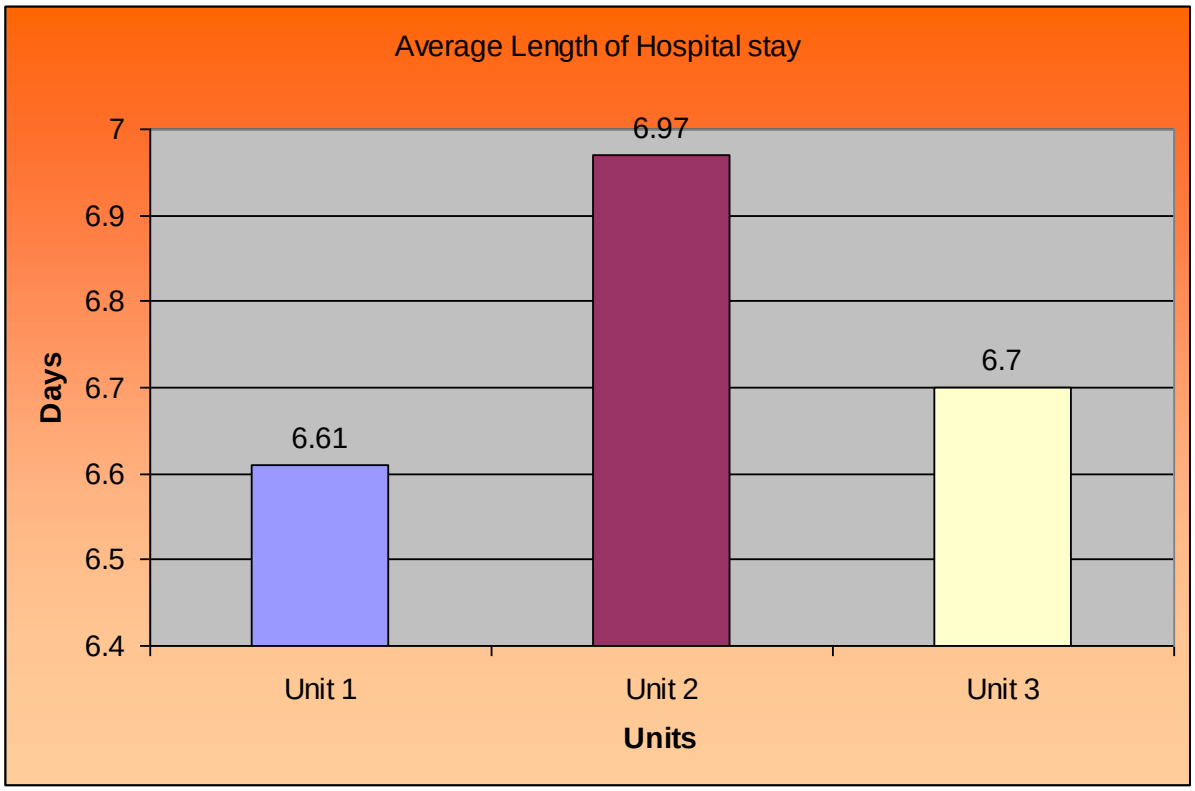
7.4 Day care admissions



Inferences

- The day care admission seems to be less as compared to surgical specialties due to
    - Diagnosis and treatments varies with the patient disease. i.e. as most of the patients are sick at the time of admission which results in longer stay for recovery.
    - Insurance companies do not support day care facilities
    - Mainly patients are admitted with PUO ,it takes time to investigate and come to final diagnosis.

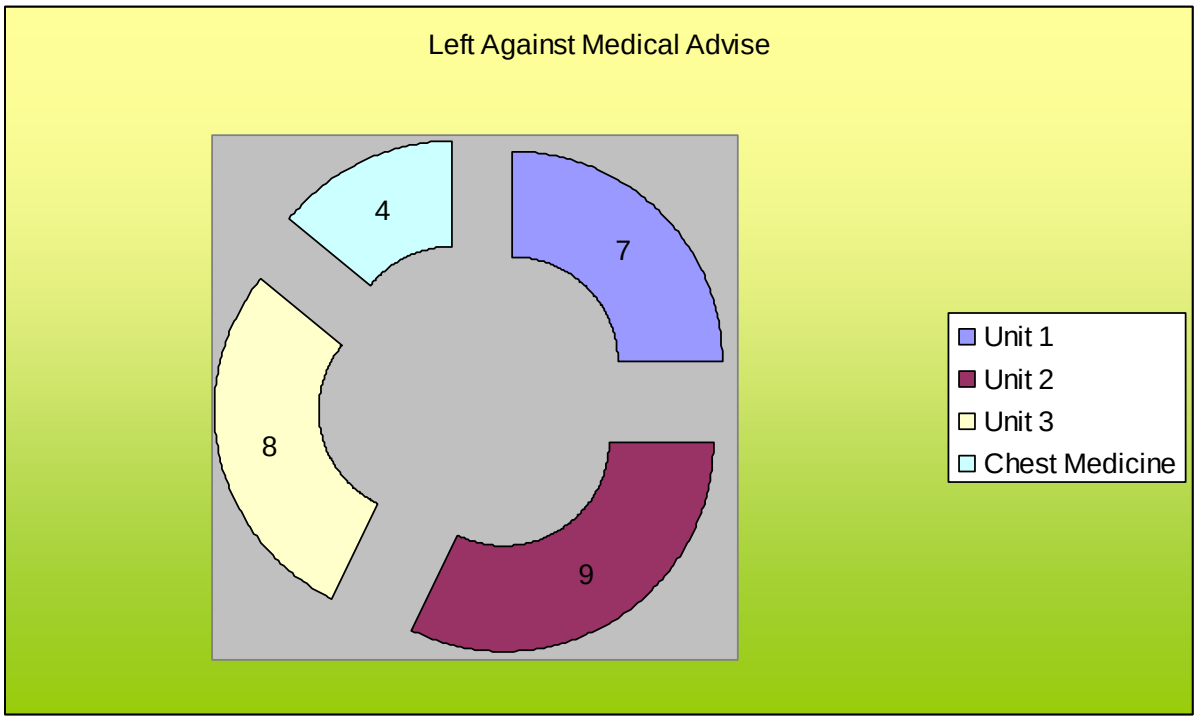
7.5 ALOS



Inferences

- The ALOS for all units is approximately 6.5, which is far more than the ALOS for the whole hospital which is 3.5. This could be due to more sick patients getting admitted in the medicine department and since Sir Ganga Ram hospital is a tertiary medical center, they have more referral practice.
- The ALOS should be as short as possible due to
    - Less financial burden on the patient
    - Better usage of the hospital resources
    - In order to decrease the HAI

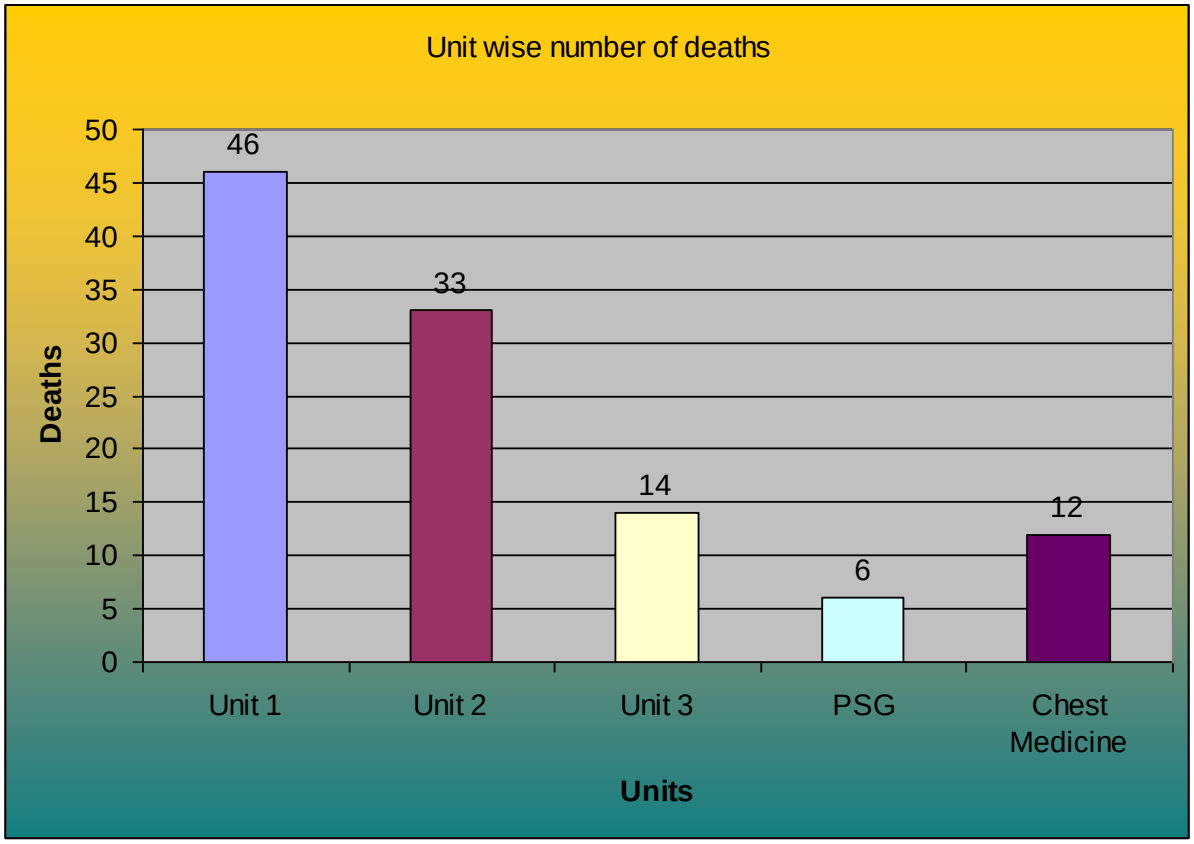
7.6 LAMA



Inferences

- The number of LAMA is not very high as Sir Ganga Ram hospital has a facility of transferring the patients from paying wards to non paying wards, in case the patient's bills rises high due to their long stay.
- The LAMA patients are generally terminally ill patients who do not find any advantage of staying in the hospital anymore and their attendants prefer to take them home.

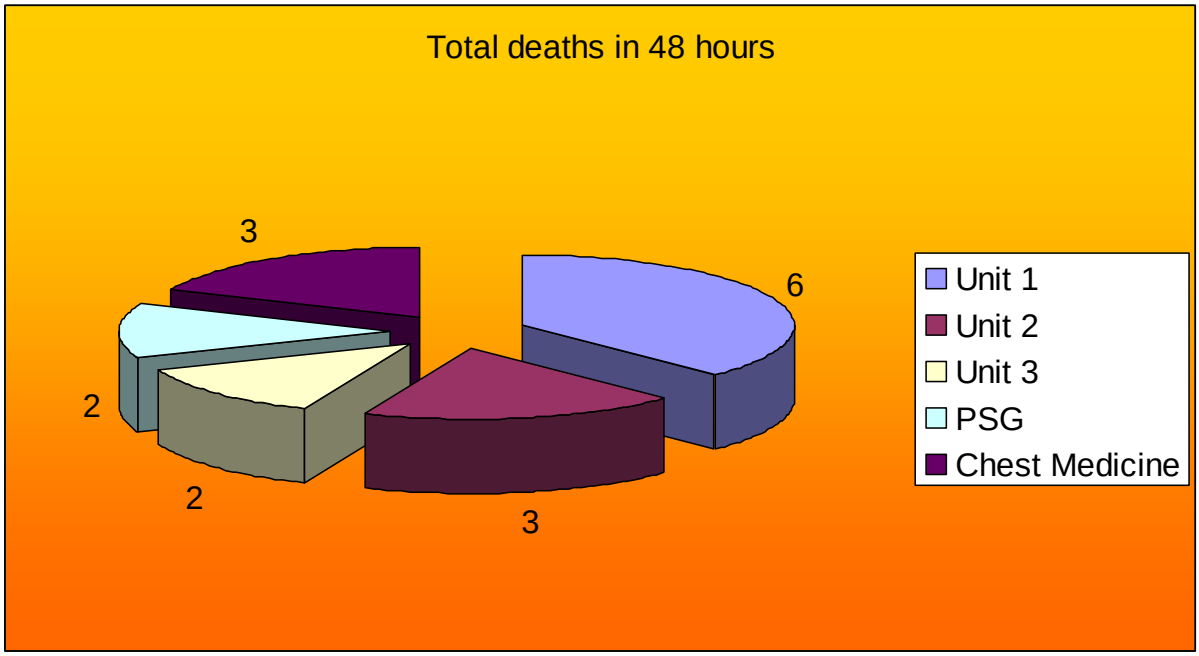
7.7 Gross deaths



Inferences

- Unit 1 seems to have higher death which could be due to
  - More terminally ill patients being admitted
  - More critically ill patients
  - Inter department transfer of critically ill patients leading to increase in the death rate

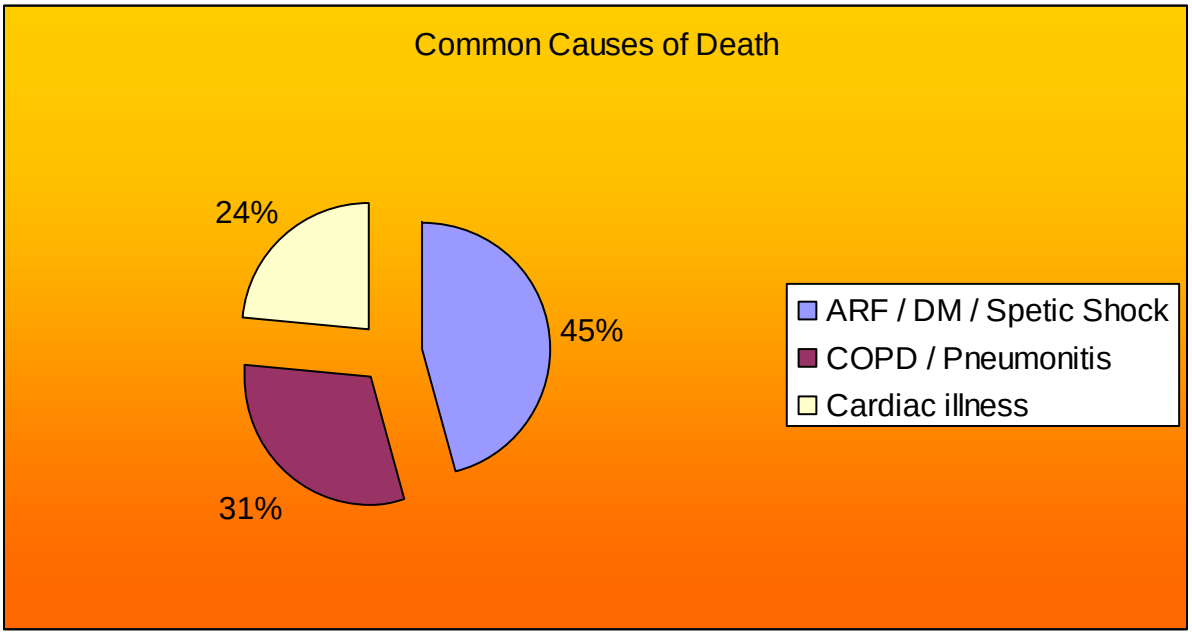
7.8 Net deaths in 48 hours



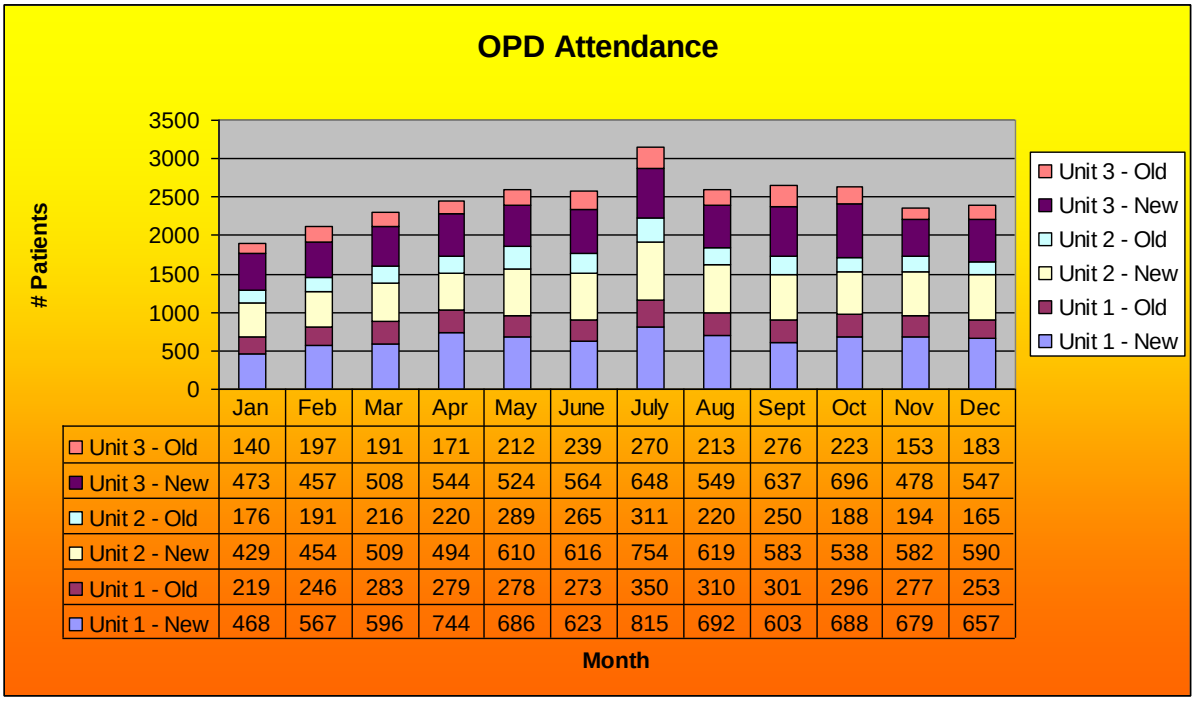
Inferences

- The net death rate is higher than the whole hospital but lower than the ICCU, could be due to more terminally ill patients get admitted in ICU from various referrals.

7.9 Cause of deaths



7.10 Patients in the OPD

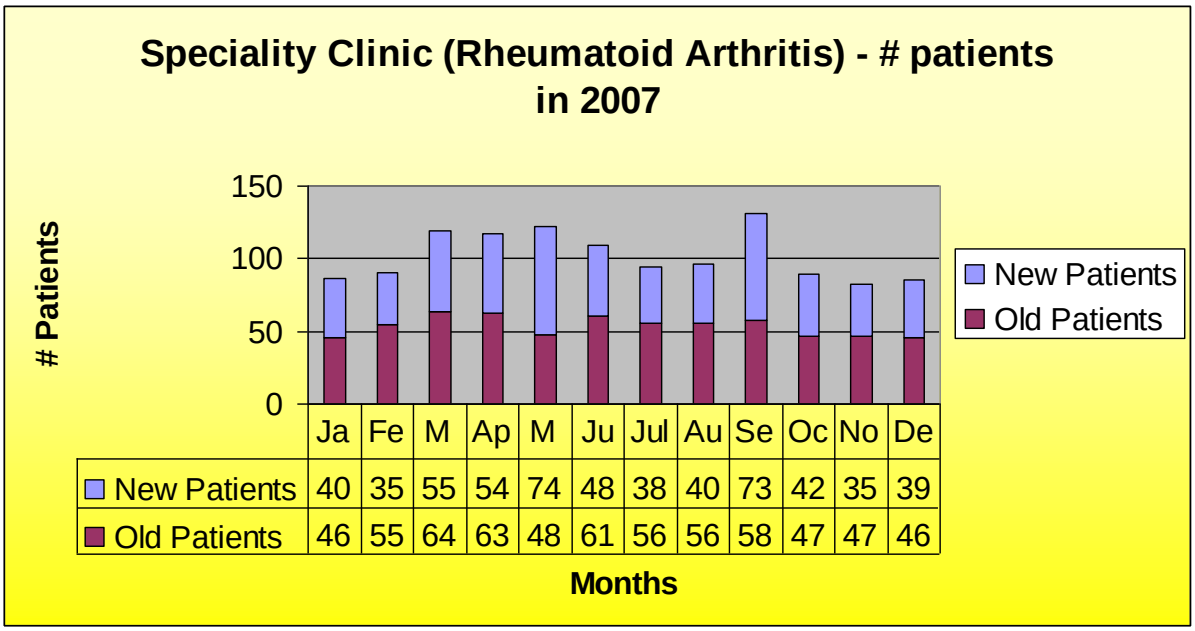


	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Unit 3 - Old	140	197	191	171	212	239	270	213	276	223	153	183
Unit 3 - New	473	457	508	544	524	564	648	549	637	696	478	547
Unit 2 - Old	176	191	216	220	289	265	311	220	250	188	194	165
Unit 2 - New	429	454	509	494	610	616	754	619	583	538	582	590
Unit 1 - Old	219	246	283	279	278	273	350	310	301	296	277	253
Unit 1 - New	468	567	596	744	686	623	815	692	603	688	679	657

Inferences

- All the three units are functioning efficiently in terms of seeing free patients in the OPD.

7.11 Speciality Clinic (Rheumatoid Arthritis)



	Ja	Fe	M	Ap	M	Ju	Jul	Au	Se	Oc	No	De
New Patients	40	35	55	54	74	48	38	40	73	42	35	39
Old Patients	46	55	64	63	48	61	56	56	58	47	47	46

Inferences

- Good number of patients are seen by specialists in the specialty units.

7.12 Antibiotic resistance

- The antibiotic resistance is seen with
  - ✓ Staph aureus
  - ✓ Staph CNS
  - ✓ Enterococcus sp
  - ✓ Strep. Pneumoniae

  This could be due to injudicious use of antibiotics

HAI (Hospital Acquired infection)

Location	CRBSI/1000 catheter days
ICU	7.978
ICU GW	7.518
Wards	0
PICU	8.62

7.13 Academics and Publications

Some of their publications are

- Gogia A, Kakkar A, Gupta PS. Skeletal tuberculosis mimicking seronegative spondyloarthropathy. JAPI 2007
- Sureka RK, Sureka Rohit. Prevelance of epilepsy in rural Rajasthan – A door to door survey. JAPI 2007
- Jain N, Duggal L, Malhotra S, Sharma A, Garg A. Pleural cryptococcosis in AIDS – unusual presentation. Respiratory Medicine
- Gogia A, Kakar A, Sureka R, Byotra S, Prakash V. Alveolar hemorrhage in systemic lupus erythematosus. APLAR Journal of Rheumatology

Conferences

A conference 19th Medicine Update (8th and 9th Feb 2007) was held.

8 Recommendations

- Board of Directors of Sir Gangaram Hospital should be requested to increase no. of beds for the department of medicine so that none of the patient is refused treatment on the basis of non availability of beds.
- Full potential of consultants can be utilized by providing them enough work all through the day.
- Patients come with faith in Gangaram hospital, would not like to be admitted in other hospitals so provision for increasing no. of beds should be taken seriously.
- Injudicious use of antibiotics should be discouraged so that antibiotic resistance can be prevented.
- Daycare wards should be constructed near emergency room so that patients coming with minor illness like diarrhea & dysentery can be taken care there & then and can be discharged the same day.
- Insurance companies should be encouraged to pass claim of genuine daycare patients.
- More no. of speciality clinics like Geriatric should be opened so that old age patients are not neglected.
- A specially designed ward for terminally ill patients should be proposed so that end care could also be provided in hospitals and patients need not go LAMA.
- ALOS should also be tried to reduse so as to decrease financial burden on patients as well as to reduse hospital aquired infection rate.
- Education training and research work should be encouraged at all levels.

9 Bibliography

1. Abbott JA; “The role of Medical audit in assessing management of alcoholic with acute pancreatitis”.
   Or. J. Stud. or Alchol. 35; 212 – 6 March 74.
2. “Hands off port graduate centers” Br. Med. J. Vol. 2 No. 5813 June 3. 1972.
3. Baslow Leonaed, “The cause and effect of good public Relation”. Hospital JAHA, Feb 16, 1964, Vol. 38.
4. Capstick Ian; “Need for pilot studies in general practice. BMJ. 1. 278 – 9, 16 Feb 1974.
5. Davidson R.C. et. al, Quality assurance in provision of hospital care. Hospitals, 48 : 58 – 8, 1 March 1974.
6. Davidson Stanely, The Principals and Practice of Medicines E and S. Living Stone Ltd. E.L.B.S. 1965 PP. 28-33.
7. Doler SRA; “Requirement of Medical records the clinician point of view. W.H.O /H.S/NAT. COM/ 70.259 PP. 2 – 6.
8. Dugdale A.E : A method of assessing hospital efficiency. Medical Journal of Australia. 1087 – 91 – 5 Dec. 70.
9. Dutton CB, et al; “Ambulatory health care” New York state J. Medicine, Vol. 74 No. 9 PP. 1545 – 50, Aug. 74.
10. Editorial : Towards Medical Audit Br. M.J.1: 255 – 7, 16 Feb 74.
11. Hugh Dudley ; Necessity for surgical audit. BMZ. 1: 275 – 7 16 Feb 1974.
12. Joshi H.B. Medical audit and its limitation Hospital Administration Vol. 8, No. 1 March 1977 PP. 78.
13. Koos El ; “Metropolis – What city people think of their medical service”?. AJPH 45 : 1541 – 50, Dec. 1955.
14. Lawson J.S. “The evaluation of evaluation in medical administration”. Med. J – Aunt. 2 : 586 – 8, 11 Sep. 1971.
15. Letter – Medical Audit
    BMJ. 1 : 388 – 9 2nd March 1974.
16. Mac Eachesn MT ; Hospital organization and management. 1982, physician’s record company. Berwyn, Illionis PP. 198 – 209.
17. Medical Audit Work sheet, Manual for medical record librarian, physician record company, Illinois PP. 177.
18. Mudalian committee report of the “Health survey and planning committee” Vol. 1, 1959 – 61 PP. 86 – 87.
19. Naish JM ; Letter medical audit BMJ. 1, 514 – 15 16 March 1974.
20. Payne BC “ Continued evaluation of a system of medical care appraisal. JAMA Vol. 201, No. 7. Aug. 14, 1967.

21. Payne BC ; " Function of Audit committee in general hospital. Hospital". Vol. 1. 37 ; 63 Dec. 1. 1963.
22. Timmappaya A, 'Medical Audit' XV course on hospital administration NI H A E PP. 1 – 8.
23. Timmappaya A & Ramaiah, "Utilization of service in four general hospital in Delhi". Vol. II, No. 3. 1969. NIHAE Bulletin.
24. Weed Lawrence L ; "Quality control and medical record" Archirers of internal medicine. Vol. 127, Jan 1971, PP. 101 – 105.
25. John R. MC Gibony " Quality of care – medical audit". Page 177 – 193 – 1979.