Summer Training at
Kokilaben Dhirubhai Ambani Hospital and Medical Research Institute
(April 1–May 31, 2014)

- **To do Growth Analysis and Plan Marketing Strategy for the Cosmetology Department**
- **Streamlining on in-Patient Pharmacy Department**
- **To Check Compliance of Phlebotomy Procedure**
- **Closed File Audit of M.R.D.**

By
Priya

Under the guidance of
Col. (Dr.) Ashok Kaushik

MBA- Hospital & Health Management (MBA-HM)
2013-2015

The IIHMR University, Jaipur
2014

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CERTIFICATE

This is to certify that **Dr. Priya** has undergone her summer training in **Kokilaben Dhirubhai Ambani Hospital, Mumbai** from 1st April, 2014 to 31st May, 2014.The candidate herself carried out below mentioned studies related to her summer training. Her approach to the study has been scientific and analytical.

Studies are:-

1. To do growth analysis and plan marketing strategy for the cosmetology department.
2. Streamlining of in-patient pharmacy department.
3. To check compliance of phlebotomy procedure.
4. Closed File Audit of M.R.D.

The summer training is partial fulfilment of the course requirement recommended for the award of Post Graduate Diploma in Hospital and Health Management.

I wish her success in all her future endeavours.

Col. (Dr.) Ashok Kaushik

Dean (Academic & Student Affairs)

IIHMR Jaipur

Kokilaben Dhirubhai Ambani
hospital & medical research institute

Every Life Matters

30 May, 2014.

To Whom It May Concern.

Dr Priya, a First Year student of the Post Graduate Diploma in Hospital Administration at The Institute Of Health Management Research in Jaipur, India did her Summer Internship for 2 months at The Kokilaben Dhirubhai Ambani Hospital, Mumbai, India from 1st April, 2014 to 30th May, 2014.

I found her to be a meticulous and hard working student who did good quality work.

She will go a long way in her career in the Hospital Industry and would be an asset to any Organization.

I wish her all the very best in the future.

Yours Sincerely,

Dr Ram Narain,

Executive Director.

KOKILABEN DHIRUBHAI AMBANI HOSPITAL MUMBAI

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Acknowledgements:

With immense pleasure I express my heartful gratitude to the Director of IIHMR Jaipur, Dr.S.D.Gupta and Dean, and my mentor Col. (Dr.) Ashok Kaushik for having given me this opportunity to undergo training.

I am extremely indebted to all the professionals at Kokilaben Dhirubhai Ambani Hospital (KDAH)for sharing generously their knowledge and precious time which inspired me to do best during summer training .I owe a great debt to chief executive officer (KDAH) for providing me an opportunity to work as a training in their organization. I would like to thank Dr. Md.Faisal Pervez (senior manager, clinical administration), mentor for the summer training in KDAH, without whose help it would not have been possible for me to understand the hospital to the extent as I have now. I am highly grateful to all the staff of cosmetology department for their cooperation which enabled me to complete my special assignment in the department.

I am also grateful to all the department heads and staffs for giving me time in spite of their hectic schedule .Without their active cooperation and participation it would not have been possible to accomplish my task.

Table of Contents: **Page no.**

Acronyms/Abbreviations:

- **A&E - Accident and Emergency**
- **DAMA -Discharge Against Medical Advice**
- **HCA -Health Care Assistant**
- **ALOS -Average Length Of Stay**
- **CMD – Chief Medical Director**
- **COO – Chief Operating Officer**
- **CGHS – central Government Health Scheme**
- **CSSD – Central Sterile and Supply Department**
- **CT – Computerized Tomography**
- **ECG – Electro Cardiogram**
- **TMT – Treadmill Test**
- **EEG – Electro Encephalography**
- **EMG – Electro Myo Graphy**
- **FMO – Front Office Manager**
- **FOE – Front Office Executive**
- **HOD – Head Of Department**
- **HRD – Human Resources Department**
- **ICU – Intensive Care Unit**
- **IPD – In-patient Department**
- **KDAH – Kokilaben Dhirubhai Ambani Hospital**
- **MRD – Medical Records Department**
- **MLC – Medico Legal Case**
- **NICU – Neonatal Intensive Care Unit**
- **OPD – Out Patient Department**

Executive summary

The Post Graduate Diploma in Health and Hospital Management (PGDHM) program of Institute of Health management Research (IIHMR) aims at preparing professionally trained managers of health care organizations and hospitals to meet the increasing need for managerial skill. It involves a eight week summer placement for the first year students to provide them with a firsthand experience of the hospital system or environment. As a part of the program I had the privilege to undergo my practical training at Kokilaben Dhirubhai Ambani Hospital, Mumbai to get a firsthand knowledge and experience about the functioning of the hospital. I worked all through under the operations team there from 1st April 2014 to 31st May 2014. The main aim of the summer training was to get exposed to operation of all the hospital in general, and an in-depth insight of the Third Party Administrator, Pharmacy, medical Record Department and Laboratory in the hospital in particular.

Objective:

The summer training program had the following objectives:

- To have a basic orientation of the hospital set up.
- To study the functioning of the hospital as a system and its departments as subsystems of the hospital.
- To observe the entire department in terms of their location, work plan and staffing pattern.
- To study about the staffing pattern and job responsibility of staff.
- Doing a project which is helpful to me in understanding hospital working in a better way and to the organization.

Method of data collection:

The data collected was primary and secondary data.

Primary data was collected by:

- Personal observation during the summer training and department visits.
- Further information was gathered by discussion with the department heads and staff on the basis of unstructured interview.

Secondary data was collected from:

- The past records and hospital management information system (HMIS).

Profile of KDAH

The Institution

Kokilaben Dhirubhai Ambani Hospital & medical Research is India‟s newest, most advanced tertiary care facility. As the flagship social initiative of Anil Dhirubhai Ambani group, it is designed to raise India‟s global standing as a healthcare hub, with emphasis on excellence in clinical services, diagnostic facilities and research.

A vision to strength en healthcare in the communities we serve and empower patients to make informed choices was at the genesis of Kokilaben Dhirubhai Ambani Hospital &Medical Research Institute.

Inaugurated in January 2009, The Hospital is a significant CSR initiative from Reliance Anil Dhirubhai Ambani Group. It is designed to raise India‟s global standing as a healthcare hub, with emphasis on excellence in clinical services, diagnostic facilities and research activities.

It is the only hospital in Mumbai to function with a FULL TIME SPECIALIST SYSTEM that ensures the availability and access to the best medical talent around-the-clock. The 900-bed hospital has over 103 full-time doctors, 520 nurses and about 200 paramedical and growing.

It represents a confluence of top-notch talent, cutting edge technology, state of art infrastructure and most important, commitment .KDAH offers doctors and patient‟s cutting edge diagnostic and surgical solutions as well as the latest in IT systems. In many cases, they represent the first of their kind in the region.

KDAH is fully geared in terms of talent ,technology, structure and spirit-to reshape perceptions regarding hospitals and redefine the concept of caring, Indeed, this globally benchmarked institution marks the beginning of a new era in Indian healthcare.

History

The hospital project was initiated in 1999 by Dr. Nitu Mandke as a large scale heart hospital. Dr. Nitu Mandke was born in 1948 in a middle class family. He was first in the family to choose medicine as a profession with a determination to become a heart surgeon.

He joined B.J. Medical College; Pune from where he passed his M.B.B.S in 1970 came to Mumbai for further studies and completed his super specialty course in Cardiovascular Surgery. He spent close to 8 years working with world renowned figures in cardiac surgery like Dr. Magdi Yacoub in England and Dr. Kirklin and Dr. Pacifico at the University of Alabama in the United states. He was an all-rounder with exemplary proficiency in sports, arts, languages, mathematics and so on.

In his lifetime he won the heart of many and repaired many more through unerring surgery. He won various social awards like : " The Rajiv Gandhi Gold Medal of merit " 1992 , " Indira Gandhi sadhbhawna Award " 1999, " Outstanding Man of the 20th Century " 2000 , " Pride of India"2001, " Sarvashri " Gold Medal 2000 and " Maharashtra Gaurav Award to name a few.

With great passion Dr. Mundke built a substantial portion of the hospital building. Sadly his dream was cut short by fate when he succumbed to a massive heart attack in May 2003 ; leaving a dream unfulfilled and unfinished.

The Management of Mandke Foundation approached Reliance ADA Group, who graciously took over this project and developed it into one of the most modern and state –of-the-art multispecialty tertiary care hospital; naming the institution as – Kokilaben Dhirubhai Ambani Hospital & Medical Research institute.

In honor of initiator, the hospital‟s Medical Convention Centre has been aptly dedicated to the memory of Dr. Nitu Mandke.

VISION

We aim to be a global healthcare institution that combines the best in medical treatment with strong ethical principles and a culture of care and compassion.

VALUES

Integrity: To deal with all stakeholders – patients, partners, employees, vendors and the community – in a spirit of fairness and integrity

Transparency: To respect the patient‟s right to know at every touch point by providing information that is clear, concise relevant and easy to understand.

Maximum Care: To re- evaluate every hospital system, Process and procedure to ensure that patients and their loved ones receive maximum care and comfort.

Self – Improvement: To instill a process of learning and self – improvement at every level through continuous training, focused research and peer review.

Patient Dignity: To safeguard the dignity of patients by protecting their individuality and privacy at all times.

KEY STATISTICS

Encompassing 10 lakhs Sq.Ft.of space spread over 17 floors and two basements. Its intelligent framework allows for hospital staff to optimize utilization of space and resources.

Accommodates over 750 in – patient beds, allows optimal utilization of resources and ensures privacy, dignity, comfort, comfort, convenience and the best healthcare to every patient. However the smooth and seamless movement of people & staff guaranteed.

Critical care unit is the largest number of critical care beds in Mumbai, with 130 ICU beds. Special technical features in ICU including ceiling mounted, dual arm pendants which ensure that the space around the patient is not cluttered. Another unique feature is dedicated air supply that keeps the critical care free of any kind of contamination and infection.

It has a total of over 140 Full time consulting clinics, with the capacity to handle over 6000 outpatient consulting every day.

Movements in the hospital is managed by 30 elevators – the largest elevator bank for any hospital in India capable of transporting 7500 persons per hour, with different elevators for inpatients , outpatients, staff and catering.

Two dedicated elevators ensure quick transfer of patients to operation Rooms and ICUs.

The hospital‟s laboratory is housed on a single floor spread over an area of over 40,000 sq ft offers over 3000 routine and highly advanced diagnostics, genetic and molecular biology test and will serve as a referral Centre for second opinions.

UNIQUE IN MUMBAI

Mumbai‟s first slice PET CT Scanner that combines computed tomography and positron emission tomography technologies into a single machine.

140 ICU beds, Largest number of critical care beds in Mumbai.

Hospital‟s laboratory housed on single floors spread over an area of over 40,000 sq ft. It offers over 3,000 routine and highly advanced diagnostics, genetic and molecular biology tests.

Hospital is having Mumbai‟s Largest OT complex with 22 operating theatre.

Largest dialysis Centre in Mumbai.

Full – time Specialist System: All doctors are attached and available only at Kokilaben Hospital.

Level I Accident and Emergency Center.

UNIQUE IN INDIA

Encompassing 10 lakh sq ft of space spread over 17 floors and two basements. Its "intelligent framework" allows for hospital staff to optimize utilization of space and resources.

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HOSPITAL INFRASTRUCTURE

1. Lower basement
    - Biomedical Engineering
    - CSSD
    - MRD
    - Nuclear medicine
    - PET CT
    - Radiation Oncology
    - SRS
2. Upper basement
    - Car Parking
    - Central security office
    - Mortuary
3. Ground floor
    - Main Reception
    - Admission counter
    - Discharge and billing
    - Pharmacy & Medical mall
    - Gift shop
    - Prayer hall
    - Business centre
    - Fine dining
    - Food court
    - ATM
    - Central report collection centre
    - Beauty Salon
    - Accident and emergency
4. Mezzanine Floor
    - Administration

- Library
- Staff dining

5. First Floor
    - Clinical administration
    - Radiology & Imaging (X-Ray, MRI , Ultrasound, CT scan)
    - Health check up program
    - Sample collection
    - Centre for cardiac sciences
    - Centre for bone and joint
    - Centre for pulmonary and lung medicine
    - Multi-specialty OPD
6. Second floor
    - Centre for children
    - Centre for brain and nervous centre
    - Dental clinic
    - Centre for cancer
    - Ophthalmology clinic
    - E.N.T clinic
    - Gastroenterology clinic
    - Dialysis centre
    - Blood bank
    - Urology clinic
    - Nephrology clinic
7. Third floor
    - OT complex 1 (8 theatres)
    - Catheterization lab
    - ICU (Neuro and surgical)
    - Interventional radiology
8. Fourth floor

9. Fifth floor
    - Ambulatory surgery
    - Day surgery
    - ICU (cardiac)
    - OT complex 2 (7 theatre)
    - Refuge Area
10. Sixth floor
    - Rehabilitation centre
    - Convention and exhibition centre
11. Seventh floor
    - IVF centre
    - Cosmetology and aesthetic surgery
    - Laboratory medicine and pathology
    - Nursing College
    - Tissue and bone bank
12. Eighth floor
    - Birthing complex (labor and delivery)
    - ICU (pediatric and neonatal)
    - Birthing Suites
    - OT (obstetric)
    - Wards
13. Ninth floor
    - Inpatients (pediatric)
14. Tenth floor
    - High dependency unit
    - ICU (Medical)
    - Refuge area
15. Eleventh floor
    - General ward

- Nursing College

16. Twelfth to sixteenth floor
    - Inpatient

DEPARTMENT IN THE HOSPITAL

The following departments function in the hospital

Clinical Services	**Clinical support services**	**Clinical Administrative Services**	**Administrative services**
Accident & Emergency	LABORATORY MEDICINE	Ambulance services	Human resources
OPD	Imaging	Nursing department	Materials
Anaesthesia	CSSD	Food & beverages	Marketing
Critical Care	Biomedical waste	Security	Finance
OT	Housekeeping	Mortuary	Engineering
IPD	Pharmacy	Laundry	IT

CLINICAL SERVICES

ACCIDENT AND EMERGENCY

An Emergency Department (ED) is also known as Accident & Emergency (A & E), Emergency Room (ER), Emergency Ward (EW), or Casualty Department is a medical treatment facility, specializing in acute care of patients who present without prior appointment, either by their own means or by ambulance. Due to the unplanned nature of patient attendance, the department must provide initial treatment for a broad spectrum of illnesses and injuries, some of which may be life threatening and require immediate attention.

Layout

- 11 bedded (6+3 triage + 2 isolation)
- Each bed is separated with curtains to maintain patient privacy and is equipped with the following:

✓ Oxygen supply
✓ Suction Pump
✓ Syringe pump
✓ Cardiac monitor

Minor Operation theatre

- Machines in minor OT are as follows:

✓ Anesthesia machine
✓ ETCO2 machine
✓ Cautery machine
✓ OT table

- Procedures done in minor OT

✓ Lumbar puncture
✓ Biopsy
✓ Bone marrow aspiration

- ✓ Suturing

This department has got its own billing and discharge counter.

Staff

HOD

9Junior Medical Doctor (2/shift)

1 Head Nurse

24 Staff nurse (6/shift)

6 HCA (2/shift)

Equipment:

- Defibrillator-2
- Portable ECG – 2
- Nebulisation machine -2
- Portable sonography machine-1
- Trolleys :
  - ✓ Procedure trolley
  - ✓ Induction trolley
  - ✓ Adult crash cart
  - ✓ Dressing trolley

Ambulance:

There are 2 types of ambulance:

a) Non-cardiac ambulance
b) Cardiac Ambulance

Equipment in the ambulance are as follows:

- Ambulance cot
- Portable Ventilator (cardiac ambulance)
- Portable oxygen unit
- Portable suction unit
- First aid kits
- Traction splint
- Auxiliary Stretcher
- Transfer sheet
- Airways (nasal, oropharyngeal)
- Obstetrical Kit
- Sphygmomanometer
- Stethoscope
- Fire Extinguishers
- Burn Kit
- Others
    - ✓ Sterile and non-sterile gloves
    - ✓ Face mask
    - ✓ Blankets
    - ✓ Towels
    - ✓ Bed pan
    - ✓ Tongue depressors
    - ✓ Cold packs instant chemical type

- 1 HCA in non-cardiac ambulance
- 1 HCA + 1 nurse + 1 cardiac consultant in cardiac ambulance

OUTPATIENT DEPARTMENT

Kokilaben Dhirubhai Ambani Hospital has 140 independent consultant clinics with a capacity to handle over 6000 outpatient consultations every day. These clinics are organized as "functional clusters" representing a specialty, with each cluster containing its own examination room, phlebotomy room, and in instances, rooms for specialized medical equipment unique to the cluster. A day care dialysis unit, an endoscopy theatre complex, radiology suites and a blood bank support outpatient service are co-located on the same floors as the self-contained outpatient area. The hospital outpatient services offer specialist consultation services across 42 different specialties including six centers of excellence.

The six centre of excellence are as follows:

- Centre for neurosciences
- Centre for cancer
- Centre for physical medicine and rehabilitation
- Centre for cardiac sciences
- Centre for bone and joint
- Centre for children

The specialists included are Anesthesiology, Critical Care Medicine, accident and emergency, gynecology and obstetrics, imaging, laboratory medicine and pathology including biochemistry, molecular biology, hematology, histopathology, microbiology, clinical pathology, transfusion medicine and blood bank, genetics, tissue and bone bank, dermatology, endocrinology, gastroenterology, clinical nutrition, internal medicine, nephrology, psychiatry, pulmonary medicine, rheumatology, geriatric medicine, surgery including dentistry, ENT, general surgery, ophthalmology, plastic and reconstructive surgery, urology, surgical oncology, cosmetology.

a) Access to OPD services:

   All patients who visit KDAH or free OPD for the first time for consultation/ other services are issued a card which gives each patient a UHID number. This UHID card is attached to the registration form. With the help of this number, medical records of patients can be assessed. Allotment and control of UHID number is the responsibility of the admission staff desk.

b) OPD Appointment:

   Appointments can be fixed over telephone to all from the call centre or personally across the reception counter. Fax and e-mail facilities are also available.

Following services are offered in the OPD

- Medical / Surgical consultations
- Preventive Health check-up packages
- Laboratory investigations
- Imaging services
- Cardiology investigations
- Neurology investigations
- Pulmonary investigations
- Pain management
- AKD
- Gamma knife
- Endoscopy
- Bronchoscopy
- Urodynamic study
- Physiotherapy
- CDC
- ENT
- Ophthalmology
- Dental procedures
- Oncology

- Radiation oncology

HEALTH CHECK UP

- The executive check-up department, a part of OPD services, is a wing of this multispecialty hospital dedicates to the diagnostic and preventive side of patient care. It is a place where healthy patient come for prognosis of disease or to know about the preventive and curative aspect of conditions they may already have.
- This system facilitates the patient to get all the required investigations/consultations done without having to pay for either consultation and/or for each individual item of pathological or imaging investigation. It is the centre point where the potential customers come directly in contact with hospital services. This department can therefore be a point to draw in patients to become in-patients or for them to come even for follow up OPD consultation.
- The packages in the program have been developed by a team of highly qualified and experienced medical personnel and are designed to offer a complete medical checkup and within their limitations detect any latent health problems. In additions, these packages are offered at special discounted rates that make them truly worthwhile. At the end of the day, candidates leave the hospital with all their reports.
- This department is dependent on various other hospital departments and consultants to ensure a smooth process flow. Therefore co-ordination is a key factor in smoothly running the department. The departments in co-ordination are: pathology, radiology, cardiology, ENT, ophthalmology, dental etc. the visiting consultants are from following department; medicine, surgery and gynecology.

OPERATION THEATRE:

The aim of department of anesthesiology and OT facility is to provide the highest quality of care to patients undergoing various types of surgeries. The OT facility is positioned as a tertiary care centre of excellence providing complete services for various surgical specialties. The department is staffed with highly experienced and trained anesthesiologist, surgeons, technicians, nurses and other support staff. Their services have state-of- the-art technology and equipment with highest

level environment and quality controls. For each OT there are two scrub nurses and one circulating nurse. Protocols based on approach for quality pre-operative, intra-operative and post-operative and follow up care of the patients. The complex is divided into three zones: sterile, semi sterile and non-sterile zones. Complete services to the following surgical specialties are provided.

- Cardiac surgery
- Nero surgery
- Onco surgery
- Orthopedics surgery
- General surgery
- Gynecology and obstetrics surgery
- Pediatrics surgery
- GI surgery
- Euro surgery
- Plastic surgery
- ophthalmic and ENT surgery
- Transplantation surgeries

The OT complex has a pre and post-operative monitoring room for continuous monitoring of patients (recovery rooms). The facility includes 22OTs, 600 square feet area, pendants in all OTs and surgical control panels.

IN PATIENT DEPARTMENT

The IPD provides the detailed pre-procedure needs their completion and coordination with the diagnostic to arrive at the diagnosis and completion of treatment regimens, comprehensive care in the pre-operative and follow up care, rehabilitative, and nutritional regimen and their scientific amalgamation as per the progressive patient care need. IPD wards are located on floor numbers 9,10,11,12,13,14,15 & 16 The IPD rooms are of the following types: single room, twin sharing, deluxe room and suits. Each floor has three zones, east, west and central and each wing has a separate nursing station. The various types of rooms with their features as follows:

- **GENERAL WARDS**
  - 5beds/room
  - Air conditioned
  - Bed head panels with medical gasses
  - Nurse call systems with 2 way communication

- **SINGLE ROOMS**
  - Area of 320 sq ft
  - Separate patient zone and attendant zone
  - Nurse call system with two way communication

- **Twin Sharing**
  - Bed head panels with medical gasses
  - Television sets
  - Couch for each patient relative
  - Nurse call system with two way communication

- **Suits**
  - Area of 750 sq. ft.
  - Terrace garden
  - Exclusive visitor area and guest rooms

- Nurse call system with two way communication

The nurse: bed ratio is 1:5 for general ward, 1:2 for single rooms, 1:3 for twin sharing, 1:1 for suits. The various other rooms are clean utility, dirty utility, janitor room, AHU (air handling unit), sluice room, I.T. room, and service elevator.

INTENSIVE CARE UNIT

The ICU cater to patients with most severe and life-threatening illnesses and injuries requiring constant close monitoring and support from specialist equipment and medication to ensure normal bodily functions. There is Adult ICU consisting of SICU & MICU, Pediatrics ICU, Neonatal ICU, Transplant ICU and Pediatrics Cardiac ICU. The nurse patient ratio for critical patients is 1:1 and for stable patients is 1:2. The ICU co-ordinates with CSSD, Laboratory and the Radiology department. Strict aseptic techniques are used. Pressure zones are created to control infection rate.

The ICU has highly dedicated and trained medical, nursing and allied staff. There is a system of closed ICU in KDAH .The space per bed is 320 sq feet in the patient care area

Bed Capacity in each ICU

ICU	***BED CAPACITY***
SICU 1	11
SICU 2	10
PCICU	11
PCICU-HDU	2
PICU	7

TRANSPLANT ICU	7
NICU	8
NICU-HDU	5
MICU	28
MICU	25

Human resource of the ICU

- Intensive care doctors

✓ 1 Chief Intensives for all ICU

✓ Junior consultants (12 hour shift)

✓ Clinical registrars (8 hours shift)

- Intensive care nursing staff

✓ 1 Director General Manager for ICU

✓ Nurse in charge (8 hours shift)

✓ Team leader (8 hours shift)

✓ Senior nurse officers

✓ Junior nurse officers

- Allied staff

✓ Physiotherapists

✓ Dieticians

✓ Biomedical Engineers

✓ Health Care Assistants

Shift timings:

For doctors

- ✓ Morning : 8 am - 4 pm
- ✓ Afternoon : 2 pm - 10 pm
- ✓ Evening : 10 pm - 8 am
- ✓ Overlapping hours : 2 pm - 4 pm

For nurses, HCA and housekeeping staff

- ✓ Morning : 7 am - 3 pm
- ✓ Evening : 3 pm - 11 pm
- ✓ Afternoon : 11 pm - 7 am

Visiting hours : 11 am – 1 pm

5 pm – 7 pm

- ✓ Only 1 relative at a time is allowed

Records and Registers

- Admission and discharge register
- Handing and Taking over/Team leader sheet
- Assignment book
- Leave book
- O.T booking register
- Critical care flow sheet
- Narcotic drug register.

Equipment's:

MONITORING EQUIPMENT	CARDIOVASCULAR THERAPHY	RESPIRATORY THERAPY	LABORATORY EQUIPMENT
Bed side and Central Monitors ECG Recorder Pulse Oximeter Spiro meter ECG Monitor Temperature Monitors Blood Glucose Meter	CPR Trolley Defibrillators Infusion Pumps and Syringes	Ventilators Intubation/ Tracheotomy Trolley Nebulisers	Blood gas Analyser Electrolyte Analyser

Miscellaneous Equipment

- Crash Cart
- Dressing trolley
- Procedure trolley

Management Information System

ICU	*LOS (days)*
Adult ICU	4
PCICU	6.5
PICU	5.6
NICU	6.4

PAEDIATRIC INTENSIVE CARE UNIT

The PICU looks after all critical pediatric patients. It is located on 8th floor. The ICU is split into 2 zones for outpatients and inpatients. The various other rooms include Ante room, equipment room, clean utility and dirty utility room. The average length of stay of each patient is approximately 1 week.

NEONATAL INTENSIVE CARE UNIT

The NICU is 18 bedded and located on the 8th floor. The department is divided into 2 zones – outpatients and inpatients. There are 2 isolation rooms. The nurse ratio is 1:1

DEPARTMENT OF RADIATION ONCOLOGY

The department of radiation oncology at KDH is a state of the art unit having the latest technology and equipped personnel, delivering services of international quality. The department has the first installed TRIOLOGY and NOVALIS Tx in the country. It is capable of performing all the high end treatment like IMRT, IGRT intracranial stereotactic radio surgery and radiotherapy, extra cranial sterotaxy, total body radiation, total skin electron treatment. There is a facility of brachytherapy for all sites in the form of remote after loading HDR brachytherapy system with 3D planning facility. The department works in close coordination with surgical oncology and neurosurgical subspecialties‟ (e.g. head and neck, thoracic, breast, urology and gynae oncology, neuro-oncology) maintaining a high quality evidence based practice for the particular sub suite.

CENTRE FOR REHABILITATION

- The centre is located on a dedicated floor with 30,000 square feet area and exclusive inpatient service, first of its kind.
- The department is located on 7th and 8th floor of hospital.\
- It has got its own billing desk.
- It also consists of a daycare centre for those patients who need 4-5 sessions in a day.
- **Staff of the department consist of**

HOD

↓

40 physiotherapists

↓

1 Asst. nurse

↓

3 Nurses

↓

5 HCA

- **Following therapy services are available :**

1. Neurological Rehabilitation
2. Musculoskeletal rehabilitation
3. Cardiac Rehabilitation services
4. Pulmonary Rehabilitation
5. Pediatric Rehabilitation
6. Cancer Rehabilitation
7. Pain management
8. Women‟s health
9. Geriatric Rehabilitation

The therapy services offered in the department:

1) Physical therapy
2) Occupational therapy
3) Electrotherapy
4) Speech and language pathology
5) Exercise physiology
6) Psychology
7) Rehabilitation nursing
8) Orthosis and prosthesis

IVF CENTRE

- Centre for reproductive endocrinology and fertility (CREF) is located on the 7th floor of the hospital and has dedicated space for out-patient care and day care of patients with infertility and reproductive endocrine problems, and for medical acupuncture and mind body program.
- CREF is staffed by a full time consultant reproductive endocrinologist and infertility specialist, embryologist and infertility issues and a health care assistant.
- A full-fledged laboratory and radiology department offering a comprehensive range of tests including some newer cutting edge tests under one roof only compliments our services at CREF, but is also extremely convenient for patients.
- Medical conditions addressed at CREF:
  - ✓ **Reproductive endocrinology**
  - ✓ **Midlife health care**
  - ✓ **Bone health**
  - ✓ **Adolescent gynecology**
  - ✓ **Infertility treatment**
    - ❖ Fertility drugs to induce / enhance ovulation (pills or injections)
    - ❖ Intrauterine insemination
    - ❖ Assisted reproductive therapy (ART) procedures:
      - o In vitro fertilization (IVF)

- Intracytoplasmic sperm injection (ICSI)
- Assisted hatching(AH)
- Blastocyst transfer
- Pre-implantation genetic diagnosis (PGD)
- Embryo cryopreservation
- Sperm cryopreservation
- Testicular tissue cryopreservation
- Third party reproduction
  - Donor oocytes
  - Donor sperm
  - Gestational surrogacy
  - Donated embryos

- Other facility:

✓ Diagnostic tests
✓ Billing and registration
✓ Phlebotomy services
✓ Ultrasound facilities
✓ Andrology and embryology laboratories
✓ Operating room, pre-op and recovery room facilities
✓ Counseling and support services

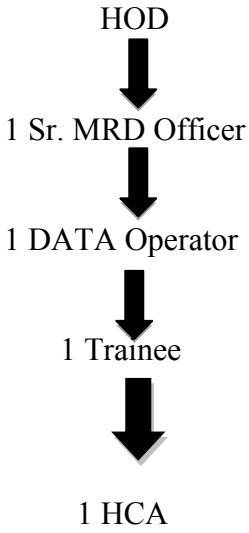
CLINICAL SUPPORT SERVICES

MEDICAL RECORD DEPARTMENT

- The main functions of the department are :

1) Storing file for future reference.
2) Research.

- Staff:



- Open and close audit is done of all files before keeping them storage.
- The arrangement of files is done in following ways-
  - ✓ Year wise and UHID wise.
  - ✓ Also on the basis of their type :
    a) Regular files
    b) DAMA files
    c) MLC files
    d) OT recovery files
    e) Chemotherapy files
    f) Dialysis files
- Apart from files few forms and records are also store in this department:
  - ✓ Consent form
  - ✓ OT papers

- ✓ A&E papers

- Certificates issued from the department :
  - ✓ Patient fitness certificate
  - ✓ Fit to fly certificate
  - ✓ Leave certificate
- All files are stored in the department for the following time period:
  - ✓ Reports -1.5years
  - ✓ Death, DAMA & MLC files 20 years
  - ✓ Regular files-5years
- ICD-10 coding is done for storing files:
  - ✓ Red-Death, DAMA & MLC
  - ✓ Black-Oncology
  - ✓ Yellow-Gynecology& obstetrics, IVF files
  - ✓ Dark blue-General medicine, critical care, Nephrology, Endocrinology, Gastroenterology, Pulmonary medicine, Dermatology, Dental, Psychiatry, rehabilitation, Rheumatology.
  - ✓ Light blue- Pediatrics
  - ✓ Orange- Neurology, CVTS, Cardiology, orthopedics
  - ✓ Green-ENT, general surgery, ophthalmology, Urology, Cosmetology, Interventional radiology.
- This department has to notify Bombay Municipal Corporation(BMC) about following things on regular basis:
  - ✓ Birth and death report (once in a week).
  - ✓ Notifiable disease which includes cholera, dengue, plague, yellow fever, TB, polio, meningococcal meningitis, leptospirosis, viral encephalitis (once in a week).
  - ✓ Maternal mortality (once in a month)
  - ✓ MTP &PNDT (once in a month)
- Retrieval- for easy retrieval of files tracer cards are used when files are given to patients or sent outside the department.

LABORATORY

The salient features of the department are as follows-

- CAP (College of American Pathology) accreditation
- Central processing laboratory is spread over 40,000sq. Ft. which follows strict internal quality compliance for all analyzer.
- Exhaustive menu of tests from routine to esoteric.
- Excellent laboratory management system which handles both pre-analytical and post-analytical aspects.
- Dedicated courier and logistic services
- 24 hrs. sample collection facility
- Stringent quality control monitoring which satisfy the quality assurance elements elaborated by GLP and GCP and readily available documented evidence of quality assurance and quality proficiency schemes.
- Constant improvisation and technology innovation using over 150 state of the art equipment.
- Quality control and quality assurance executive that monitors pre-analytical and post-analytical processing of the samples.
- Customized management report (MIS-management information system)
- An active IRB and ethics committee which oversees clinical trials proposed when required.

BLOOD BANK

Transfusion medicine is a multi-disciplinary area concerned with the appropriate use of blood and blood components in the treatment of human disease. The mission of KDAH is to make available appropriate adequate quantity and high quality of safe blood and blood component to "anyone, anytime, anywhere" in medical community. KDAH adheres to quality norms and focus on the donor satisfaction standards and technique and quality control are precisely and meticulously maintained as per norms given in the drugs and cosmetics acts, by the regulatory authority, director drug controller (India), ministry of

health and family welfare, Govt. of India, and also internationally recommended methods. The department runs round the clock and blood and its products are supplied as and when requested. Blood donation is accepted from voluntary blood donors and relatives and friends of the patient. Autologous blood donation (blood donation for one‟s own use) is also accepted. The blood donors are informed and educated about the infections transmitted by transfusion of blood components 100% of collected blood is processed into component like red cells concentrate, platelet concentrate, fresh frozen plasma (FFP) and cryoprecipitate. The use of the components is better and cost effective. The blood bank at KDAH is equipped with state of art equipment, which enables use of advanced techniques for processing/screening of blood and its components. All the mandatory screening for the transfusion transmissible disease like HIV, HBV, and HCV is done with the more sensitive and specific CMLIA and ELISA methods. All units are screened for VDRL and malaria parasite. Red cells in an additive solution (RCA) like, SAGM or ADSOL is a product which is used in variety of indication like surgeries, anemia, trauma, child birth etc. as a thumb rule one unit would increase the hemoglobin by 1 gm.%.

IMAGING

The imaging department consists of radiology services. The investigations performed in these departments include:

- CT Scan
- MRI
- X-Ray
- Ultrasonography
- Mammography

The HIS has a system for appointment scheduling for each of these investigations. The appointments are given by Call Centre. There are 4 X-ray machines, 5 ultrasonography machines, 1 mammography machine, 1 CT Scan machine, and 2 MRI machine of which one is 3 Tesla located in the radiology department and the other is 1.5 Tesla IMRIS (intraoperative magnetic resonance imaging suit) is a movable machine attached to the ceiling that is located

in the OT. It is basically used for MRI scanning during a surgery. They are working on its complete utilization.

CENTRAL STERILE SUPPLY DEPARTMENT

The central sterile supply department (CSSD) plays a key role in providing the items required to deliver quality patient care. Centralizing the reprocessing of reusable devices helps ensure uniform standards of practice, while also providing for improved workflow (soiled, to clean, to sterile). This also facilitates the training and education of skilled technicians who must be aware about the standards, complexities, challenges, risks and technicians associated with the CSSD function. Every CSSD task must be performed for the welfare and safety of patients, co-workers and the community.

CSSD is the heart of hospital infection control and the most important unit of clinical support services. CSSD‟s main functions are cleaning and drying, assembly, packing, sterilizing, storing and distributing instruments (both multi use and single use devices), as per well delineated protocols and standardized procedures.

INFRASTRUCTURE

It is divided into 3 zones

1. Decontamination area
2. Assembly area
3. Sterile storage area

STAFF

1 manager / department head

1 executive

1 senior technical officer

4 technical officers

6 junior technical officers

10 trainees

16 health care attendants

MAJOR TECHNOLOGIES

Ultrasonic cleaner

Washer disinfectant

Dryer

Steam sterilizers

Plasma sterilizer

ETO (ethylene oxide gas sterilizer)

Dry heat sterilizer.

RECORD MAINTAINED:

- Manual issue and receiving OT
- Manual issue and receiving all departments
- Sterilization records

PHARMACY

Central pharmacy indents to IP, OP and LB. it is of 2 categories: capital and consumables.

SCOPE OF INVENTORY MANAGEMENT:

- INDENTATION
- RECEIVING
- STORING
- DISTRIBUTION

The staff consists of:

- 5 manager
- 1 executive
- 8 senior officers
- 24 officers
- 7 junior officers
- 6 trainee assistants
- 1 trainee HCA
- 16 attendants
- 21 HCA

HOUSE KEEPING:

The objective of housekeeping is exceptional standards of cleanliness, sanitation and hygiene of the entire hospital. Housekeeping services are outsourced to ARA MARK services.

The staffs include:

- Housekeeping manager
- Assistant manager
- Housekeeping executives
- Supervisors
- Houseboys &house girls

Functions of housekeeping department are:

- General facility cleaning
  - ✓ Routine cleaning of patient"s rooms
  - ✓ Patient"s common areas
  - ✓ Washrooms
  - ✓ OT
  - ✓ Laboratory
  - ✓ Consultant"s office

- ✓ Glass windows and doors
- ✓ Ceiling etc.

- Handling of biomedical waste.
- Pest control-It includes spraying every 24 hours for mosquitoes, cockroaches, flies, rats, lizards and termites.
- Garbage disposal- The housekeeping staff collects garbage collected in specified color coded bags from all garbage bins existing inside the hospital premises and disposes the garbage at the designated area within the hospital, which is the biomedical waste room. The general waste is sold to the junk dealer and healthcare waste is handed over to government approved vendor "synergy waste management".
- Horticulture- It is responsible for maintenance of in house plants & terrace gardens, flower arrangement during hospital functions.

The performance indicators are B.M.W. color code compliance, B.M.W. collection, pest control efficiency and sanitization of the hospital premises.

CLINICAL ADMINISTRATIVE SERVICES

STORES

Material stores functions in order to supply the right material in right quintiles at the right time at the right price. The IP departments put up requests for the required materials by uploading indents in the HIS. The store manager raises a purchase order to be sent at the central procurement stores. The supplies received are inspected on the basis of quantity and expiry in the incoming material inspection area. The items are stored as per the storage norms. Departmental issues are made for non – medical consumables as per requirement. Stock is reviewed periodically for non-moving items and short expiry items. Stock audits are carried out twice/year. Any variance is reported to the higher management. For inventory control, ABC and VED analysis is carried out. FEFO (first expiry first out) is followed. The staff includes:

- Assistant Manager
- Executive store
- Assistants
- 2 Health care assistants

The key performance indicators are no stock outs, zero errors in maintenance of accounts, zero error in billing processing, maintain minimum inventory maximum efficiency, maintaining stores as per the NABH = ISO standards, submission of bills accounts within 4 working days, expired items on the shelves should be zero, minimize emergency purchase, TAT suture and lab kits (19 days), instruments (8 weeks) and other items (2 days)

LINEN AND LAUNDRY

The objective linen and laundry is the availability of clean uniforms for patients and staff. Soiled linen when collected is kept in the dirt utility room in a hamper trolley. Infected linen are collected and put in a red bag at the source4 of generation. The red bag is sealed and labeled for infection. At the end of each shift, the dirty utility linen is carried in the hamper trolley to the collection room. At the collection point, it is segregated, counted, and sent tothe

laundry for washing. The performance indicators are laundry pending, turnaround time for laundry cleaning, percentage discarded linen.

BIOMEDICAL ENGINEERING DEPARTMENT

The main objective of the department is to facilitate the usage of latest technologies in the diagnosis, treatment and care of patients. It is also responsible for proper usage and quality performance of these costly equipment and tools inside the hospital

The department maintains an updated asset register of the hospital equipment, conduct daily rounds to ensure that the equipment is functioning smoothly, responsible for facilitation and identification of equipment requirements, planning technical comparison, ordering installation and deployment units and new projects, conduct regular preventive maintenance servicing for all the equipment at regular intervals, facilitating equipment replacements and condemnation, whenever required, conducting regular training programs for hospital staff, on usage of hospital equipments. The staff consists of HOD, 5 biomedical engineers and 2 biomedical technicians and 4 medical gas technicians.

FOOD AND BEVERAGES

The objectives of food and beverages department are to deliver healthy and nutritious meals coupled with a wonderful experience of hospitality services to all IP, OP and staff. The cafeteria is outsourced to Java Green. The main functions of the department are as follows:

- Inpatient meal management
- Purchase of fruits, vegetables, milk, pulses, whole grain and other dietary consumables
- FIFO is followed

The purchased items are unloaded in the receiving area, where they are inspected and then washed with water and anti-bacterial liquid before bringing it in the kitchen premises. It is followed by storage of perishable and non-perishable items in refrigerator and dry storage area respectively. Diet planning and counseling is done by the dietician according to the patient‟s condition, food allergy and taste and general preference. The diet summary is handed over to the supervisor in the form of meal sheet cum ticket. According to this, the food is

prepared and laid out on trays. The meals are served in the patients‟ rooms and clearance is carried out after 2 hours. Food/meal/diet for a patient admitted in the hospital is decided by the doctor admitting the patient depending on his/her medical condition. On doctor‟s recommendations, the dieticians plan the meal that is best for the patient‟s speedy recovery. The staff includes:

- Regional head of support function
- F&B manager cum chef
- Assistant manager F&B
- Executives
- Senior Dietician
- Other F&B staff

SECURITY

Services rendered by security department are surveillance and patrolling of the infrastructure and material, access control (in restricted areas like IT, MRD, LSS, Mortuary, Pharmacy, Electric control panels), control of movement of traffic in premises, reception and conduct of visitors and attendants, assistance in fire control and emergency plan, vigilance and intelligence, liaison with sensitive areas, carry out verification, hold records, issue passes, and generate reports on security matters. It is equipped with modern equipment like CCTV‟s metal and explosive detectors, alarms, security, lighting and walkie-talkies, etc. The staff members are:

- HOD
- Senior officer
- Security supervisor
- Sr. security assistant
- Security guards

The performance indicators are TAT, theft percent, code related incidents.

EDUCATION AND TRAINING FACILITIES FOR NURSES

In line with the vision of continued commitment toward education and training in the field of healthcare, particularly the preparation of highly competent nursing professionals dedicated to patient care, the board of management has upgraded its School of Nursing to a full KDA College of Nursing.

ADMINISTRATIVE SERVICES

ADMISSION AND BILLING:

The admission and billing staff includes 1 H.O.D. and 12 employees. The services offered by the department are registration of a new patient, booking/reservation-bed and O.T, admission, billing, discharge work.

Front office:

The front office is the first point of contact at KDAH. It is manned by duty manager, deputy duty manager, and patient care executive and patient care coordination. There are total 7 front offices in KDAH and there are 2 help desks.

Functions:

- Respond and answer telephone calls from patients and clients (call center).
- Registration of outpatients, in patients and executive health checkup patients for various investigations (registration counter).
- Admission, billing and discharge of in patients.
- Direct the patients and their relatives to the outpatient services and the inpatient wards (helpdesk and welcome desk).
- Report receiving and handling over to the patient (dispatch counter).

Third Party Administrator Desk:

T.P.A. staff includes one executive clinical administrator and 4 Customer care officer.

Functions:

- Counseling.
- Pre-Authorization.
- Cashless admission.
- Query handling.
- Final approval.

- Maintain privacy and confidentiality.

INFORMATION TECHNOLOGY DEPARTMENT:

It is implied that there is central database for entire hospital. Services rendered by the IT department are as follows:

- IT support to location users for hardware and software as per SLA (service level agreement).
- Installation of new IT equipment.
- Helping biomedical department in configuring the medical equipment with HIS.
- Installation of appointment scheduling programs.

The IT staffs include:

- Chief information officer
- Manager IT
- Executive IT engineers.

The performance indicators are calls resolutions within a time limit, strict data security, zero percent variance, in hardware and software variance, minimal occupational hazard and proper e-waste disposal.

ENGINEERING DAPARTMENT:

Engineering and maintenance department is manned for 24 hours for keeping round the clock vigil on proper functioning of plant engineering equipment coming under the purview of department. This covers maintenance of major supplies to the hospital such as power, water, which form the life line to the hospital‟s activities. The responsibilities of the department include operation and maintenance of plant equipment installed in the basement of main building and various other areas to support the normal functioning of the hospital and repair work of equipment related to the department‟s responsibility. The policy of the department is to serve well with safety and it time, continuous improvement, cost saving, optimum utilization of manpower and equipment, optimum utilization of inventory and teamwork.

The major engineering services are:

- Electrical power supply- normal and emergency
- Air conditioning, ventilation and refrigeration.
- Steam and hot water supply.
- Water stations and cold water supplies- filtration system.
- Medical gases supplies
- Fire detection alarms and fighting system.
- Internal and external plumbing system.
- Civil works-Masonry, carpentry, glasswork, upholstery, painting, etc.
- PNG and LPG supply.
- Safety assessment of facilities.

MARKETING AND SALES

Marketing and sales department is concerned with business development, branding, promotions and advertisement of KDAH healthcare services. Marketing deals with organizing health check-up camps and awareness talks for corporate or PSU"s and RWA, designing all the brochures and signage, conducting CME"s/seminars. The sales department deals with PSU"s and corporate tie-ups, pitching referral sales from nearby general practitioners and nursing homes, liaison with TPAs and managing the international patients (medical tourism).

FINANCE

The scope of services includes the entire hospital cash handling and cash disbursement in the form of salaries and vendor payment for stores, pharmacy and biomedical department. All the cash collected is deposited on daily basis n the bank. The TPA payment is collected through lump sum amount in the form of cheque at the end of the month. The staffs include :

- HOD
- Asst. Manager

- Senior executives
- Junior executives
- 2 cashiers

PURCHASING DEPARTMENT

Purchasing department is responsible for the procurement of function of the hospital the primary functions of the purchasing department are to:

- Procure the rights and services from the right suppliers at the right time for the right place.
- Receive, warehouse, issue $ distribute stocks to hospital departments in accordance with KDH procedure.
- Hospital users and clinicians actively participate in product evaluation processes. The purchasing department is actively involved in cost analysis and supplier performance management. It is through all of these activities that the department manages the chain process.

HUMAN RESOURCE DEPARTMENT

The functions of HR department at KDA hospital are:

- Hiring
- Physician and nurse recruitment
- Employee orientation
- Personal management
- Benefits and compensation management
- Counseling
- Claims handling
- Training and performance monitoring
- Professional development programs
- State and federal regulations education

- Work place safety and sanitation
- Administration – employee meetings
- Staff morale and retention

Recruitment /selection:

- Identifying the key requirements areas(KRA)
- Drafting job description
- Recruitment through job portals and internal references
- Selection
- Medical examination of the candidate
- Offering letter to the selected ones

QUALITY CONTROL DEPARTMENT

The Functions of the department are:

- To analyze patient feedback forms.
- To analyze different parameters from different departments and compare them.
- Infection control of the hospital.
- Induction and training of hospital staff.
- Accreditations (NABH, JCI).

This department also maintains few quality indicators for hospital:

- Medication Errors
- Return of patient within 72hours.
- Return of patient to OT within 48hours.
- Return of patient to ICU within 48hours.
- Number of Needle sticks Injuries.
- Number of blood transfusion reaction.
- Number of Adverse Drug reaction.

Staff:

This department consists of one quality manager who reports directly to the director of hospital.

Project -1

TO DO GROWTH ANALYSIS AND PLAN MARKETING STRTEGY FOR COSMETOLOGY DEPARTMENT

Introduction

- The department of cosmetology of KDAH Started in june2013.
- It provides all type of cosmetic treatment related to hair, skin and body.
- All cosmetic treatment done under one roof.
- Internationally trained and certified doctors available.
- State of art equipments

Rationale of study

- This department is just 10 months old and doing pretty well.
- There was a need to analyze-

✓ Its growth.
✓ Plan marketing strategy

Research question

How to increase productivity and overall growth of the cosmetology department?

Research objective

1. To study the growth and utilization of cosmetic procedures of cosmetology department in the last 10 months.
2. To plan marketing strategy for cosmetology department

Research methodology

- Area of study :- Kokilaben Dhirubhai Ambani Hospital
- Study period :- 1 month (1April-30 April 2014)
- Study design :- Exploratory design

Tools and technique

- Qualitative method

Key informant interview

- Quantitative method

  Secondary data (MIS)

Sample size

All patients that visited the department from June2013-March2014. (For the study of growth and Utilization of procedures)

Data Analysis

- Analysis of primary data.

Name of machine	Highest utilization	Actual utilization
Exilis	7 patients	1 patient
Oxy facial	7 patients	2 patients
Blue light/red light	14 patients	2 patients
Platelet rich plasma	7 patients	1 patient
Laser hair reduction	variable	1 patient
Peel	variable	1 patient
Fraction laser	variable	
Mesoporation	7 patients	2 patients
Pumpkin facial	variable	
Skin tags	variable	
Q- switch Laser	7 patients	
Botox/fillers	7 patients	

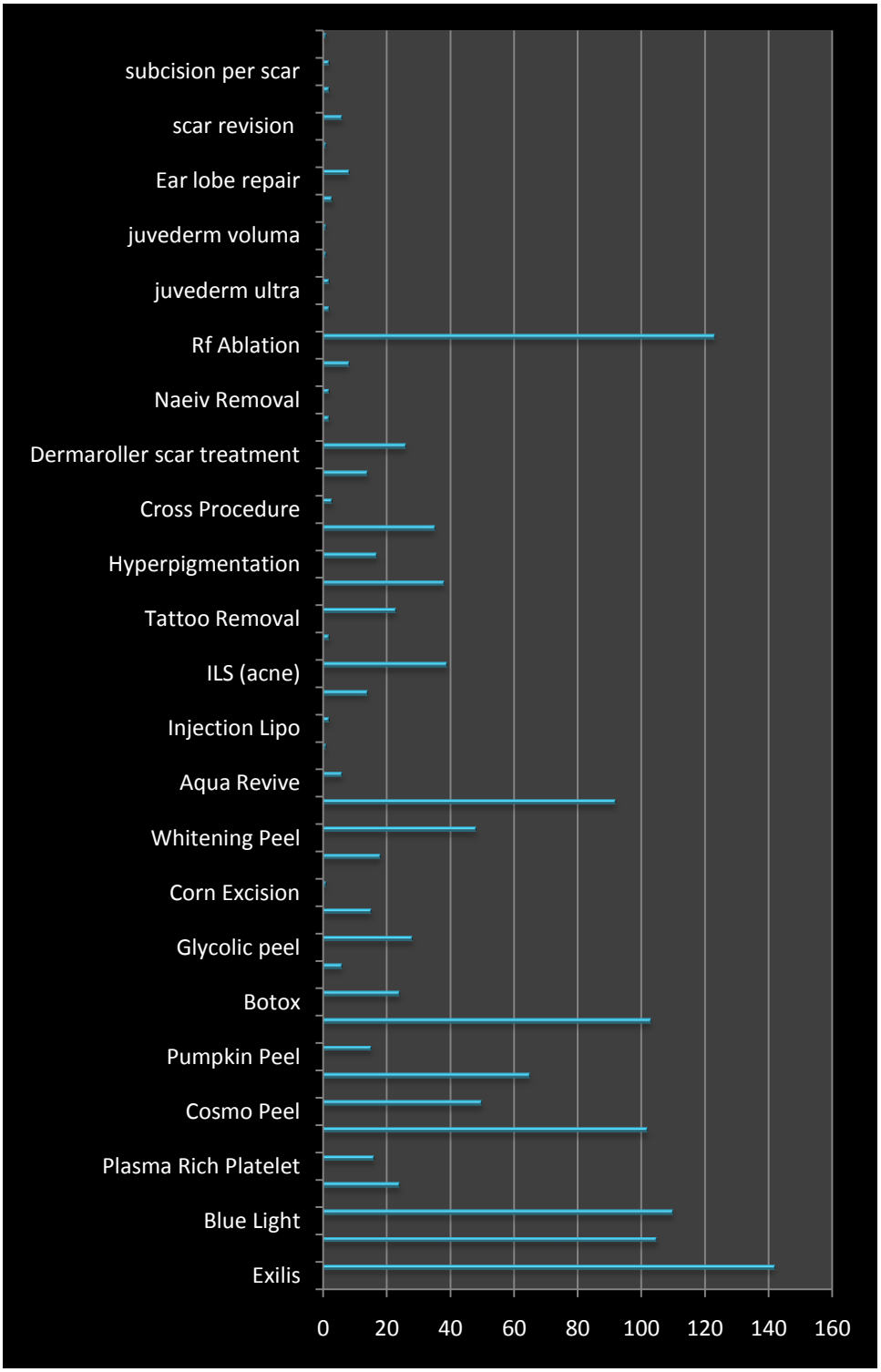
- Analysis of secondary data obtained from MIS to prepare graphs for each procedure (Annexure page no.61 -82)

Interpretation- showing growth of each procedure for the last 10 months from June 2013-March2014.At present only few procedures show constant growth eg.Exilis, Blue light, Red light.

- Graph comparing growth of all the procedures from June 2013- March 2014.

Interpretation:- Only few procedures have a strong foot hold in the market and is in demand like Exilis, Red light,Blue light. Other procedures are growing slowing and need some more time to come in demand like tattoo removal, ear piercing, whitening peel, hair treatment. And few procedures are not showing growth but still they need to be in list as the department promises to provide all type of cosmetic treatment like Aqua revive.

- **Graph comparing overall procedures with each other**



- **BCG matrix for procedures**

STARS	QUESTION MARKS
(high market share and high market growth) 1) Exilis 2) Oxy-facial 3) Blue Light 4) Laser hair reduction 5) Fractional Laser	(low market share and high market growth) 1) Red Light 2) platelet rich plasma 3) Glycolic peel 4) Whitening peel 5) Hair Root Therapy 6) ILS (acne) 7) ILS(Kleiod) 8) Rf Ablation 9) Juvederm Ultra Plus XC 10)Ear Lobe Repair 11)Microdermasion 12)Cosmo peel 13)Pumpkin Facial 14)Photo Therapy 15)Botox 16)Ear Piercing 17)Tattoo Removal 18)Hyper pigmentation 19)Laser Toning 20)Dermaroller Scar Treatment 21) Scar Revision
CASH COWS (high market share and low market growth)	DOGS (low market share and low market growth) 1) Mole Excision 2) Corn Excision 3) Azelan peel 4) Aqua Revive 5) Argi Under Eye peel 6) Injection Lipo 7) Comedone Extraction 8) Biopsy 9) Cross Procedure 10) Molluscum Removal 11) Nail Removal 12)Naeiv Removal 13) Juvederm 14) Juvederm Ultra

	15)Juvederm Ultra XC 16) Juvederm volume 17)Auroplasty bilateral 18)Subcision per scar 19)Intralesional Injection per lesion

SWOT analysis for the department

STRENGTHS	WEAKNESSES
1) Comprehensive plan (all treatment available under one roof) 2) Hospital based aesthetic clinic. 3) Facility of cosmetic dermatology as well as cosmetic surgery is available. 4) Wide range of treatment is available. 5) Infrastructure. 6) Price (as it is comparable with other providers.) 7) Latest technology.	1) Experience of doctors. 2) Less number of staff. 3) Not all facilities are available on the same floor. 4) People still unaware about the services. 5) Less advertisement. 6) Limited timing. (10am-6pm). 7) Location.
THREATS	*OPPORTUNITIES*
1) Well known cosmetologists. 2) Well established Aesthetic clinics in nearby area. 3) Other hospital based aesthetic clinic like hiranandani hospital, breach candy. 4) Loyal customers of other aesthetic clinic.	1) Internal referrals. 2) Located in an area of „Celebrity hub." 3) Medical tourism. 4) Tie-up with known cosmetologist/ cosmetic surgeon. (part time) 5) Brand identity.(Reliance is already a known name in the market.)

- Target population for promotion of procedures.

Age group	Services	Socio-economic class
18+ (Both)	Oxy Facial	M & U
	Cosmo Peel	M & U
	Fractional Laser	M & U
	Glycolic peel	M & U
	Azelan Peel	M & U
	Whitening Peel	M & U
20+ (Both)	Pumpkin Peel -(F)	M
	Photo therapy	M & U
	Hair Root Therapy (Stem cells and injectables)	M & U
	Aqua Revive	M & U
	Intra lesional steroid (kleiod)	M & U
	Intra lesional steroid (acne)	M & U
25+ (Both)	Botox	M & U
	Injection Lipo	U
	Hyper pigmentation	M &U
	Laser Toning	M & U
	Dermaroller scar treatment	M & U
	Juvederm	U

Age group	Services	socio-economic class

25+ (Both)	Juvederm ultra	U
	Juvederm ultra XC	U
	Juvederm volume	U
	Juvederm ultra plus XC	U
16-30 (Both)	Blue Light	M & U
	Red Light	M & U
18-40 (Both)	Laser Hair Reduction -(F)	M & U
30-60 (Both)	Exilis	U
25-35 (Both)	Tattoo Removal	M & U
1+ (Both)	Ear piercing	U
23-40 (Both)	Platelet Rich plasma	U

Recommendations

For design:-

1. Proper signage for –toilets, drinking water, treatment room, OT, doctor room.
2. To maintain privacy lift no.17 & 18 should be stopped from opening in waiting space of 7^{th} floor. (There is staff elevator just near to the department and there is hardly any kind of emergency in the department).
3. Aquarium/glass wall to cover the treatment room and the VIP lounge

For Comfort

4. Timing should be increased from 6 pm to10 pm. So that even working people can come for consultation on weekdays.
5. For a plastic surgeon, It becomes quite difficult to give appointment to patients and present on that time. Nurse should check the list of pt. and make a call to let them know at what time they should come.
6. Cold drink machine which can be used unmanned. As it will be revenue generating.
7. One dedicated housekeeping staff for cleaning the dressing room in between the patients. (At present nurse only clean the room and Housekeeping Staff is called only when the room starts stinking.)
8. Pharmacy related product should be made available in advance. List of products required for next day treatment should be checked by a nurse/therapist whoever is given the charge and inform the pharmacy well in advance.
9. All facility should be made available on the same floor. Eg. Dental aesthetic treatment, bariatric surgery

For Technology

10. Vascular laser – use to treat red lines on face (veins related). If a patient comes with such a complaint than such patient cannot be treated in this department. At present no alternative is available for its treatment in the department.
11. Fractional CO2 – specifically used to treat aggressive scar. At present if such a case comes the doctor uses two machines to treat it.

For promotion:-

12. There should be some provision to display the "treatments available and there effects". TV can be used for this purpose. Pictures of the real patients can be used, sometimes interviews of patient with face covered, details of doctors available, any schemes available. To emphasize more on "word of mouth" promotion.

Internal referrals:-

13. **Gynecology department**: - All those women who deliver in this hospital should be given some concession on all treatments and it should be valid for 2 years. (Cosmetic problems are common after pregnancy and women become serious regarding the problem generally after 1 year. So, if they are given an option in advance than they can be easily attracted.)
14. **Accident and emergency department: -** Any patient with face and neck injury after treatment should be referred to cosmetology for scar treatment.
15. **Endocrinology department**: - If doctor comes to know that the patient"s condition is not related to any hormonal problem than such patient should be referred to cosmetology.

INNOVATIVE SUGGESTIONS

1. Magazines in national or international flight to Mumbai may have a detailed article on aesthetic department of KDAH.
2. Advertisement in newspaper with an alarm battery."stop cursing God for your appearance visit KDAH cosmetology … for solution of all problems"
3. "Membership card" that can give them some discount on next service.(to make loyal customers)
4. Advertisements in cinema halls during interval.
5. Event in high street phoenix mall "lucky draw for free facials".
6. Canopy near colleges with some schemes for students: - People of age group 18-25 are the target population. As they are more conscious about their appearance. So it can be used to aware them about the facility.

7. Dummy placed in malls / ground floor/7th floor of KDAH
8. To be a sponsor in movie premium or music release. As all the target population for this department come to such places.
9. A program on FM radio where doctors explain the procedure, adverse effects and answer the queries.

   Time:- evening around 6-7 pm

10. Register on "just dial" website.
11. Use QR bar code or alive app
12. Pop up advertisements in health magazines:- health/ appearance conscious people read it. And pop-up advertisement on right side of the page will be cheaper and it will gain attention quickly.
13. Tie-ups with salon like L"Oreal, Lakme, Habbibs etc.
14. Tie-up with a world renowned aesthetic doctor.
15. Advertisements on face book and twitter.
16. What"s app messages circulated for schemes.

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[2] Report "Indian Cosmetic Sector Analysis (2009-2012) and Travel trends: Cosmetic surgery In India.

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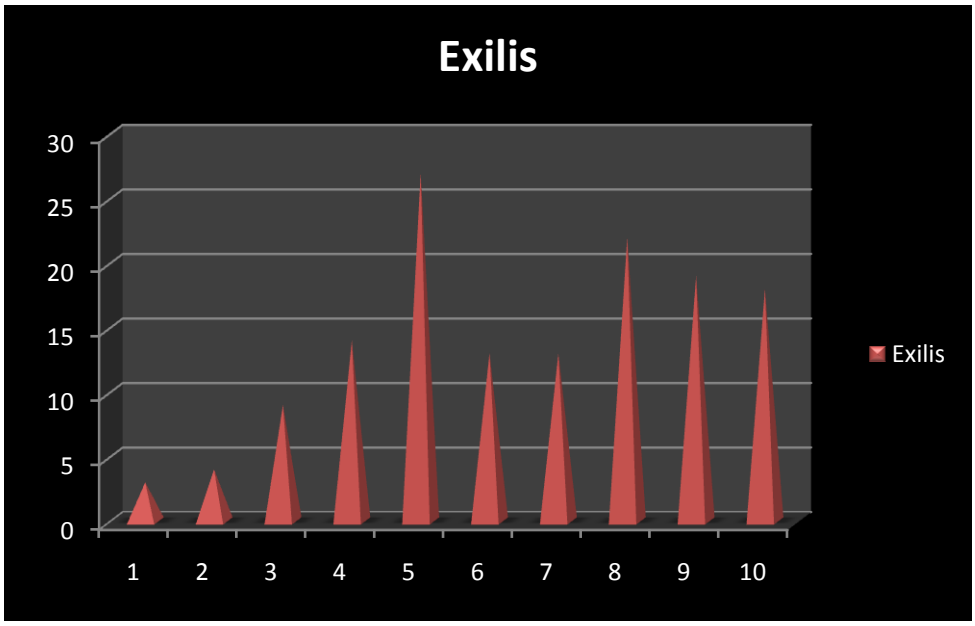
[4] Travel trends: Cosmetic surgery in India.

(By Amrita Ghaswalla 22 November, 2011)

Annexure:

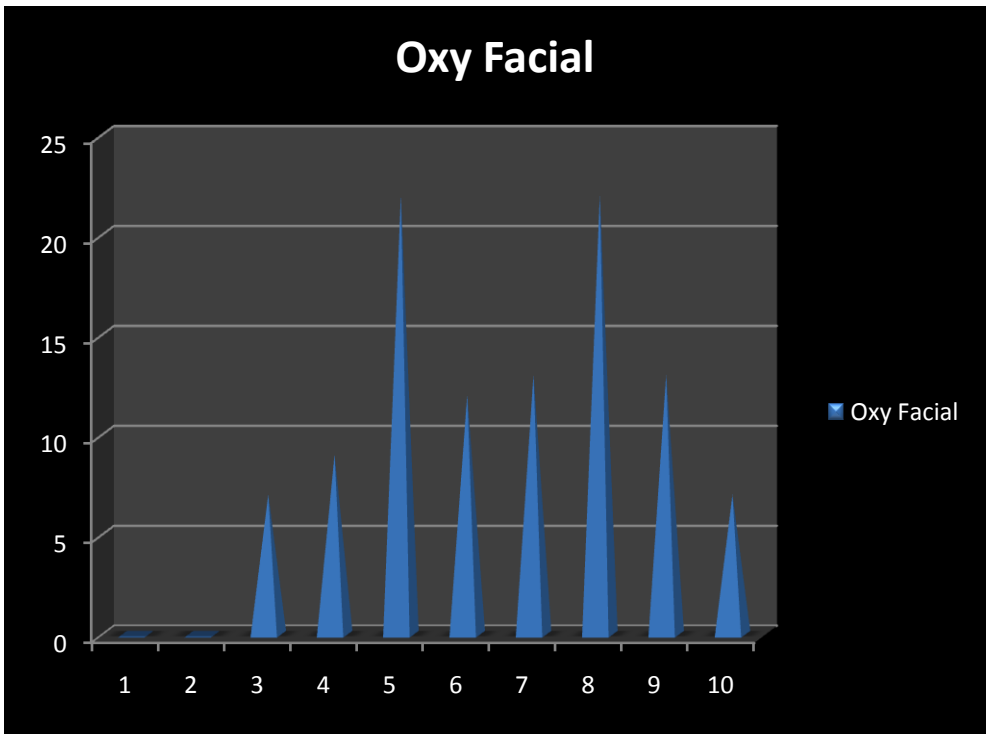
GRAPH SHOWING EACH PROCEDURE MONTHWISE



On X-axis

1. **Jun-13**
2. **Jul-13**
3. **Aug-13**
4. **Sep-13**
5. **Oct-13**
6. **Nov-13**
7. **Dec-13**
8. **Jan-14**
9. **Feb-14**
10. **Mar-14**

On Y-axis

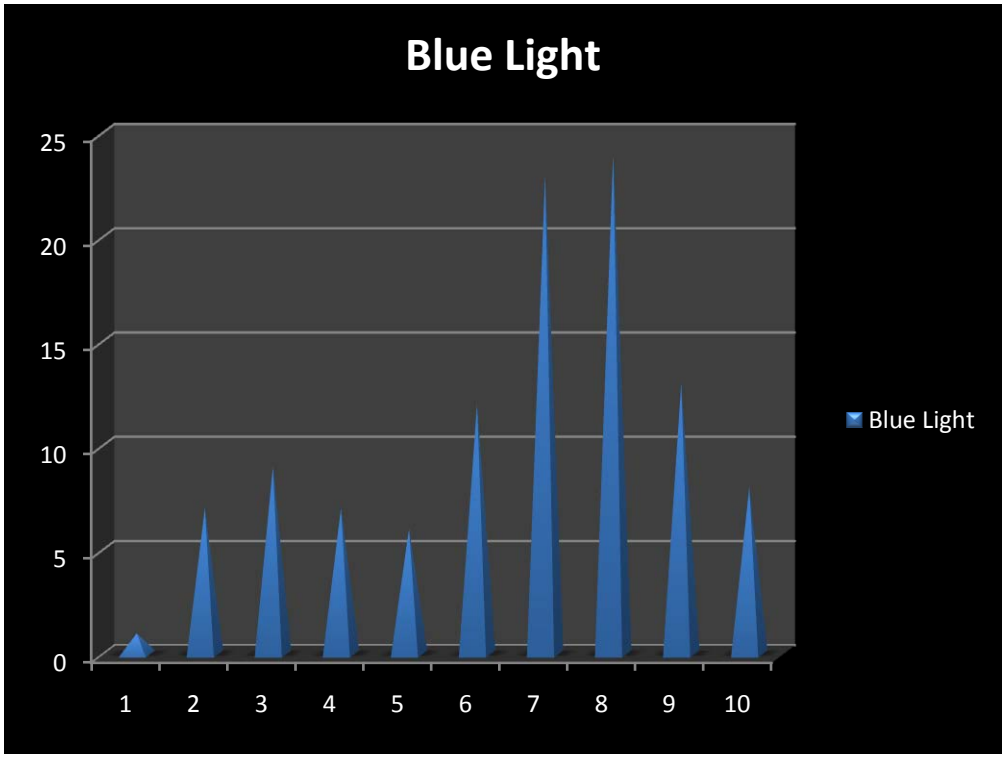


On X-axis

1. **Jun-13**
2. **Jul-13**
3. **Aug-13**
4. **Sep-13**
5. **Oct-13**
6. **Nov-13**
7. **Dec-13**
8. **Jan-14**
9. **Feb-14**
10. **Mar-14**

On Y-axis

Number of procedures

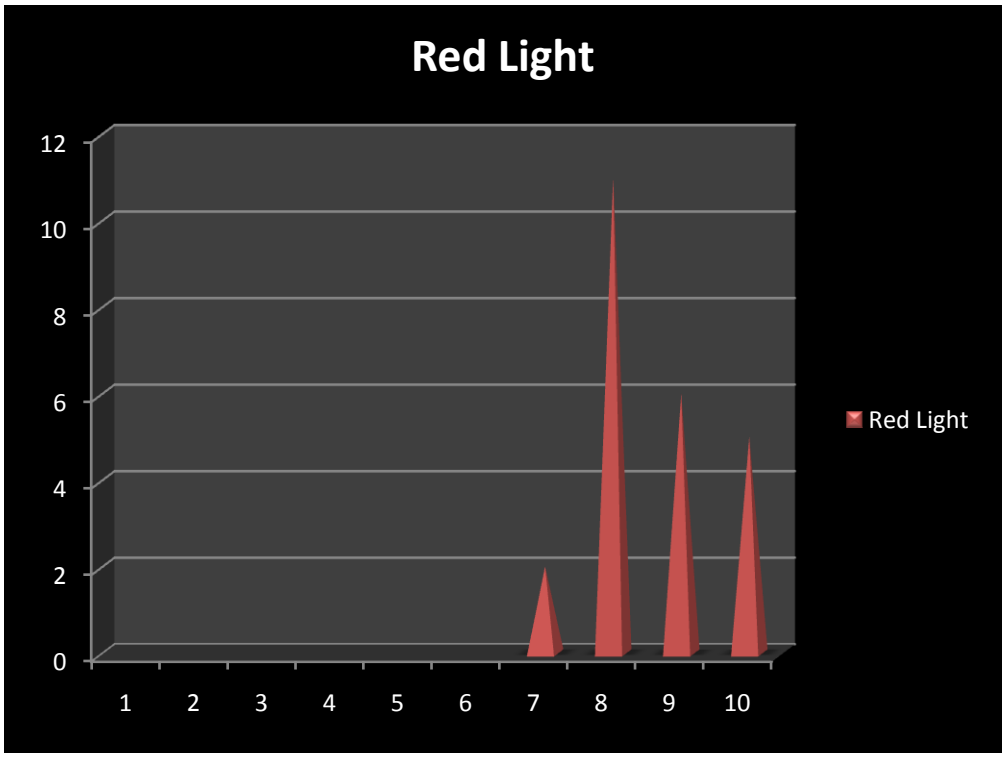


On X-axis

1. Jun-13
2. Jul-13
3. Aug-13
4. Sep-13
5. Oct-13
6. Nov-13
7. Dec-13
8. Jan-14
9. Feb-14
10. Mar-14

On Y-axis

Number of procedures



On X-axis

1. Jun-13
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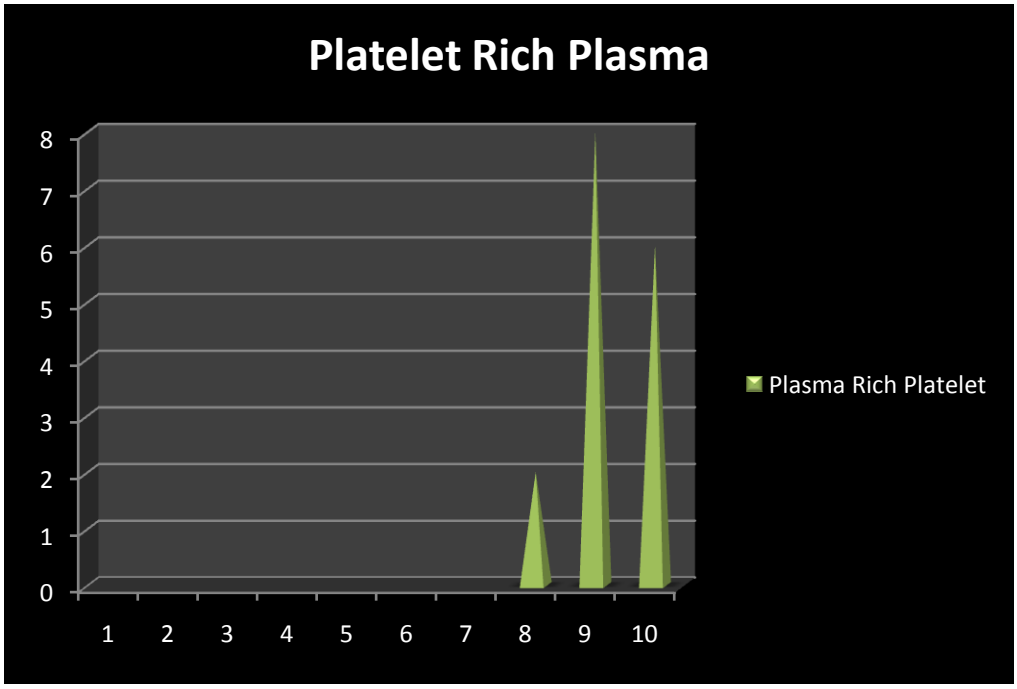
8. Jan-14
9. Feb-14
10. Mar-14

On Y-axis

Number of procedures



On X-axis

1. Jun-13
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3. Aug-13
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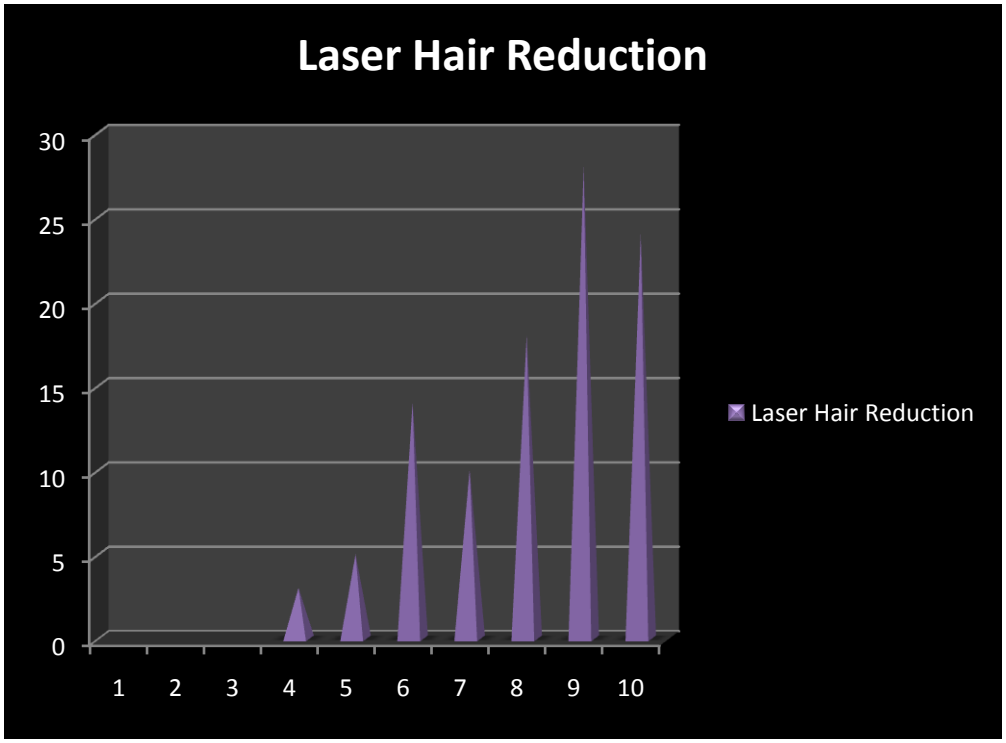
8. Jan-14
9. Feb-14
10. Mar-14

On Y-axis

Number of procedures



On X-axis

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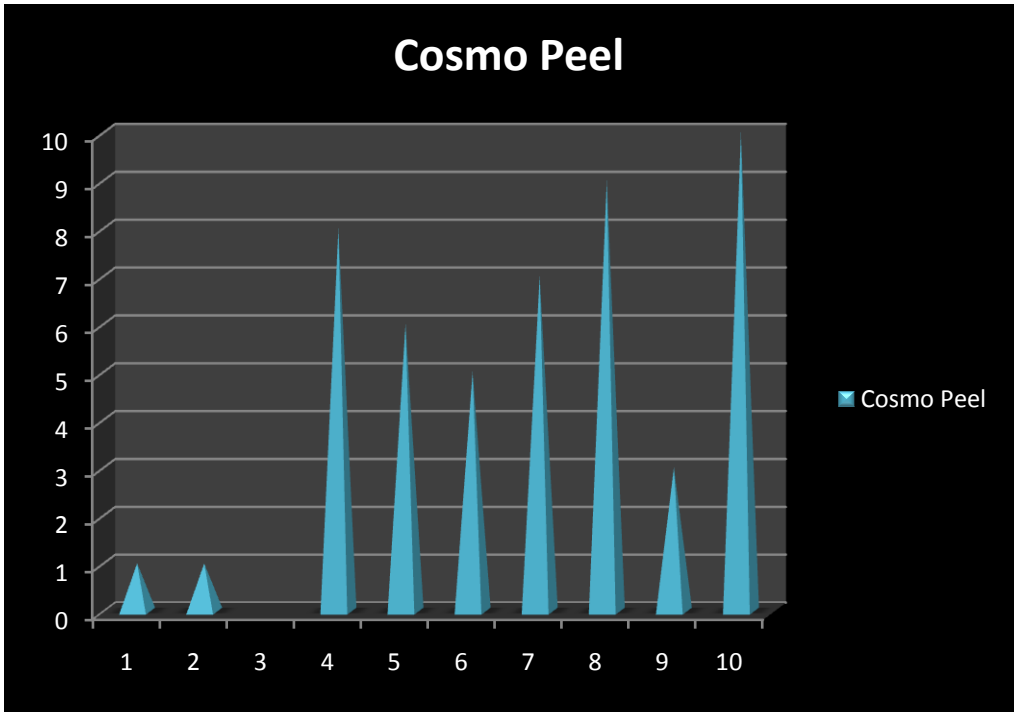
10. Mar-14

On Y-axis

Number of procedures



On X-axis

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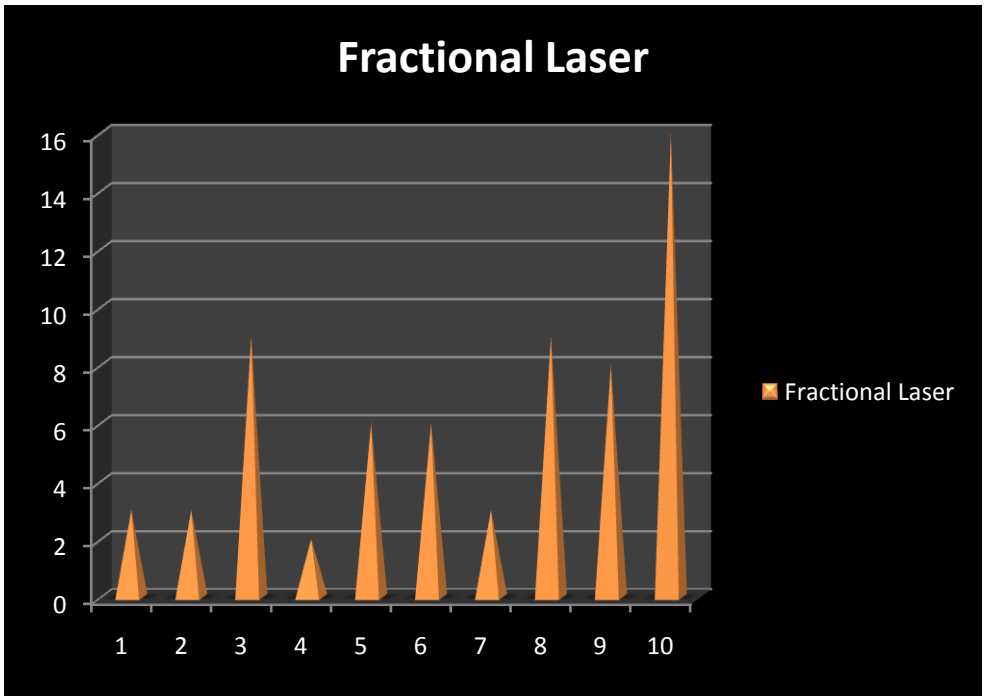
8. Jan-14
9. Feb-14
10. Mar-14

On Y-axis

Number of procedures



On X-axis

1. Jun-13
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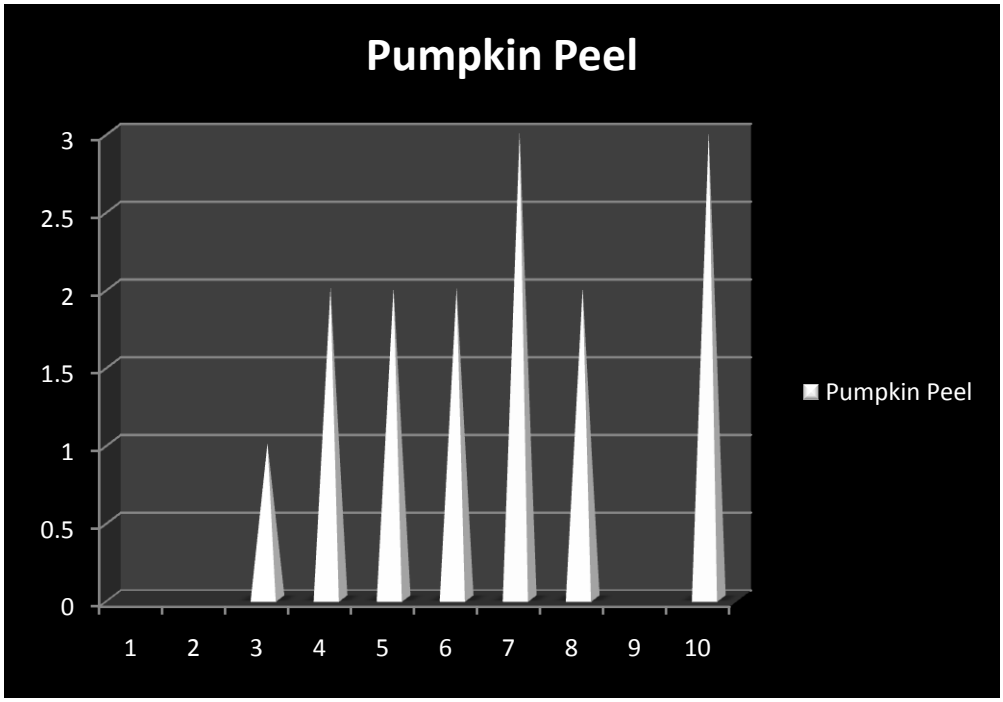
9. Feb-14
10. Mar-14

On Y-axis

Number of procedures



On X-axis

1. Jun-13
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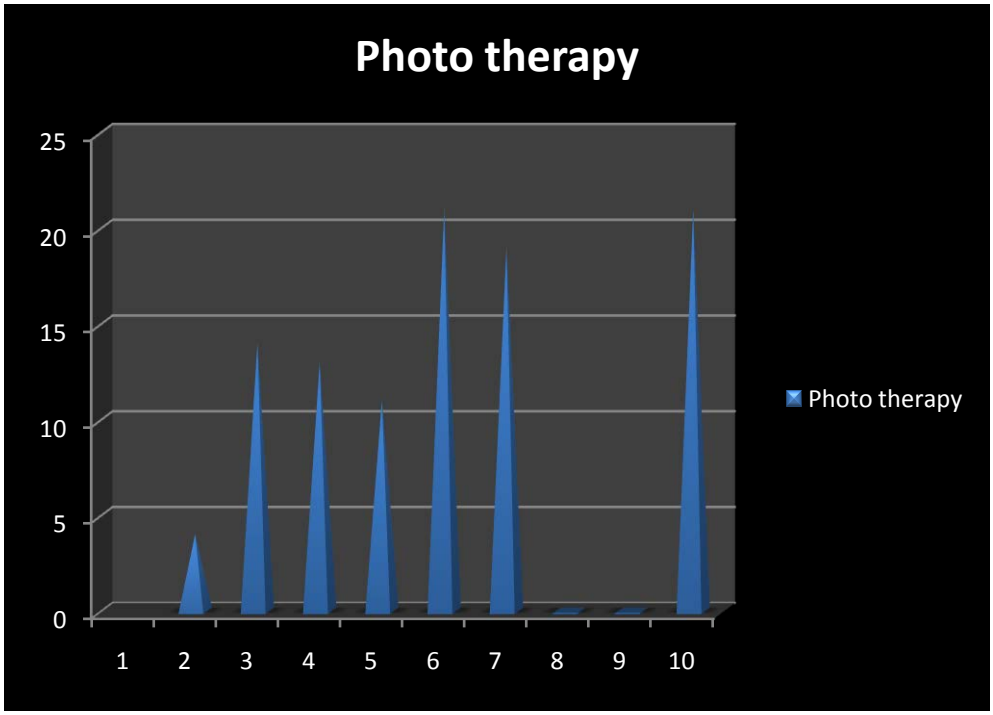
On Y-axis

Number of procedures



On X-axis

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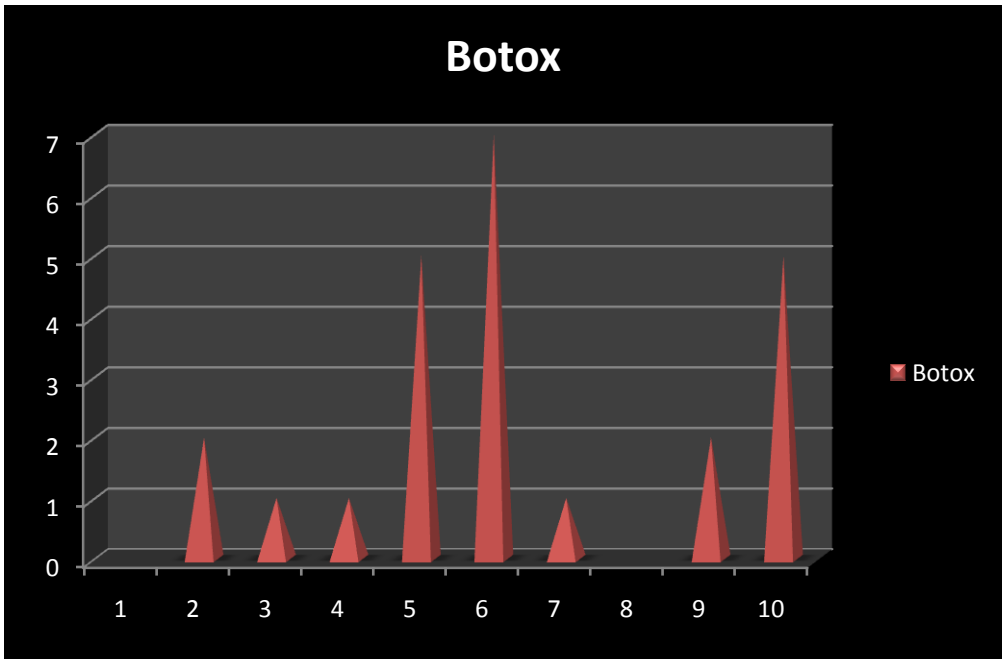
On Y-axis

Number of procedures



On X-axis

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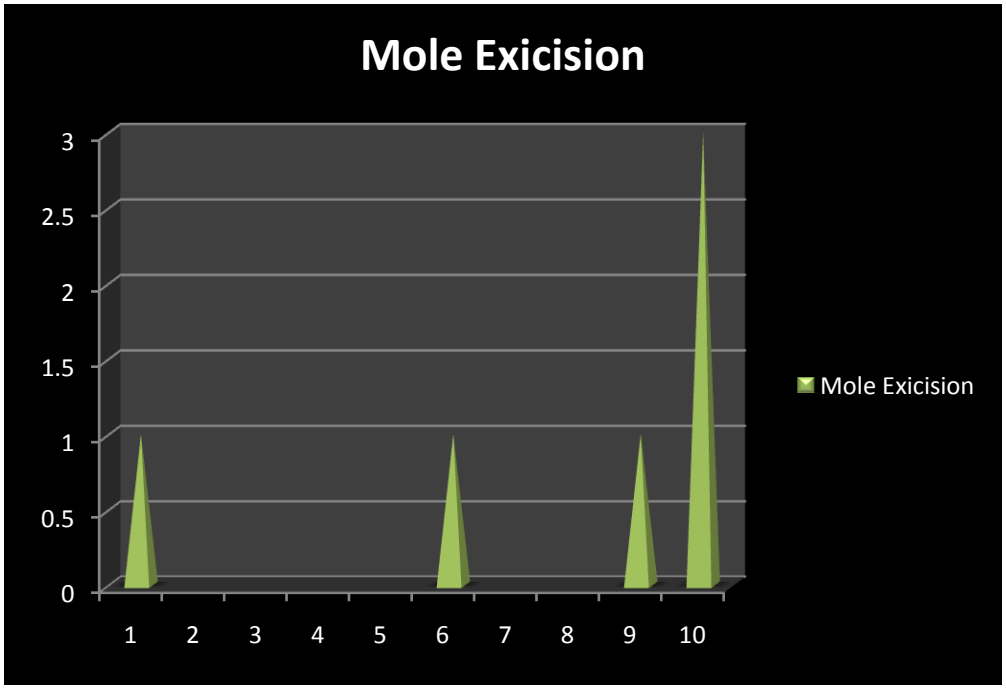
On Y-axis

Number of procedures



On X-axis

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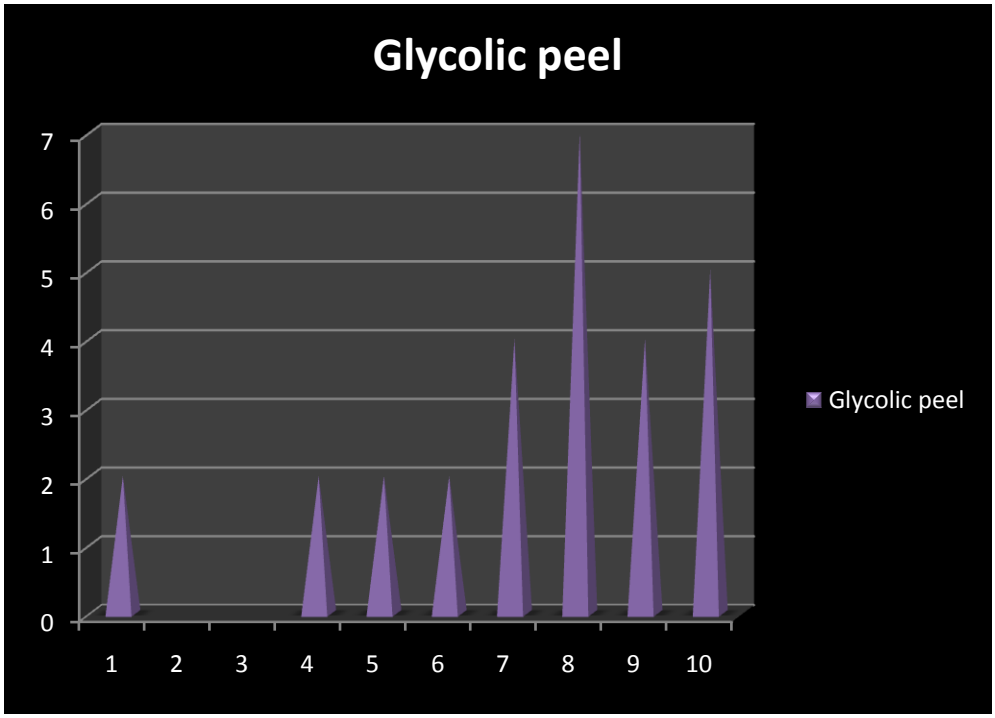
On Y-axis

Number of procedures



On X-axis

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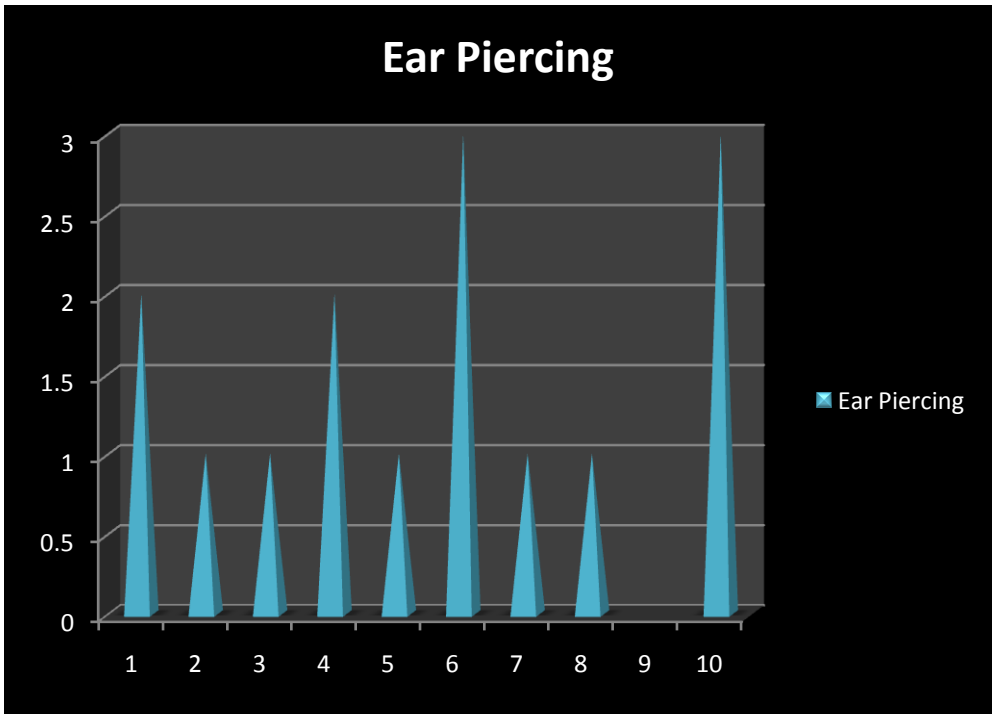
On Y-axis

Number of procedures



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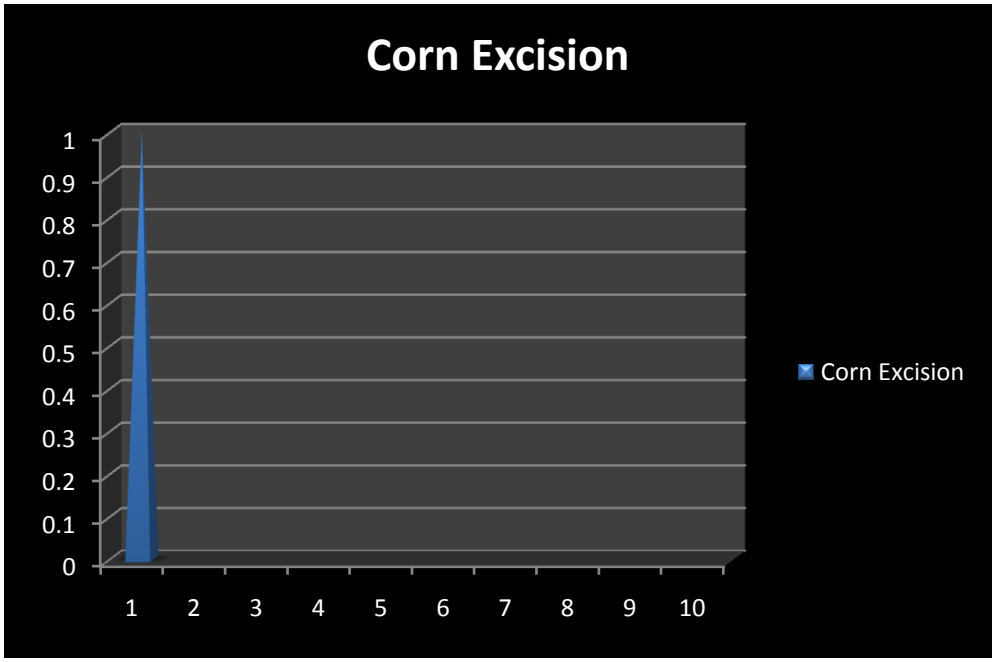
On Y-axis

Number of procedures



On X-axis

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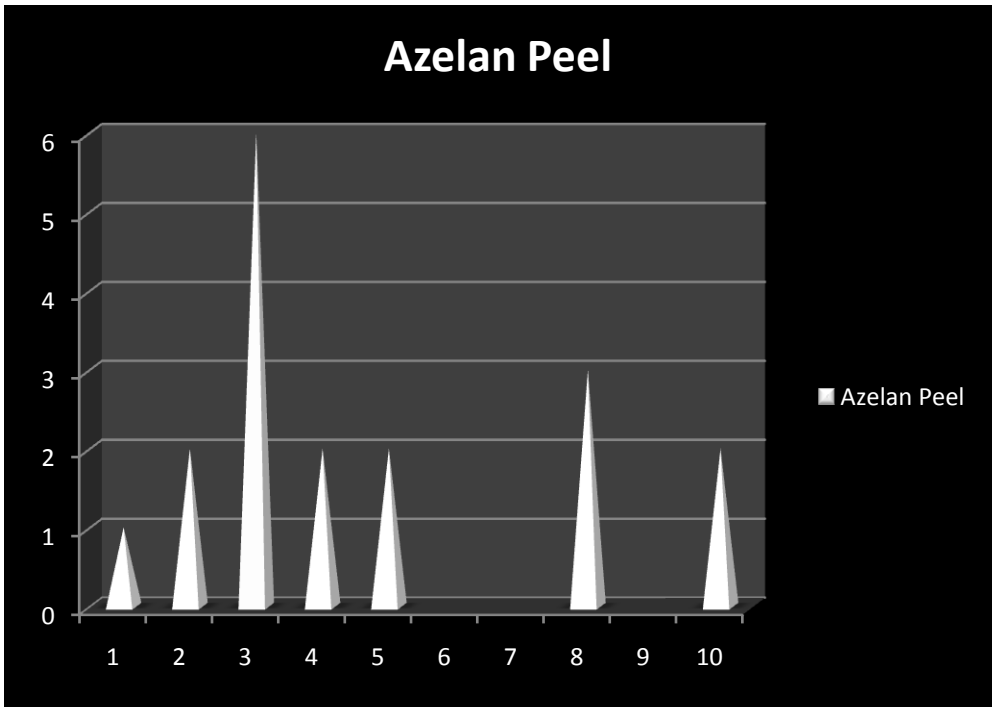
On Y-axis

Number of procedures



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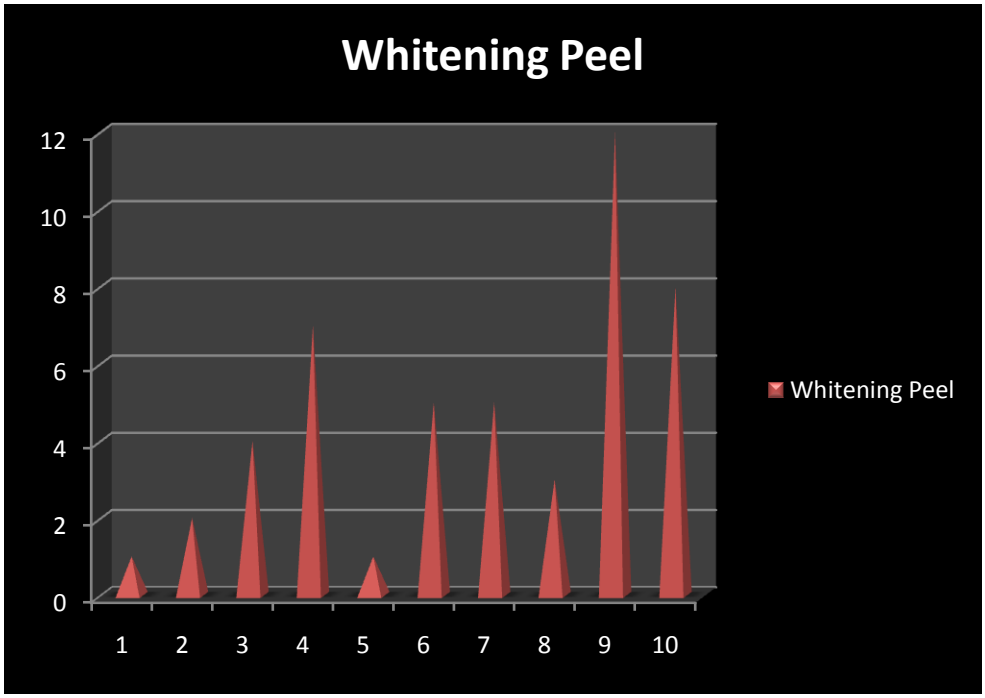
On Y-axis

Number of procedures



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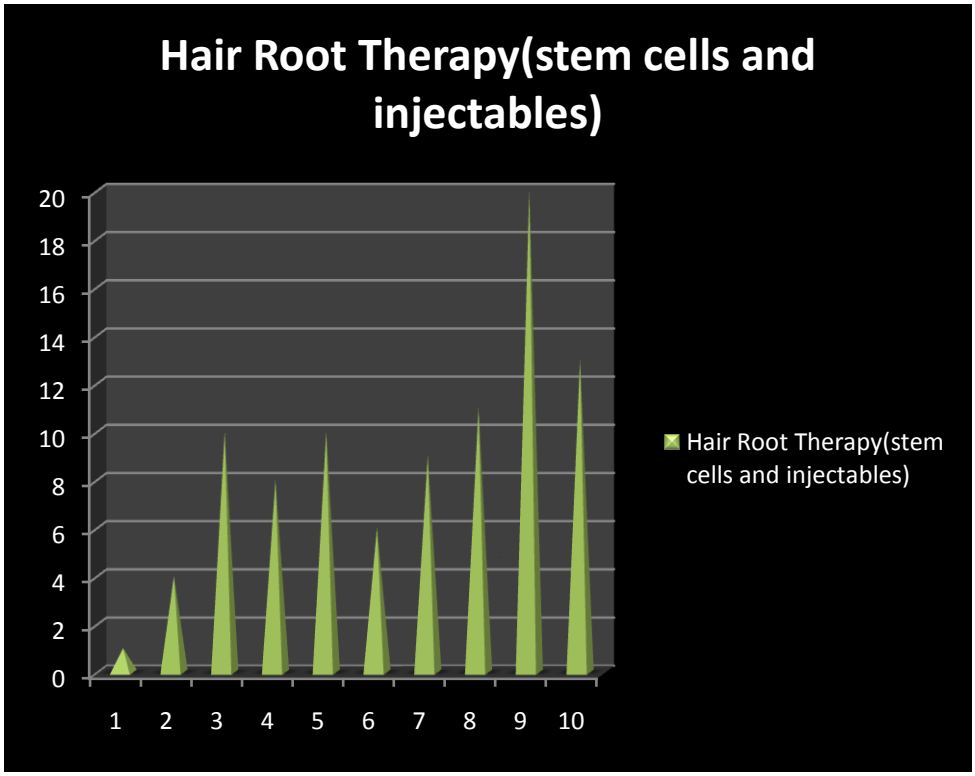
On Y-axis

Number of procedures



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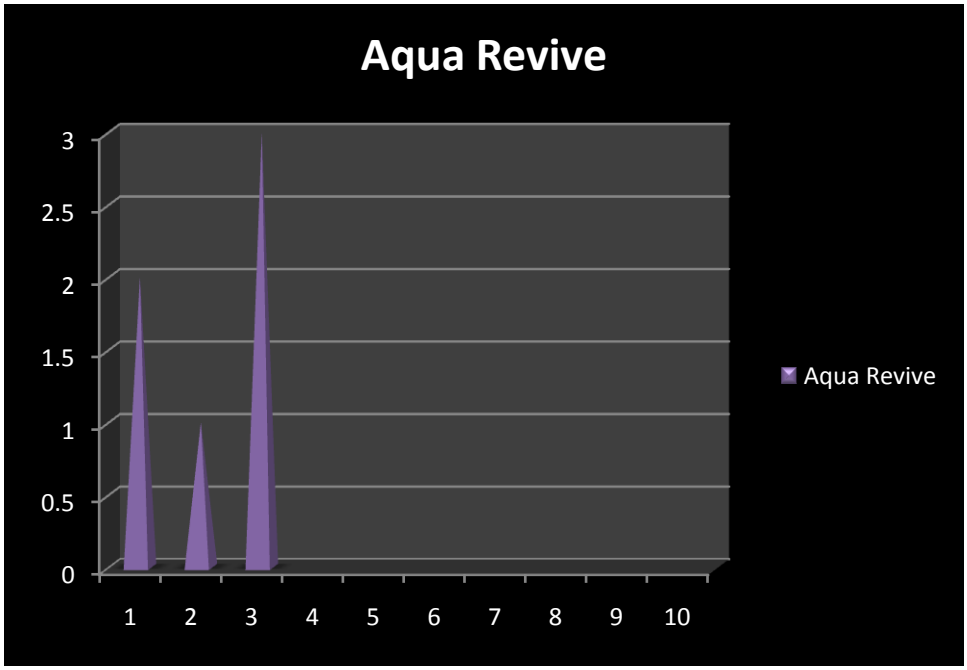
On Y-axis

Number of procedures



On X-axis

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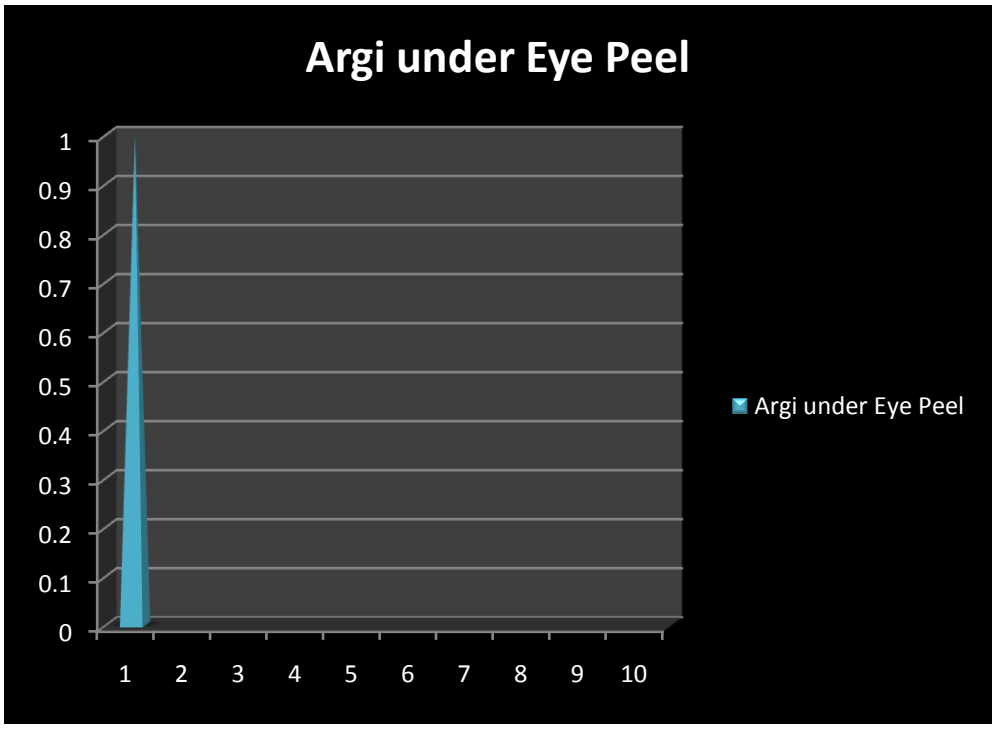
On Y-axis

Number of procedures



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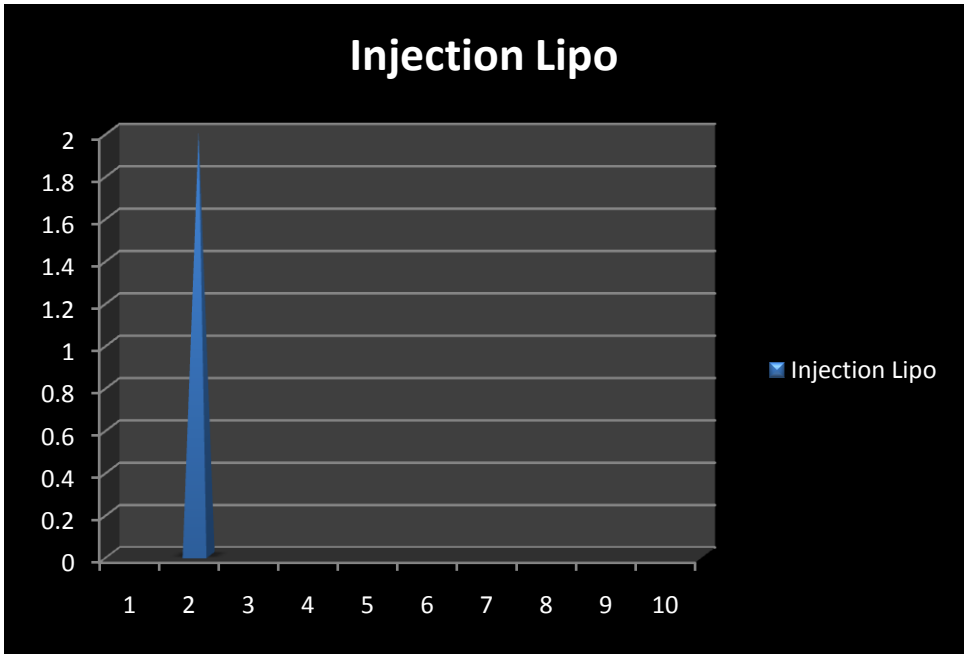
On Y-axis

Number of procedures



On X-axis

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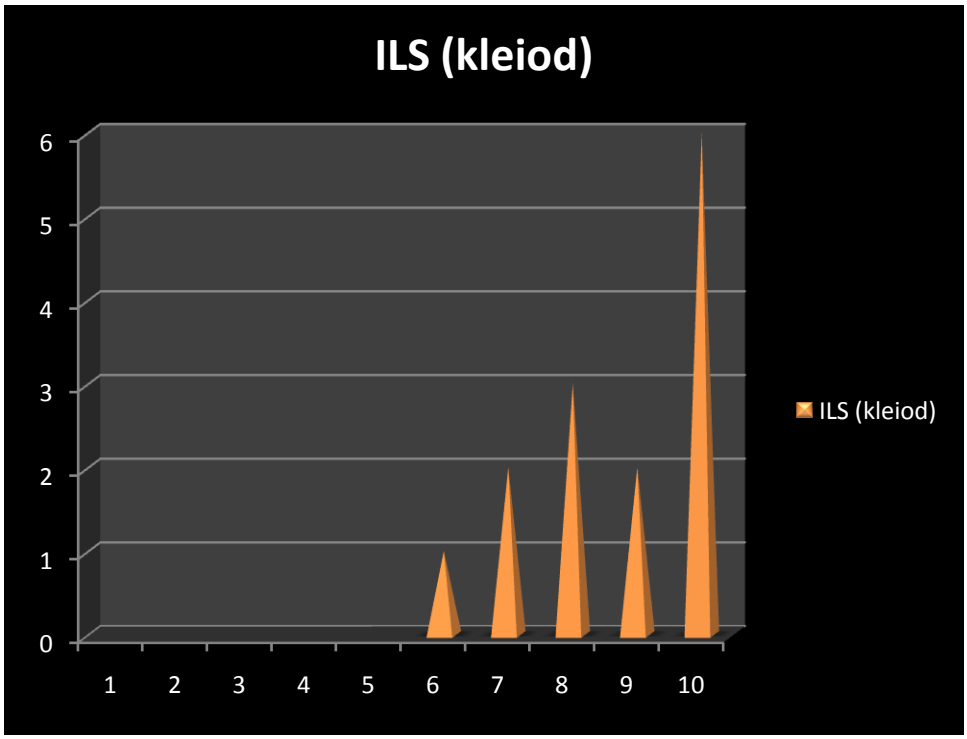
On Y-axis

Number of procedures



On X-axis

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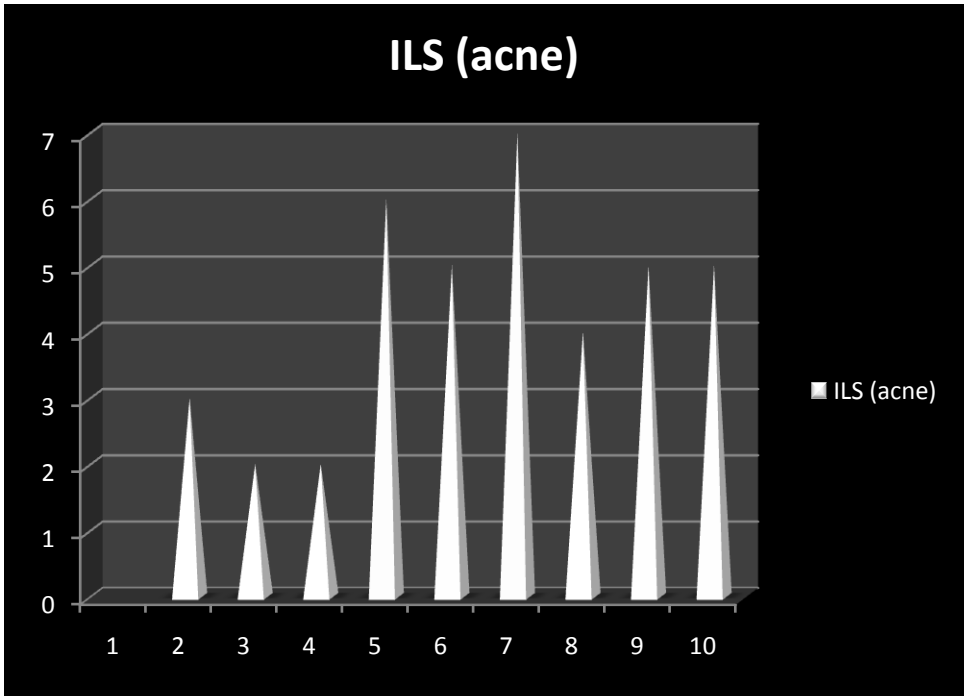
On Y-axis

Number of procedures



On X-axis

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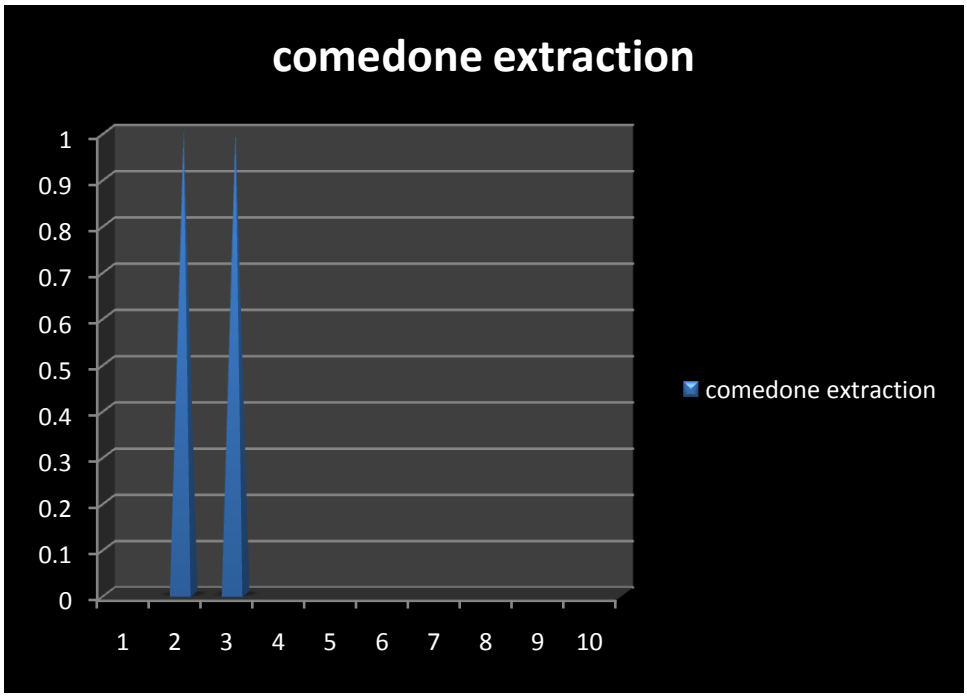
On Y-axis

Number of procedures



On X-axis

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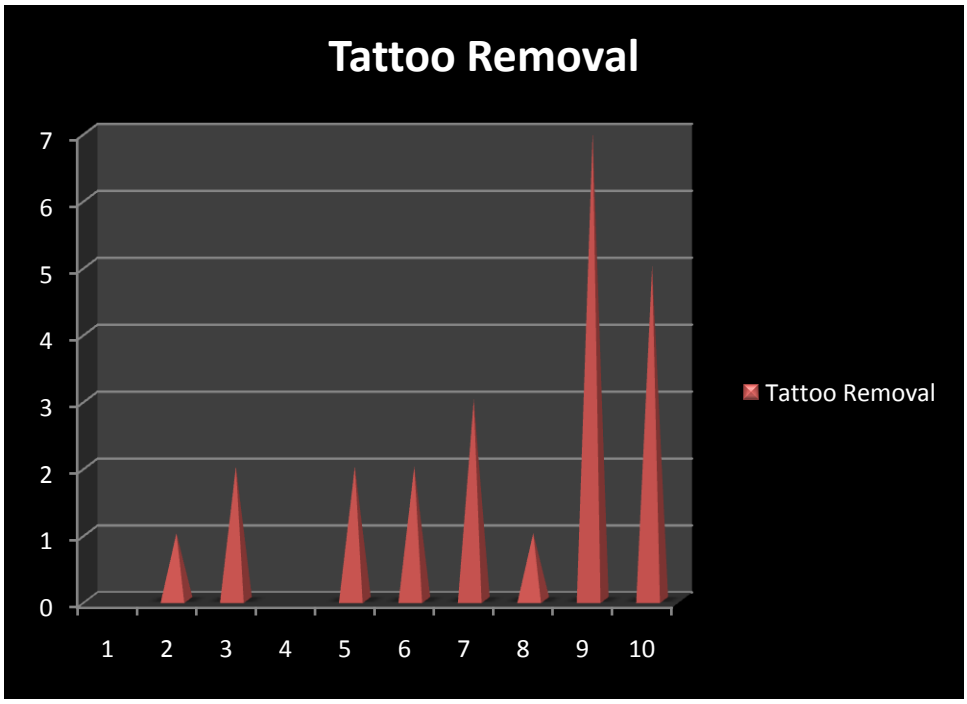
On Y-axis

Number of procedures



On X-axis

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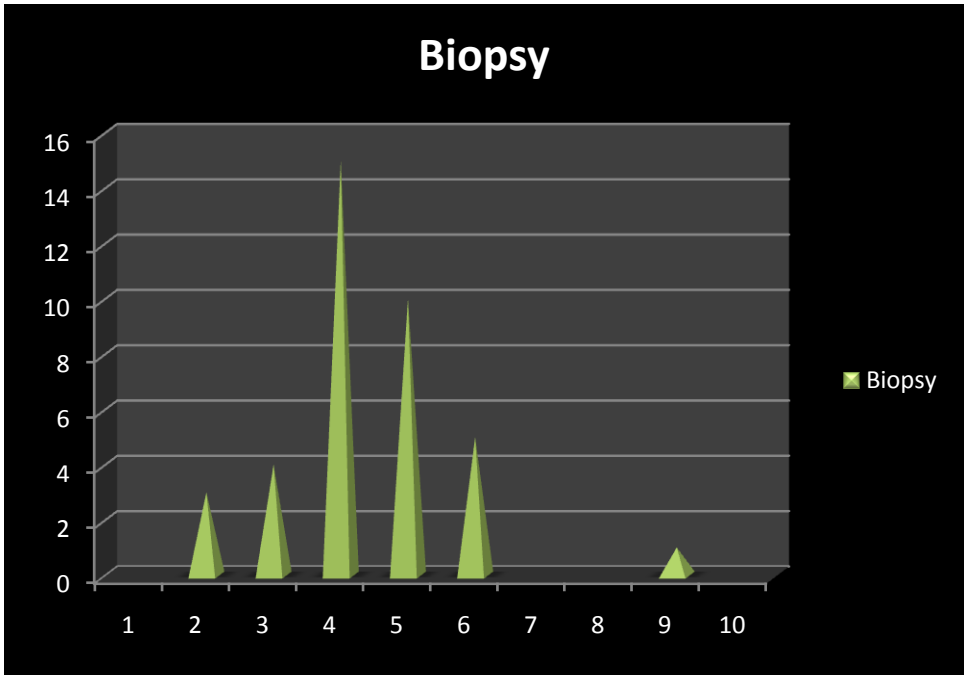
On Y-axis

Number of procedures



On X-axis

1. Jun-13
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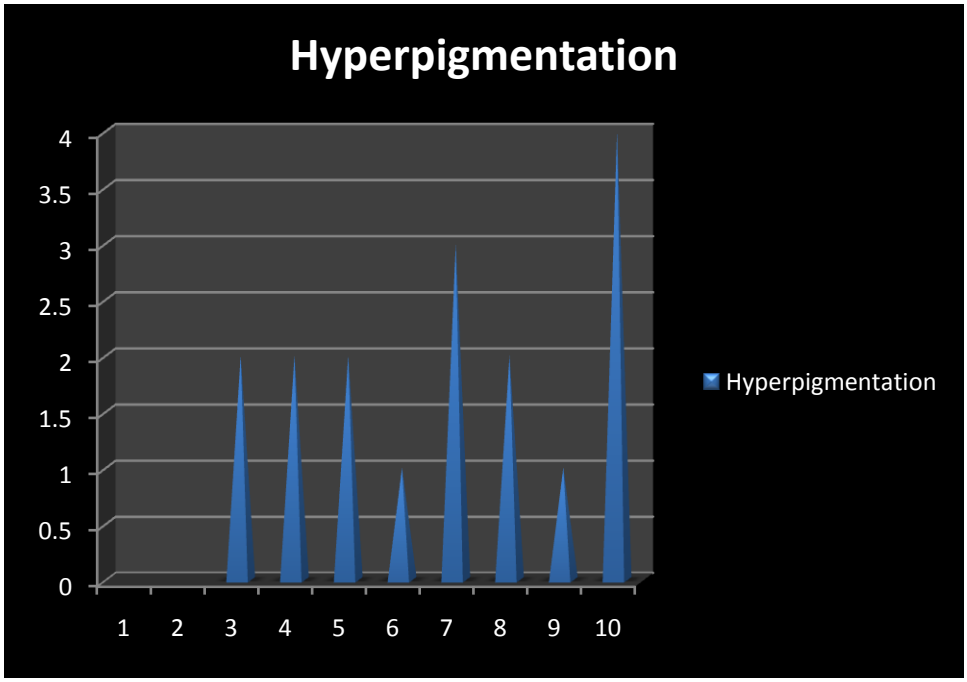
On Y-axis

Number of procedures



On X-axis

1. Jun-13
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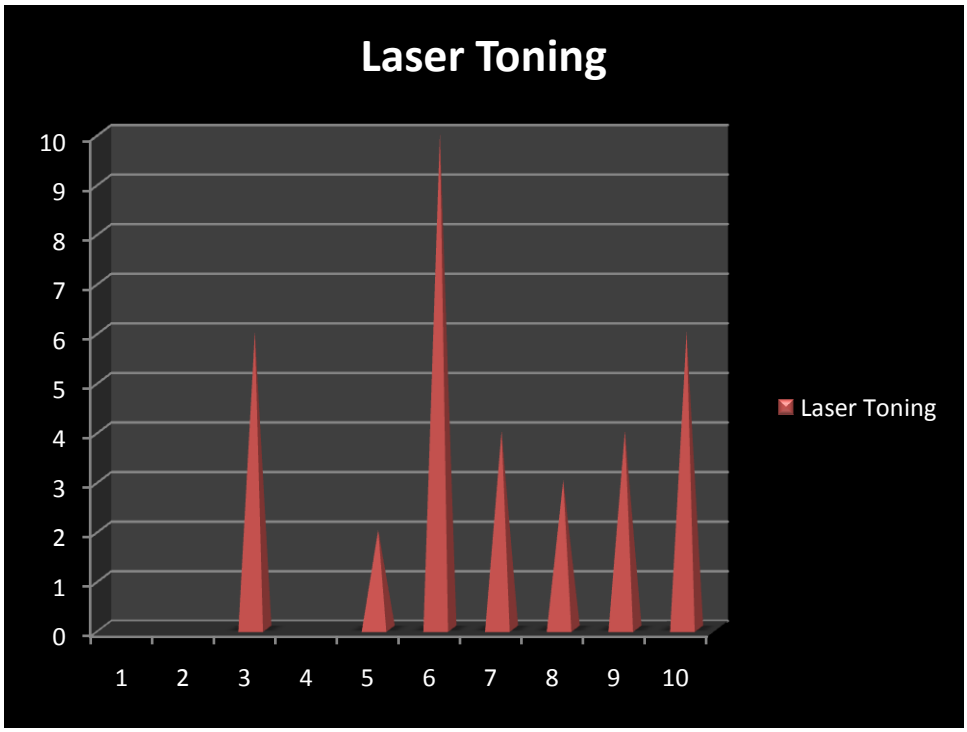
On Y-axis

Number of procedures



On X-axis

1. Jun-13
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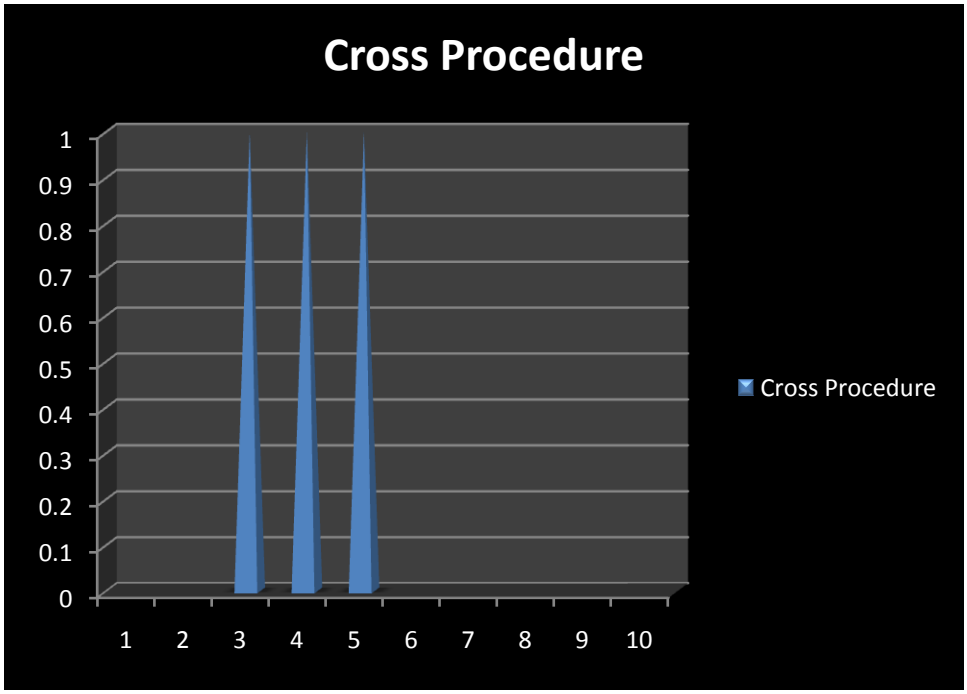
10. Mar-14

On Y-axis

Number of procedures



On X-axis

1. Jun-13
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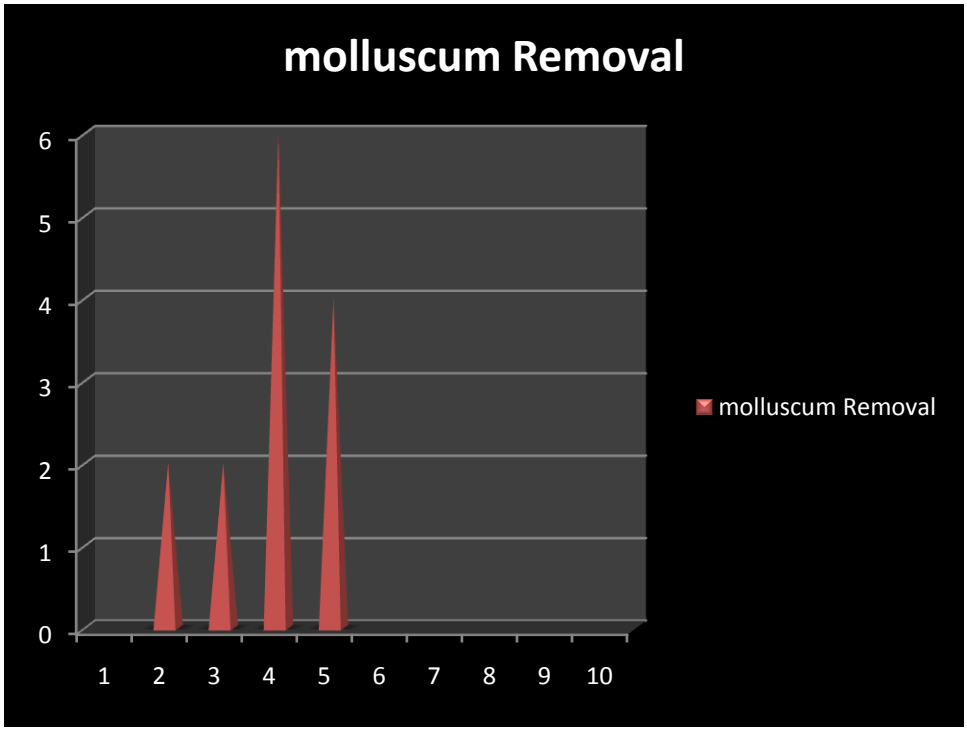
On Y-axis

Number of procedures



On X-axis

1. Jun-13
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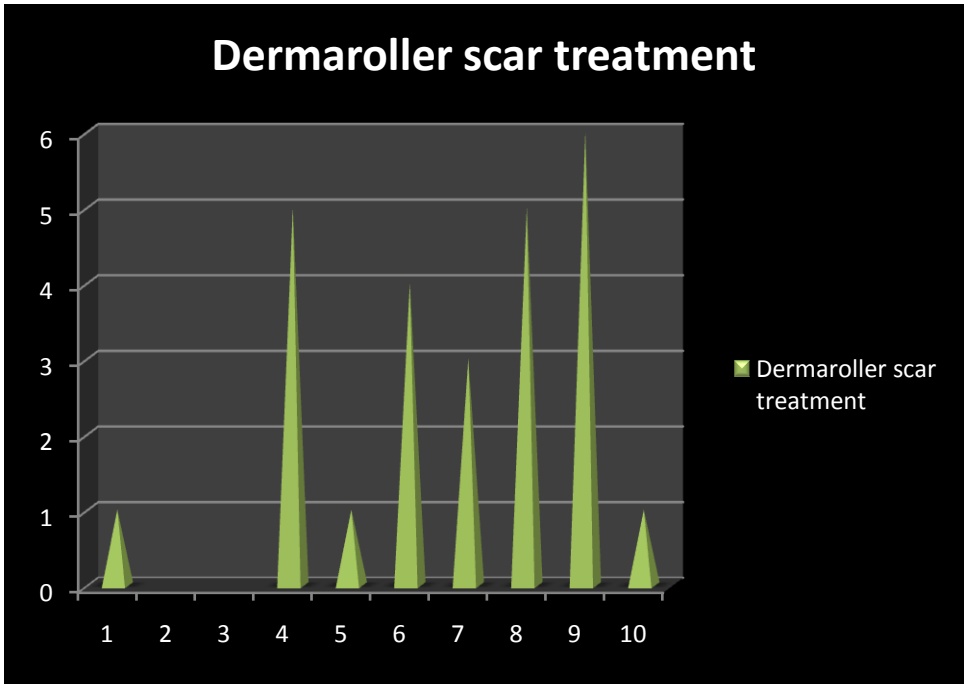
9. Feb-14
10. Mar-14

On Y-axis

Number of procedures



On X-axis

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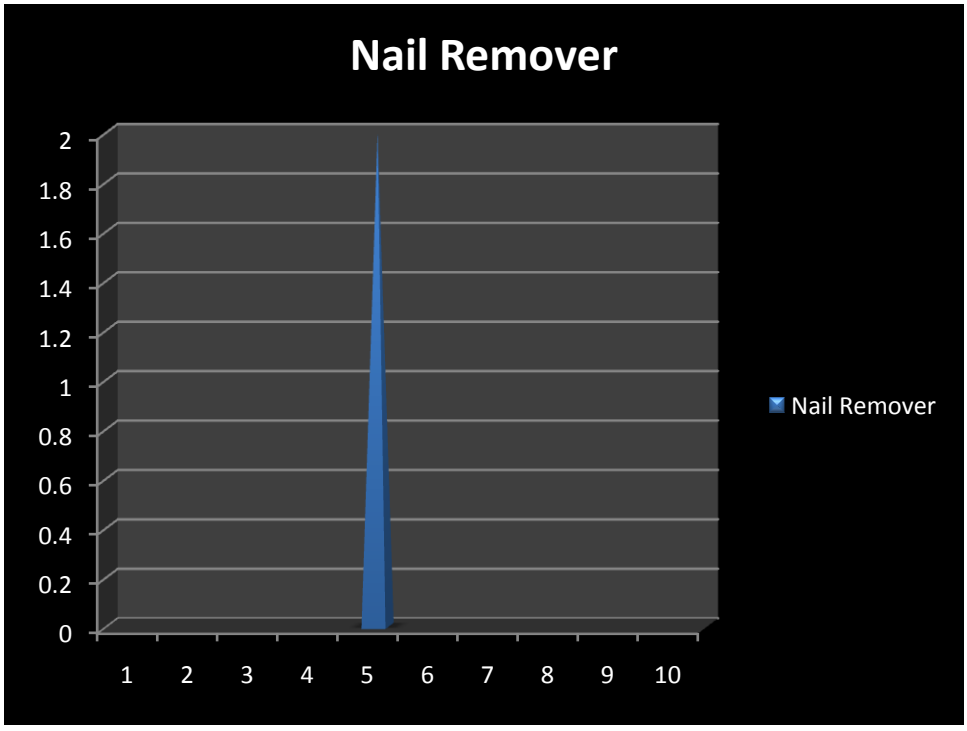
10. Mar-14

On Y-axis

Number of procedures



On X-axis

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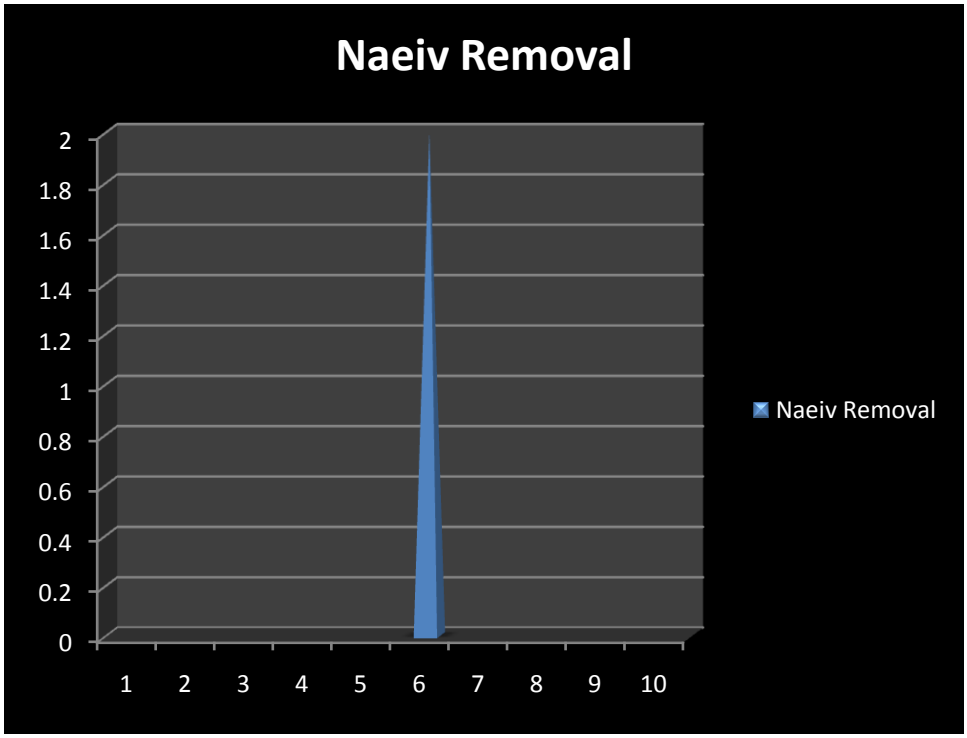
On Y-axis

Number of procedures



On X-axis

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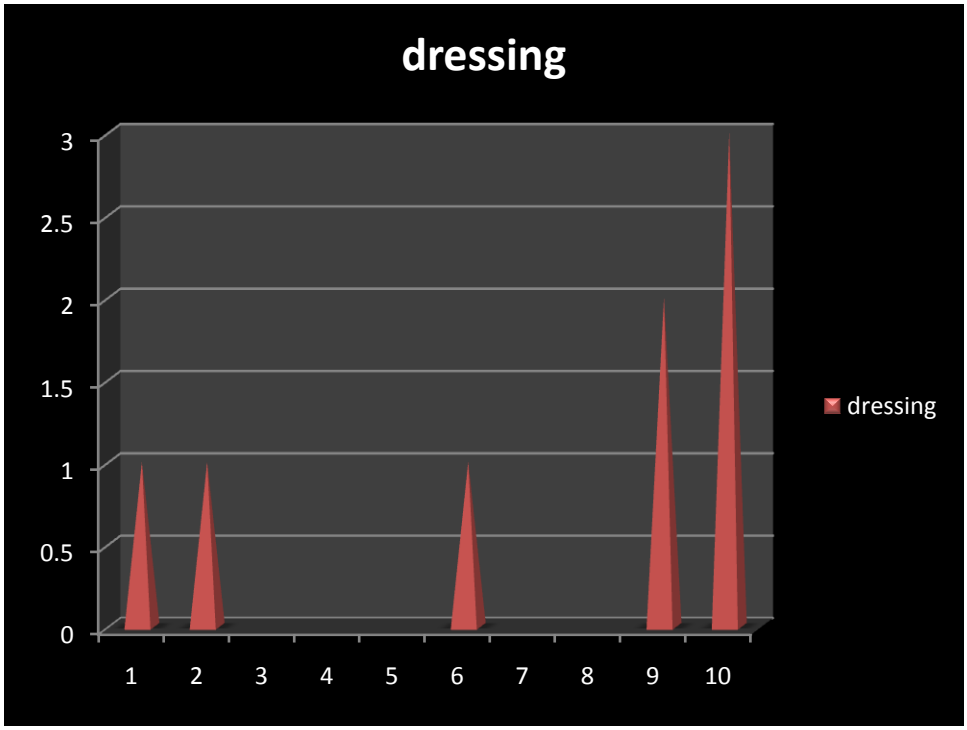
On Y-axis

Number of procedures



On X-axis

1. Jun-13
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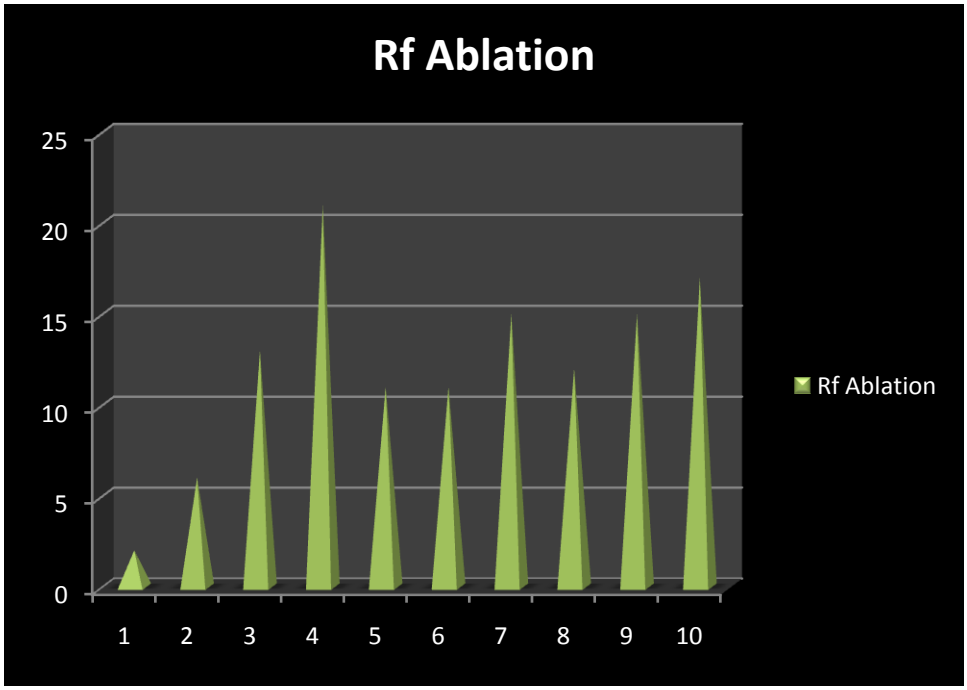
On Y-axis

Number of procedures



On X-axis

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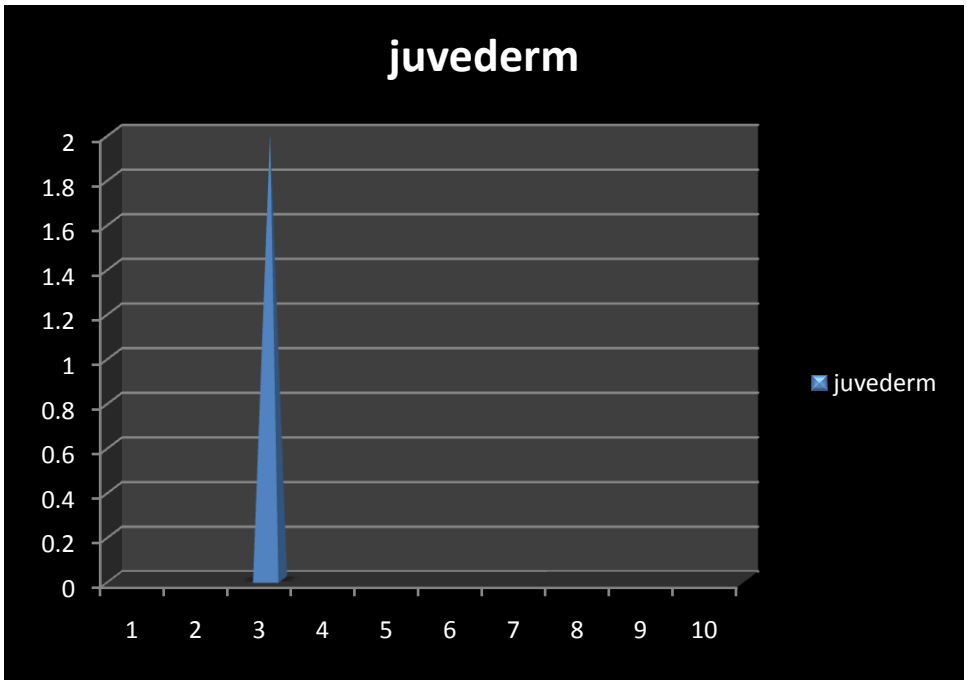
On Y-axis

Number of procedures



On X-axis

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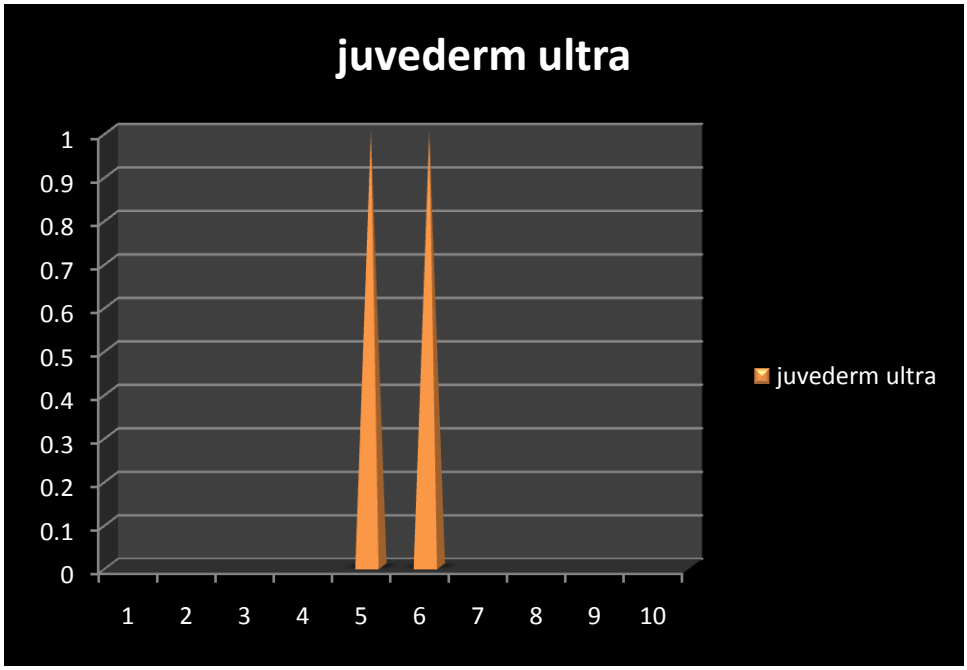
On Y-axis

Number of procedures



On X-axis

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9. Feb-14
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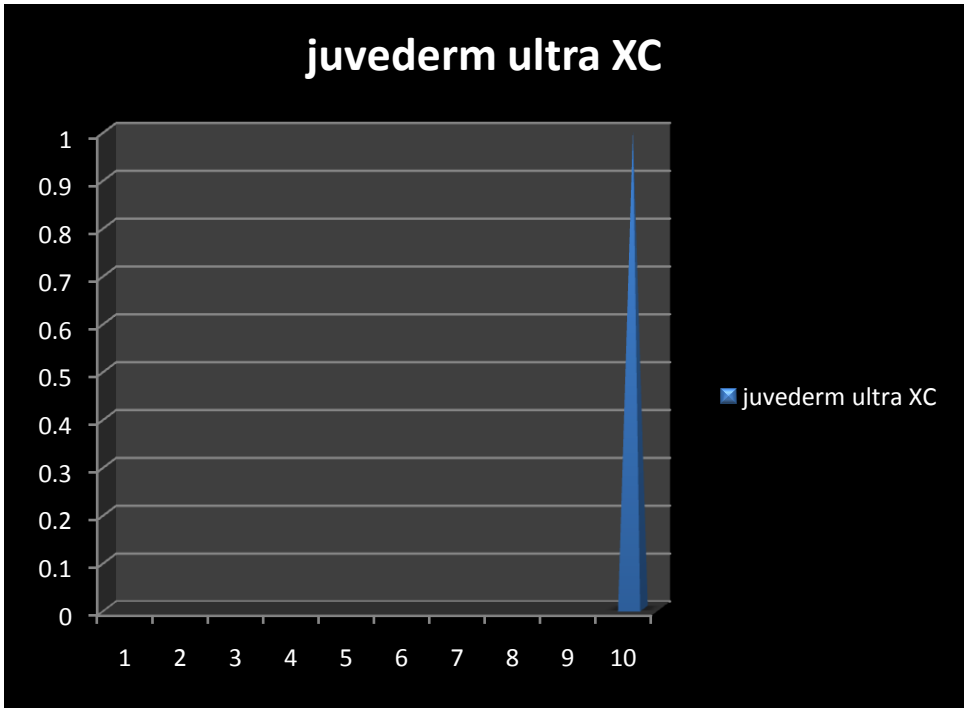
On Y-axis

Number of procedures



On X-axis

1. Jun-13
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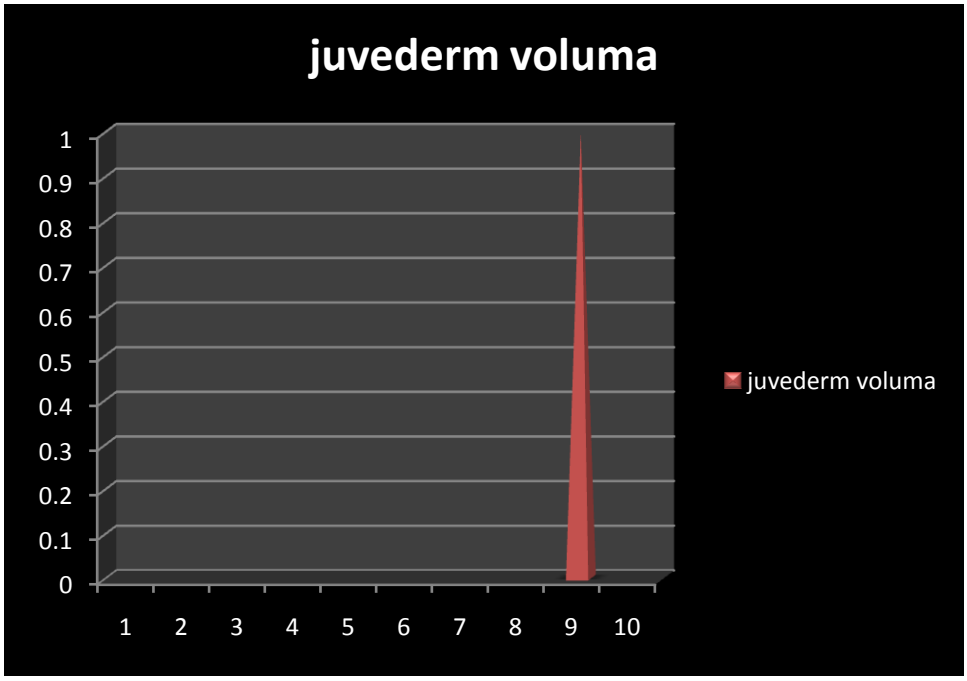
9. Feb-14
10. Mar-14

On Y-axis

Number of procedures



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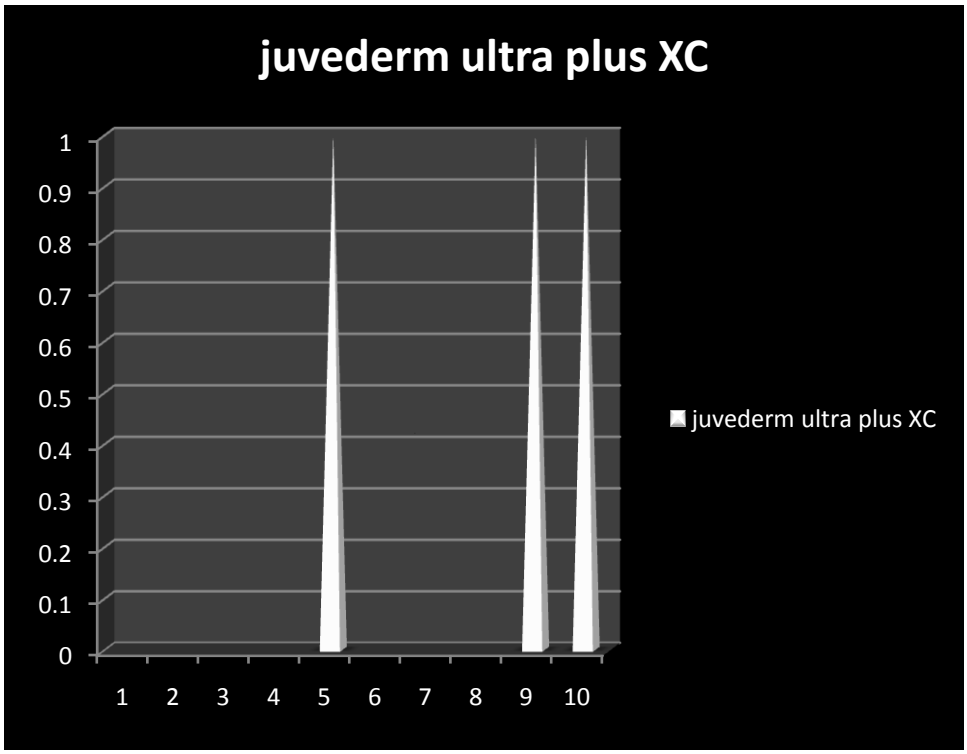
On Y-axis

Number of procedures



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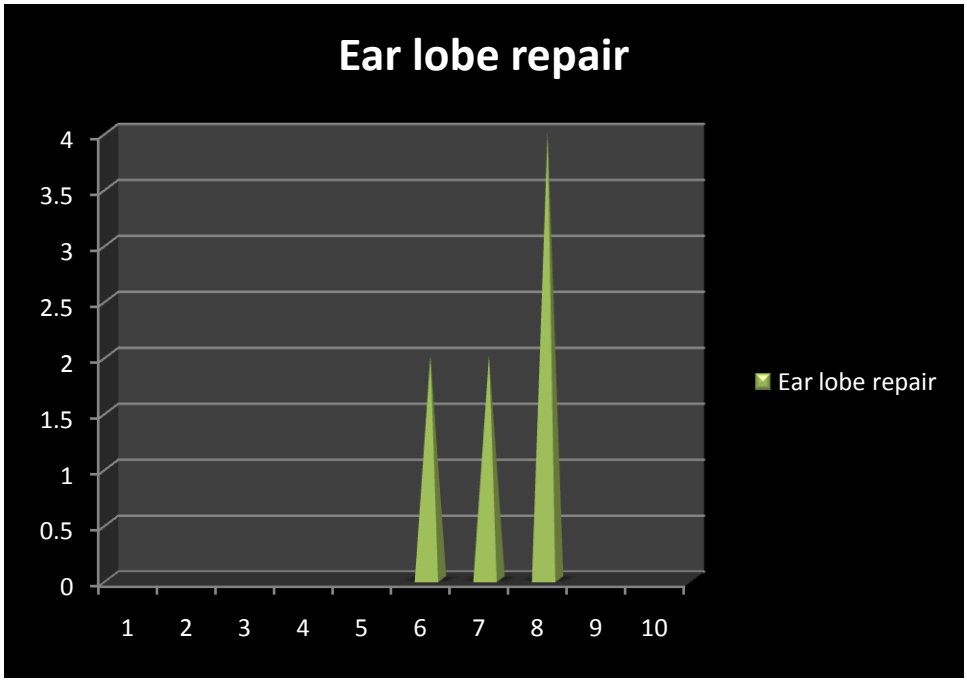
On Y-axis

Number of procedures



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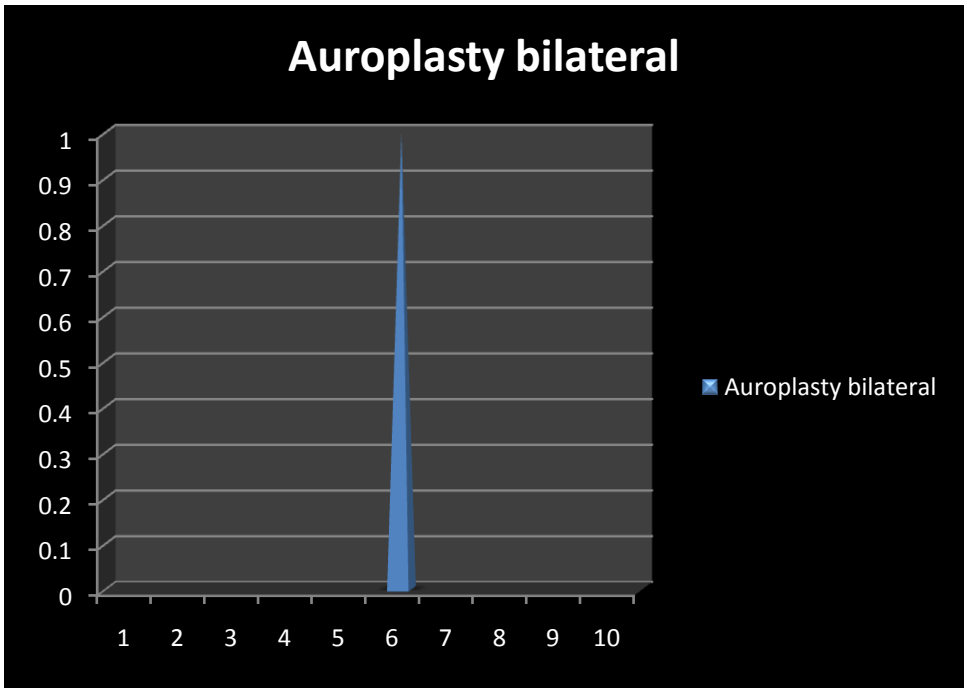
10. Mar-14

On Y-axis

Number of procedures



On X-axis

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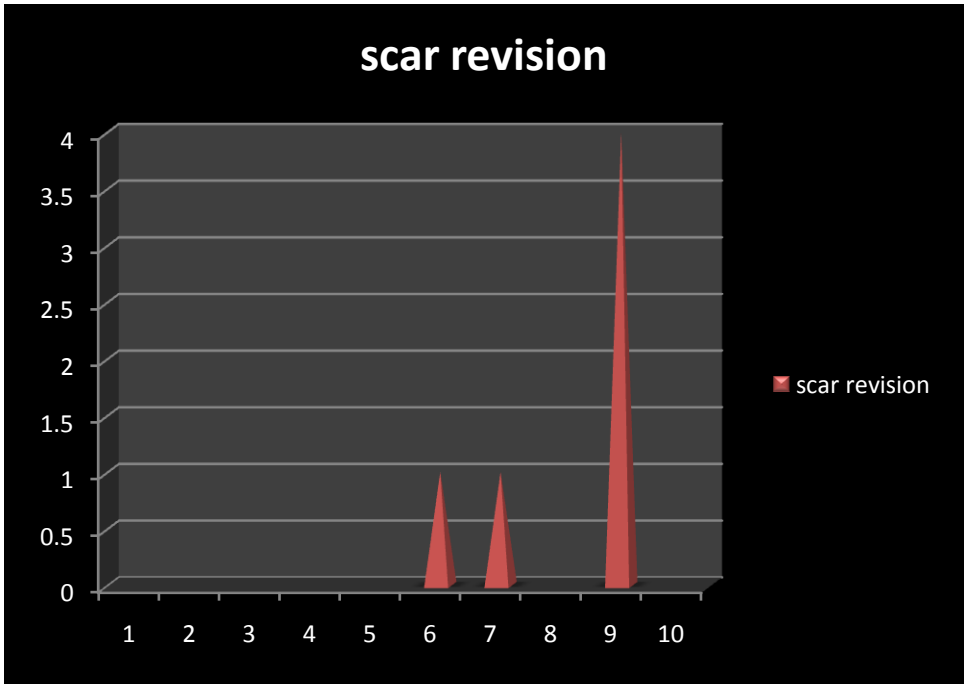
9. Feb-14
10. Mar-14

On Y-axis

Number of procedures



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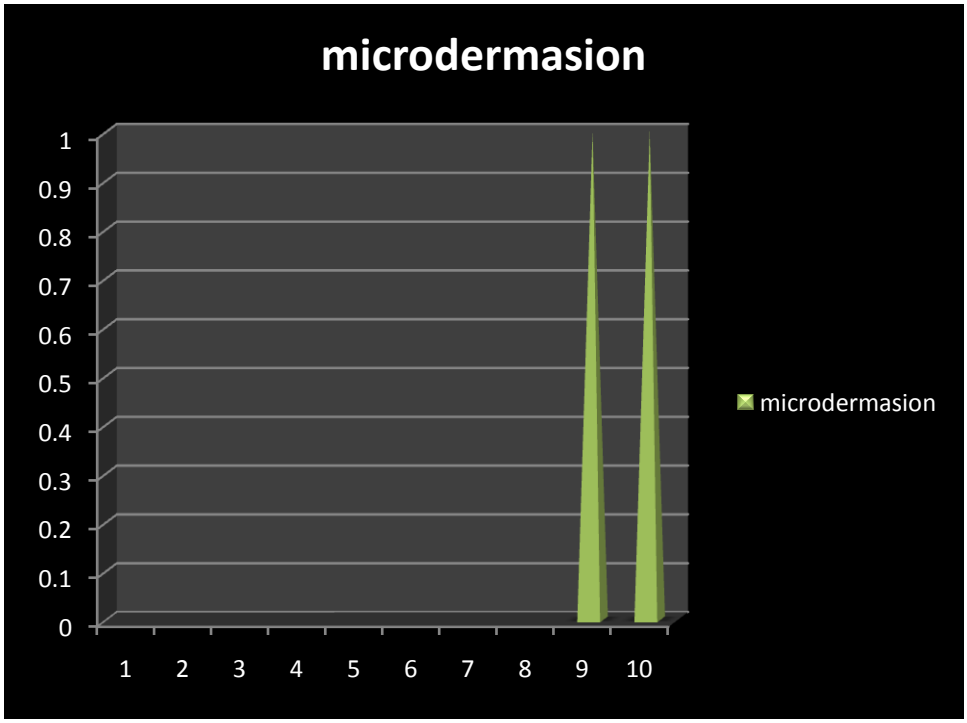
On Y-axis

Number of procedures



On X-axis

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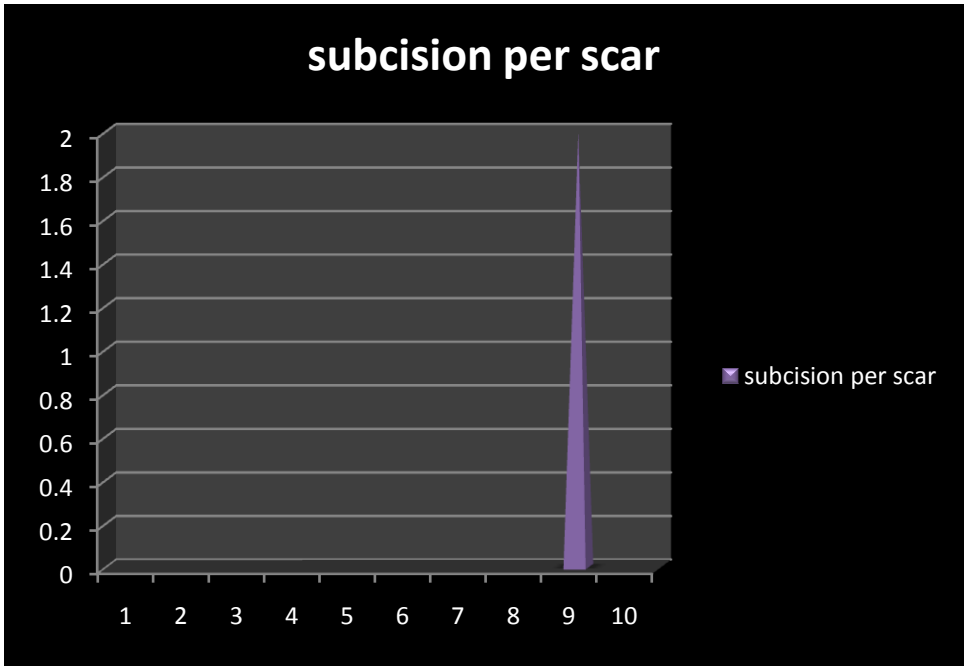
On Y-axis

Number of procedures



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9. Feb-14
10. Mar-14

On Y-axis

Number of procedures

On X-axis

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10. Mar-14

On Y-axis

Number of procedures

PROJECT – 2

STREAMLINING OF IN-PATIENT PHARMACY DEPARTMENT

PROJECT REPORT:

Introduction

- The In-patient pharmacy department of KDAH is a division of material department.
- It runs 24* 7*365 days.
- The department strives to provide the best of medications as prescribed by the doctors and of course faster services to the patient.

Rationale of study

As the department gets the demand of indent throughout the day.

So there was:-

- Delayed delivery of indents to all in-patient department and ICUS.
- More than 40 rounds of indent delivery by the delivery boy.
- No break for the staffs working in the department.

Research question

How to increase the efficiency of the department?

Objective

- To decrease the turnaround time of indent delivery.

Method of data collection

- Primary data collection
- Secondary data collection

Time period

- 15 days (1st May-15th May 2014)

Critical findings

- Unorganized indent order from wards and ICU.
- Delay in indent dispensing.
- Delivery boy spends a lot of time

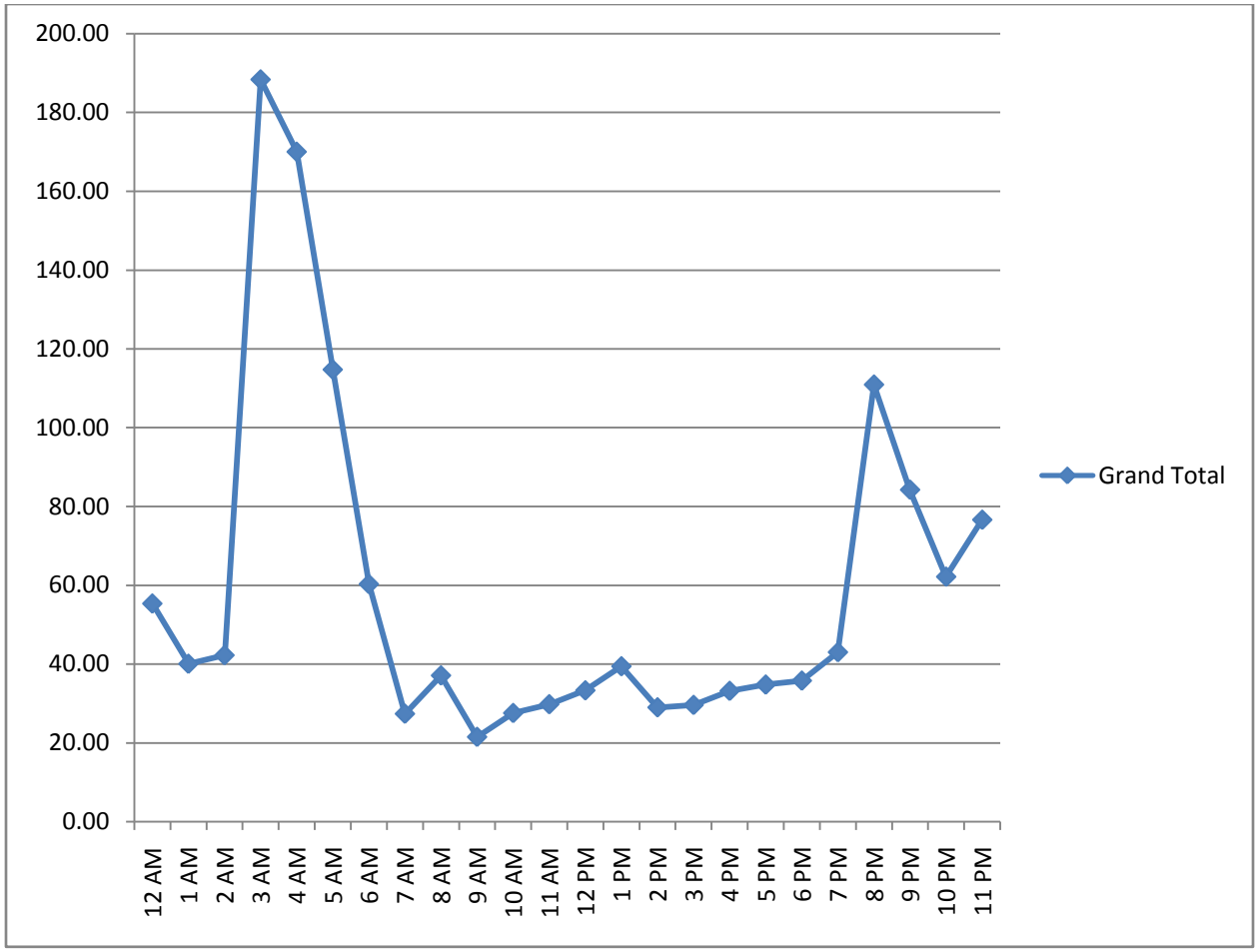
I. waiting for the lift.

II. Selecting delivery for different zones.

III. To hand over the indent to specific nurse in ICU.

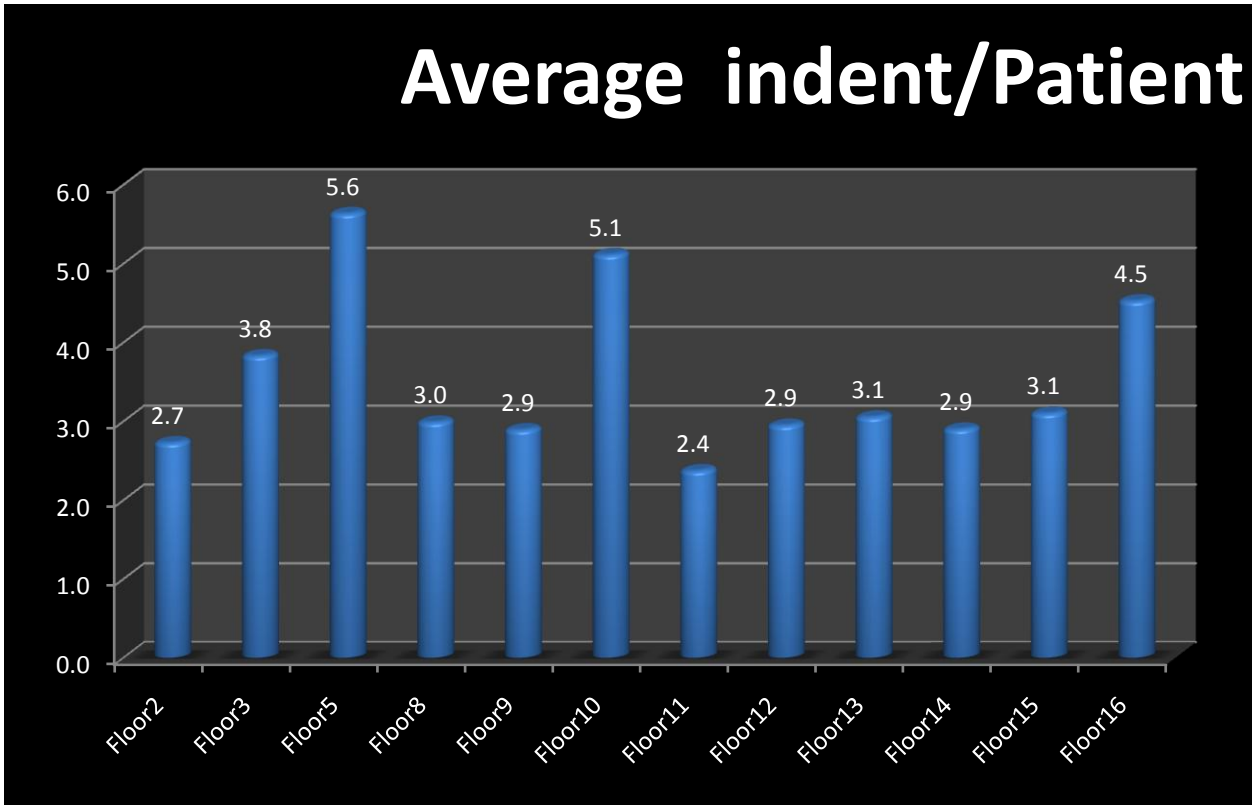
Data analysis

Graph showing total no. of indents raised/hr.



Interpretation:- maximum no. of indents are raised during 2-4 AM as there was demand from the ICU nurse .Indents /patient is highest in ICU. Again it increased during night 8-10 PM. In-patient department nurse raise the indents during this time.

Graph showing requirement of Indents/patient floor wise.



Interpretation:- Maximum demand for indent is from 5th and 10th floor as there is ICU on these floors.

Recommendations

1) Recommended slot for the department.

FLOORS	INDENTING TIME	DISPENSING TIME	DELIVERY TIME
ROUND 1			
10 + 2	5:00-5:30AM	5:30-6:30AM	6:30-7:00AM
5+11	5:00-5:30AM	5:30-6:30AM	6:30-7:00AM
8 +15	5:00-5:30AM	5:30-6:30AM	6:30-7:00AM
3 + 9	6:00-6:30AM	6:30-7:30AM	7:30-8:00AM
13 + 14	6:00-6:30AM	6:30-7:30AM	7:30-8:00AM
16 +12	6:00-6:30AM	6:30-7:30AM	7:30-8:00AM
7:30-8:30AM BREAKFAST BREAK			
ROUND 2			
10 + 2	8:00-8:30AM	8:30-9:30AM	9:30-10:00AM
5+11	8:00-8:30AM	8:30-9:30AM	9:30-10:00AM
8 +15	8:00-8:30AM	8:30-9:30AM	9:30-10:00AM
3 + 9	9:00:9:30AM	9:30-10:30AM	10:30-11:00AM
13 + 14	9:00:9:30AM	9:30-10:30AM	10:30-11:00AM
16 +12	9:00:9:30AM	9:30-10:30AM	10:30-11:00AM
ROUND 3			
10 + 2	10:00-10:30AM	10:30-11:30AM	11:30-12:00PM
5+11	10:00-10:30AM	10:30-11:30AM	11:30-12:00PM
8 +15	10:00-10:30AM	10:30-11:30AM	11:30-12:00PM
3 + 9	11:00-11:30AM	11:30-12:30PM	12:30-1:00PM
13 + 14	11:00-11:30AM	11:30-12:30PM	12:30-1:00PM
16 +12	11:00-11:30AM	11:30-12:30PM	12:30-1:00PM
ROUND 4			
10 + 2	12:00-12:30PM	12:30-1:30PM	1:30-2:00PM
5+11	12:00-12:30PM	12:30-1:30PM	1:30-2:00PM
8 +15	12:00-12:30PM	12:30-1:30PM	1:30-2:00PM
3 + 9	1:00-1:30PM	1:30-2:30PM	2:30-3:00PM

13 + 14	1:00-1:30PM	1:30-2:30PM	2:30-3:00PM
16 +12	1:00-1:30PM	1:30-2:30PM	2:30-3:00PM
ROUND 5			
10 + 2	2:00-2:30PM	2:30-3:30PM	3:30-4:00PM
5+11	2:00-2:30PM	2:30-3:30PM	3:30-4:00PM
8 +15	2:00-2:30PM	2:30-3:30PM	3:30-4:00PM
3 + 9	3:00-3:30PM	3:30-4:30PM	4:30-5:00PM
13 + 14	3:00-3:30PM	3:30-4:30PM	4:30-5:00PM
16 +12	3:00-3:30PM	3:30-4:30PM	4:30-5:00PM
ROUND 6			
10 + 2	4:00-4:30PM	4:30-5:30PM	5:30-6:00PM
5+11	4:00-4:30PM	4:30-5:30PM	5:30-6:00PM
8 +15	4:00-4:30PM	4:30-5:30PM	5:30-6:00PM
3 + 9	5:00-5:30PM	5:30-6:30PM	6:30-7:00PM
13 + 14	5:00-5:30PM	5:30-6:30PM	6:30-7:00PM
16 +12	5:00-5:30PM	5:30-6:30PM	6:30-7:00PM
6:30-7:30PM EVENING SNACKS BREAK			
ROUND 7			
10 + 2	7:00-7:30PM	7:30-8:30PM	8:30-9:00PM
5+11	7:00-7:30PM	7:30-8:30PM	8:30-9:00PM
8 +15	7:00-7:30PM	7:30-8:30PM	8:30-9:00PM
3 + 9	8:00-8:30PM	8:30-9:30PM	9:30-10:00PM
13 + 14	8:00-8:30PM	8:30-9:30PM	9:30-10:00PM
16 +12	8:00-8:30PM	8:30-9:30PM	9:30-10:00PM
ROUND 8			
10 + 2	9:00-9:30PM	9:30-10:30PM	10:30-11:00PM
5+11	9:00-9:30PM	9:30-10:30PM	10:30-11:00PM
8 +15	9:00-9:30PM	9:30-10:30PM	10:30-11:00PM
3 + 9	10:00-10:30PM	10:30-11:30PM	11:30-12:00AM
13 + 14	10:00-10:30PM	10:30-11:30PM	11:30-12:00AM
16 +12	10:00-10:30PM	10:30-11:30PM	11:30-12:00AM

ROUND 9			
10 + 2	12:00-1:30AM	1:30-3:30AM	3:30-4:30AM
5+11	12:00-1:30AM	1:30-3:30AM	3:30-4:30AM
8 +15	12:00-1:30AM	1:30-3:30AM	3:30-4:30AM
3 + 9	2:00-3:30AM	3:30-5:30AM	5:30-6:30AM
13 + 14	2:00-3:30AM	3:30-5:30AM	5:30-6:30AM
16 +12	2:00-3:30AM	3:30-5:30AM	5:30-6:30AM

2) Plan for implementation of slot.

PLAN FOR IMPLEMENTATION OF SLOTS

a) NURSING STATION

Inform nurses

Stick the time table of "indenting time"and "delivery time" on their desk.

b) PHARMACY

Allocate separate computer, pharmacist and table for each group of floors.

Stick the time table of "dispensing indent" and "delivery time".

c) DELIVERY BOY

Inform delivery boy and security guard regarding delivery time.

Stick the time table of " delivery time" near door

3) List of top 10 items which is having high frequency.

INDENT NAME	INDENT /MONTH	INDENT/DAY
NS 100ML FREEFLEX	4874	162
ZEPOXIN 40MG INJ	2994	100
ALCOHOL SWABS PREMIER	2585	86
SYRINGE 10 ML WITH NEEDLE 21 X 1 BD	2581	86
SYRINGE 10ML LL 21GX1 WITH NEEDLE BD	2558	85
SAFESET B BRAUN I.V.SET	2553	85
NS 100ML(RECONS. DEVICE-BAXTER)	2533	84
NS 500ML FREEFLEX	2526	84
PERFALGAN 100ML INJ	2295	77
SYRINGE 5ML LL 23GX1 WITH NEEDLE BD	2126	71

4) Decentralize

5) Provision of floor pharmacy.

6) Assign pharmacy coordinator in ICU for receiving and indenting both.

7) Template for indent for surgeries for which protocols are fixed. (CABG, Angioplasty etc.)

8) Kit can be prepared for the same .

9) Pneumatic-shoot this is available but non-functional right now in the department.

10) Limitation of brands (indenting by generic name).

11) Color coding for carry bags for different zones.

12) Allocate lift no.16 for pharmacy**.**

13) In case of stat and oncology department

- Allocate one pharmacist and delivery boy.
- Separate mobile phone for delivery boy.
- Delivery in half an hour.

References :-

1) Pharmacy manager of KDAH.

Project Report 3

TO CHECK THE COMPLIANCE OF PHLEBOTOMY PROCEDURE.

EXECUTIVE SUMMARY

1. Phlebotomy – the drawing of blood – has been practiced for centuries and is still one of the most Common invasive procedures in health care. Each step in the process of phlebotomy affects the Quality of the specimen and is thus important for preventing laboratory error, patient injury and even death. For example, the touch of a finger to verify the location of a vein before insertion of the needle increases the chance that a specimen will be contaminated. This can cause false blood culture results, prolong hospitalization, delay diagnosis and cause unnecessary use of antibiotics. Clerical errors in completing forms and identifying patients are common, Costly and preventable. Other adverse effects for patients are common; they include bruising at the site of puncture, fainting, nerve damage and hematomas. Phlebotomy also poses risks for health workers. It is still common to see a phlebotomist carry out dangerous practices known to increase the risk of needle-stick injury and transmission of disease. Phlebotomy involves the use of large, hollow needles that have been in a blood vessel. The needles can carry a large volume of blood that, in the event of an accidental puncture, may be more likely to transmit disease than other sharps. Blood borne organisms that have been transmitted after needle-sticks include viruses such as hepatitis B and human immunodeficiency virus (HIV), bacteria such as syphilis and parasites such as malaria.
2. A Special checklist was prepared for accessing the % of compliance of the phlebotomy procedures carried out for EHC patients as well as out patients in respective Phlebotomy rooms. The list of compliance for 200 Patients was prepared in the duration of 10 days with the help of checklist.

INTRODUCTION

Overview:

Phlebotomy-the drawing of blood has been practiced for centuries and is still one of the most common invasive procedures in health care.

Issues in Phlebotomy:

By its nature, phlebotomy has the potential to expose health workers and patients to blood from other people. Putting them at risk from blood borne pathogens. These pathogens include Human Immunodeficiency virus (HIV), Hepatitis B virus (HBV), Hepatitis C virus (HCV) and those causing viral hemorrhagic fevers. For example, Disease such as malaria and syphilis may also be transmitted via contaminated blood and poor infection control may lead to bacterial infection where the needle is inserted and contamination of specimens.

If a blood sample is poorly collected, the results may be inaccurate and misleading to the Clinician, and the patient may have to undergo the inconvenience of repeat testing. The three major issues resulting from errors in collection are haemolysis, contamination and inaccurate labeling.

Serious adverse events linked with phlebotomy are rare, but may include loss of consciousness with tonic clonic seizures. Less severe events include pain at the site of venepuncture, anxiety and fainting.

Home-based care is a growing component of health delivery, and current global trends suggest that home-based phlebotomy will become increasingly common. In this situation, stronger protection of community-based health workers and the community will be needed. This can be achieved by improving sharps disposal, and by using safety needles with needle covers or retractable needles to minimize the risk of exposure to needles and lancets.

METHODS AND SAMPLING

Objective of the study

To Identify the Gaps/compliance of Phlebotomy procedure in Kokilaben Dhirubhai Ambani hospital and Medical research centre, Mumbai.

Methodology:

I. Sample period :15 days
II. Sample size :200 patient
III. Study area: EHC Phlebotomy Room and Outpatient Phlebotomy Room of KDAH.
IV. Tool used : Checklist(*Annexure 1*)
V. Data source: Primary data.

DATA COLLECTION

Data has been collected using the following Checklist:

Serial no.	procedures
1	Greets patients .
2	Wears gloves / use sanitizer over gloves.
3	Ask pt. regarding fasting.
4	Answering patients query.
5	Selects proper number and types of vacutubes needed for the tests ordered from nurse server.
6	Identifies patient by name and/or checking ID bracelet.
7	Explains procedure to patient.
8	Prepares equipment.
9	Applies tourniquet correctly.
10	Palpates the antecubital area to select venipuncture site
11	Properly cleanses venipuncture site with alcohol.
12	Stabilize vein
13	Inserts needle, bevel up
14	Single prick
17	Smoothly pushes evacuated tube into holder without Changing needle position.
18	Adjusts needle if necessary to obtain flow then stabilizes Vacutainer.
19	Changes vacutubes without changing needle position
20	Fill vacutubes in correct order.
21	Mixes anticoagulated vacutubes properly.
22	Releases tourniquet while filling last tube
23	Removes last tube from needle before withdrawing needle
24	Withdraws needle from arm smoothly.
25	Applies pressure to site after withdrawing needle
26	Disposes of needle properly and carefully.
27	Any post-phlebotomy adverse effect.

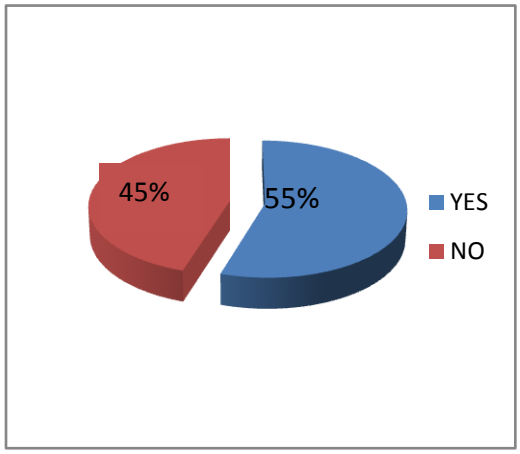
28	Labels the vacutubes matching labels to requisition(s).
30	Checks site to ascertain bleeding has stopped
31	Discards gloves and washes hand.
32	Document on monitoring record.

DATA ANALYSIS

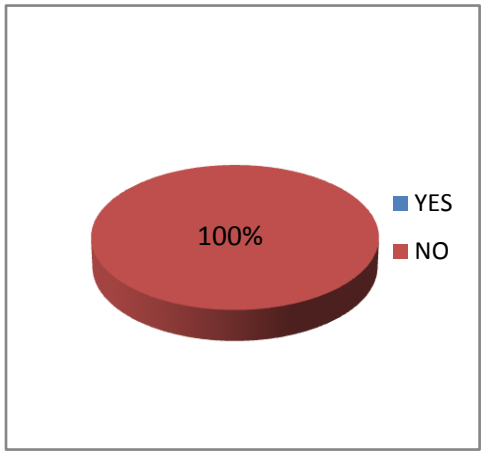
According to the checklist it was found that 8 steps out of 32 steps of phlebotomy procedure carried out by phlebotomist showed Non compliance while rest showed 100% compliance.

1. Greets Patients

OP Phlebotomy



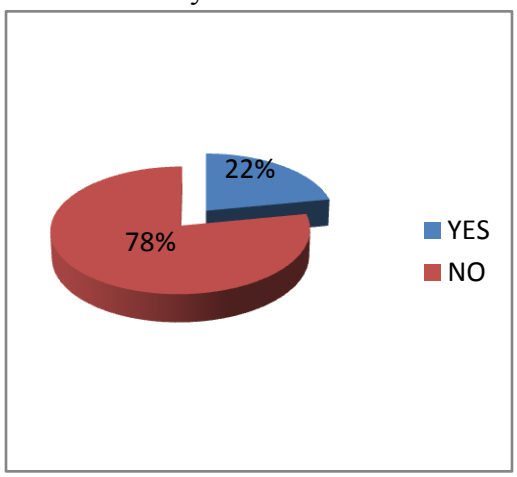
EHC Phlebotomy



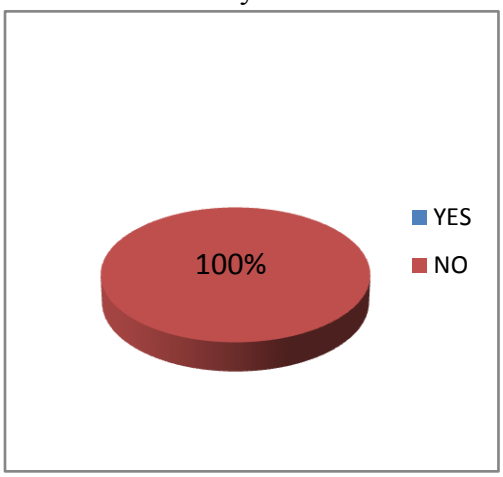
Interpretation:-It was found that the phlebotomist used to greet only those patients whom they knew or those who are coming to the department for the second time.

2. Wears gloves / use sanitizer over gloves

OP Phlebotomy



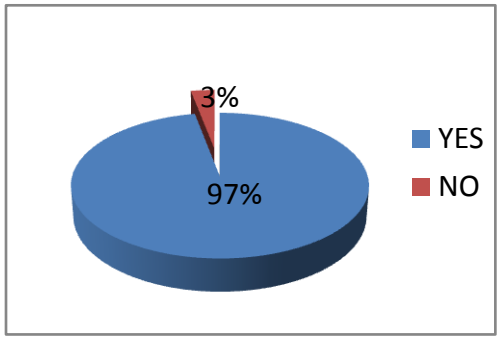
EHC Phlebotomy



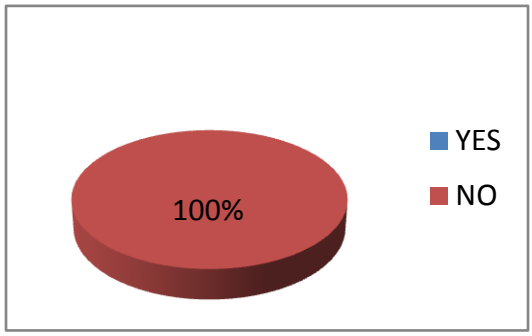
Interpretation: - The phlebotomist used to change gloves only when there were no patient for the sample collection or the gloves were torn.

3. Identify the patient by full name/checking Id

OP Phlebotomy



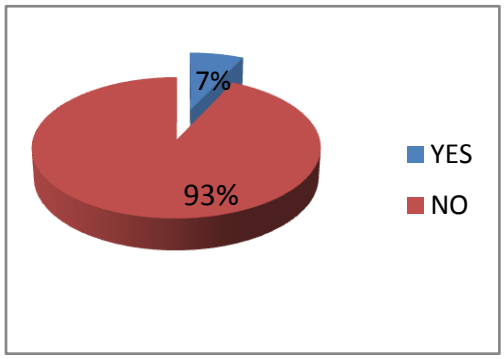
EHC Phlebotomy



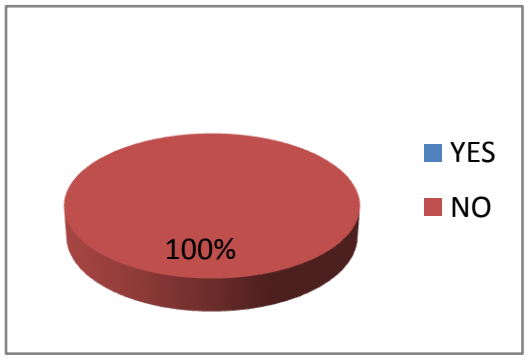
Interpretation: - In EHC the staff used to send the patient in the sample collection room. So, the phlebotomist does not use to identify the patient by name..

4. Explains Procedure to the patient

OP Phlebotomy



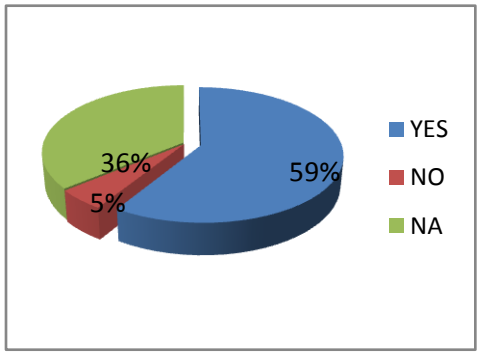
EHC Phlebotomy



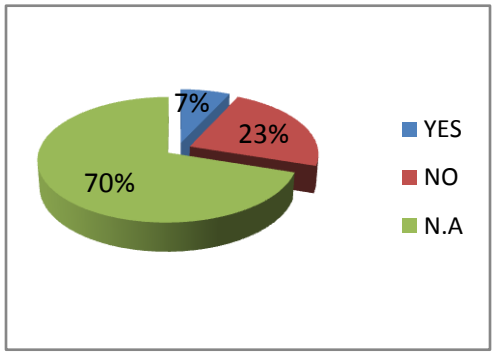
Interpretation: - Procedure was explained to only that patient who asked about it.

5. Fill Vacutubes in correct Order

OP Phlebotomy



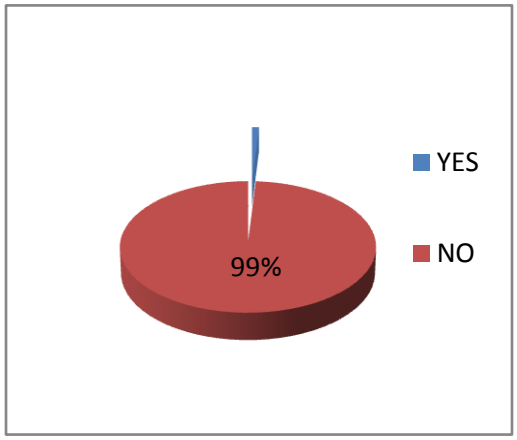
EHC Phlebotomy



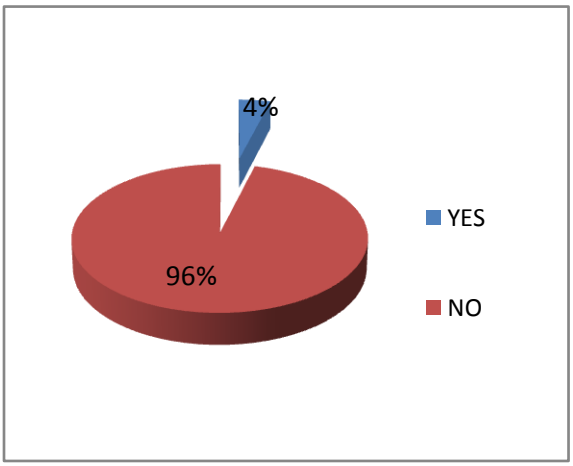
Interpretation: - It was not applicable for the conditions in which only one vacutube was filled. And non-compliance was observed in the case when they filled blue vacutainer.

6. Any Post Phlebotomy effect

OP Phlebotomy



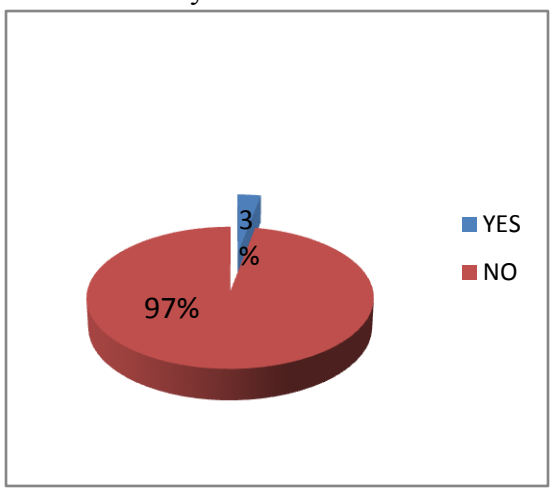
EHC Phlebotomy



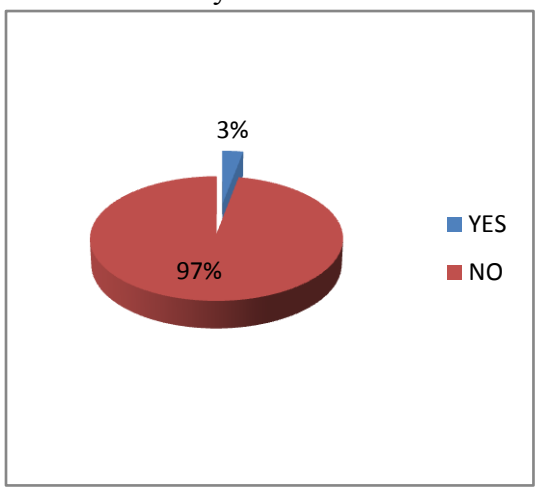
Interpretation: - Very few cases of pain and hematoma was reported.

7. Discard Gloves And washes Hands

OP Phlebotomy



EHC Phlebotomy



Interpretation: - They used to discard the gloves and wash hand only when there were no more patient in the department for sample collection.

RECOMMENDATIONS

The following recommendations were given for Phlebotomy Procedure to improve its compliance**:**

- To use sanitizer over gloves.
- To provide properly fitted gloves.
- To remove the gloves if it‟s tom.
- To greet each and every patient.
- To give proper instruction.
- Never leave the patient unattended.
- Separate table for each chair.
- Explain the procedure to the patient.

PROJECT – 4

CLOSED FILE AUDIT MEDICAL RECORDS DEPARTMENT

1. Introduction

A medical record can be defined as a set of documents which contains clinical, administrative, treatment & management related information about a patient in a sequential manner to justify the diagnosis, treatment & the end results.

Need for medical records:

- ✓ Patients can retrieve their data for legal purposes, etc
- ✓ Doctors use it for tackling any legal issue; doctors can retrieve the patient‟s record and can justify their treatment.
- ✓ Quantity , quality & type of work undertaken in a hospital can be assessed
- ✓ It is utilized in conducting research work to study seasonal variation in pattern of diseases, for daily, monthly and yearly census, etc
- ✓ Hospitals have to send records of communicable diseases, deaths and births to national and international governmental agencies for registration.

Medical record audit is done to ensure that the patient file has all the essential documents.

Audit of 120 patient files was carried out. A checklist of 58 points was assessed to evaluate the compliance level with medical record documentation.

Closed medical record audit form

Sl. No.	Criteria	Compliance (in percentage)
Admission and discharge record form		
1.	Final diagnosis mentioned	48.99
2.	Icd coding	37.58
3.	Cause of death	97.28
General consent for treatment		
4.	Signed , named , dated and timed by patient/ guardian /relative	61.74
Discharge against medical advice		
5.	Signed , named by patient/ guardian /relative	98.66
6.	Relationship of signatory with patient mentioned	99.33
7.	Date and time mentioned	100
Patient's history examination and plan of care record		
8.	Date/time written by doctor	71.81
9.	Name of informant with relationship of patient	18.79
10.	Vulnerable patient categorized	5.37
11.	Presenting complaints written	98.66
12.	History of present illness written	91.95
13.	Past history written	88.51
14.	Prenatal history(in case of paediatrics patient) written	93.96
15.	Developmental history (in case of paediatric patient) written	95.97
16.	Immunizations history(in case of paediatrics patient) written	96.64
17.	Feeding /dietary history(in case of paediatric patient) written	95.30
18.	Family history written	61.07
19.	Personal history written	51.01

20.	Gynae & obst history written (for female patient)	73.83
21.	Allergic history written	64.43
22.	Current medication list written	67.79
23.	Physical examination written	89.26
24.	Systemic examination written	93.29
25.	Provisional diagnosis mentioned	89.93
26.	Date / time written on plan of care	28.86
27.	Investigation order mentioned	42.28
28.	Initial nutritional assessment done	77.85
29.	Nutrition / diet order mention	75.84
30.	Plan of treatment written	45.64
31.	Any procedure / surgery need mentioned	34.23
32.	Preventive care mentioned	10.07
33.	Signature of consultant with name date and time written	14.77
34.	Plan of care countersigned by admitting consultant within 24 hrs	24.16
35.	Goals / desired results of treatment, care of service mentioned	11.41
36.	Doctor's orders dated , signed , timed and named	51.68
37.	All prescription orders are clear legible and written in uniform location	88.59
38.	Al procedure performed are recorded dated timed , signed and named	89.12
OPERATIVE AND OTHER INVASIVE PROCEDURES		
39.	All consent forms (surgery, anaesthesia, special procedure) signed by patient/ guardian/ relative	93.69
40.	Pre-anaesthesia assessment done and documented	90.60
41.	Operative notes documented and authenticated by chief surgeon	95.30
42.	Post operative plan of care documented	93.29
43.	Surgical safety check list complete	92.62
NURSING RECORDS		
44.	Nursing initial assessment done and documented	98.66
45.	Nursing care plan documented	99.33

46.	Pain screening/assessment done	92.62
47.	Clinical chart completed	97.99
48.	Daily nursing record sheet complete	98.66
49.	Nursing notes legible, signed, named, dated	100.00
50.	Medication administration record completed, legible, signed, dated	96.62
51.	High risk medication administered after verification and signed by 2 staff	89.93
52.	Medication chart with error prone abbreviations	79.19
DISCHARGE SUMMARY		
53.	Copy of discharge summary attached	98.64
54.	Discharge summary is complete and signed by consultant	98.64
55.	Discharge summary contain follow up advice and other instruction in understandable manner	98.64
56.	Is charge summary mentions about when and how to contact in case of emergency	97.96
OTHERS		
57.	Informed consent form for special procedure are complete, signed, named & attached with patient file	100.00
58.	All consent form are legible complete, signed and named by doctor	91.28