

PRESENTATION

BY

COL B ANIL KUMAR

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PREVIEW

- PART – I REPORT ON INTERNSHIP AT CANTONMENT GENERAL HOSPITAL, DELHI CANTT
- PART- II DISSERTATION/PROJECT REPORT STUDY ON EXISTING LEVEL OF I.T PENETRATION IN THE MEDICAL STORES OF CANTONMENT GENERAL HOSPITAL

PART-I

- REPORT ON INTERNSHIP AT CANTONMENT
GENERAL HOSPITAL, DELHI CANTT

INTRODUCTION

- Cantonment Board Hospitals available in all Cantts to look after the civilian population.
- DCB maintaining a 100 bedded, Cantonment General Hospital .
- Modest beginning made from one of the barracks of old Base Hospital.
- Was shifted to its present loc in 1963.
- The hospital has not developed any separate Mission, Vision or Value Statement

FRONT VIEW OF HOSPITAL



LAYOUT OF THE HOSPITAL

- 3 Storied building
- **Ground Floor:**
 - Reception and Registration centre
 - Emergency / Casualty
 - Orthopaedics
 - Gynae
 - Eye
 - ENT
 - Medical
 - Skin
 - Psychiatry
 - Ayurvedic OPD
 - Homeo OPD
 - Minor OT
 - Radiology(X ray & USG), ECG
 - Immunization & Injection Room
 - Family Planning Counselling room
 - Labour room
 - Physiotherapy room
 - DOTS Centre
 - Dispensary
 - Dressing Room and Plaster Room

LAYOUT OF THE HOSPITAL

- **First floor:**
 - Administration Block
 - Dental
 - Pathology Lab
 - Medical Store
 - Ayurvedic Store
 - Female ward
 - Conference Room
- **Second floor**
 - Major OT
 - VIP Rooms (06)
 - Private ward
 - Male ward
 - CSSD
- **Basement**
 - AC plant
 - Linen Store
 - Furniture store
 - Pump house
 - Genset

SERVICES PROVIDED BY THE HOSPITAL

- General OPD
- Dental OPD
- Specialist OPDs
- Obs & Gynae
- Orthopaedics
- Medicine
- ENT
- Ophthalmology
- Surgery
- Paediatric
- Psychiatry
- Skin
- Radiology
- Anaesthetics
- Ayurvedic OPD
- Homoeopathy
OPD
- Emergency
- Major OT – 01
- Minor OT – 01
- Diagnostic
Services
- Physiotherapy
- Indoor Services
– IPD 100 beds

VARIOUS FACILITIES

FULLY AUTOMATIC BIO ANALYSER



DENTAL UNIT



MINOR OT



ULTRASOUND



PHYSIOTHERAPY



CSSD



HOMOPATHY CLINIC



LABOUR ROOM



LABOUR WARD



BIRTH/DEATH REGISTRATION



INTENSIVE CARE UNIT



RECEPTION



AYURVEDIC CLINIC



PEDIATRICIAN



EMERGENCY



DENTAL



VARIOUS FACILITIES

CARE FOR SENIOR CITIZENS



FEMALE WARD



FAMILY CARE DEPTT



ECC



ENT



SKIN OPD



LABOUR ROOM



PHARMACY



BIRTH/DEATH REGISTRATION



PATHOLOGY



MOBILE DISPENSARY



CRITICAL CARE AMBULANCE



VARIOUS FACILITIES



VARIOUS FACILITIES



VARIOUS FACILITIES



DISTRIBUTION OF BEDS

DETAILS OF HR

The hospital is headed by a CMO

- **Permanent** –
 - Doctors -13 (4 including 1 x dentist)
+ 9 Newly inducted specialists
 - ANM – 02
 - Tech – 02
 - Pharmacists -02
 - Adm Staff – 18
- **Contractual** –
 - Docs -35 (Splst Docs -19 Addl GDMO-11, SR-3, JR-2)
 - Nurses – 39
 - Tech -21
 - Pharmacists – 02
- **Outsourced services**
 - Security – 30 pers
 - HK and waste disp – 60 pers

OTHER SERVICES

- Pulse Polio Immunization
- Immunization Programmes
- Health Post Maternity and Immunization Services
- DOTS Centre
- Maitri (HIV/AIDS)
- B & D Registration
- Senior citizen
- Kishori Clinic
- School Health
- Special children
- Medical camps

TASK ASSIGNED

- During the Internship period I was tasked to visit various departments of the hospital.
- Was provided an opportunity to learn about various aspects of Hosp, from Clinical to Administrative aspects.

CHALLENGES FACED

- Being a busy place, with lots of crowd, nobody has time to spare. It's your initiative & perseverance which can be of use.
- Interaction with the CMO most difficult because of public dealing w.r.t births and deaths.
- Saw a clerk having a show down with the CMO.
- Procurement for CGH dealt by DCB clerk.
- Like typical Govt organisations, organisational culture, is of postponing things.

KEY LEARNING

- Treatment open to all.
- OPD Registration , a yellow card(payment of Rs 5/-) is physically filled and given to the patient directing him to report to the specialist or to a general physician.(validity 7 days)
- A white card issued for staff of CGH, DCB & IDES. A light green card for Senior citizens.
- Footfall of 500-800 patients from middle class / lower strata.
- OPD 0800- 1500 hrs
- Huge rush at Regn counter & OPD area . Lesser rush is seen at the Ayurvedic and Homoeopathy OPD areas as they are in different location.

REGISTRATION COUNTER



OPD BLOCK



KEY LEARNING

- Patients mostly illiterate are unable to describe their problem, leading to wastage of time at the registration counter as well at the OPD.
- OPD registration number is started afresh on 1st of April, each year. The numbers run into lakhs & become unwieldy as the year progresses.
- The registration number is common for all OPDs. The OPDs don't have any separate ID other than the common Registration number given manually at the registration counter.
- ICU is not yet functional. Space has been allocated but further construction is held up for want of funds.

KEY LEARNING

- The clerk dealing with procurement for CGH, in DCB office, is also responsible for many other institutions run by the DCB. Leads to delay in procurement of items.
- Stock out of drugs /Vendors under rate contract issued show cause notice/blacklisted/Pharmacy can issue reminders only.
- CMO is the Registrar of births & deaths for the entire cantonment area , no fixed time for public dealing.

RECOMMENDATIONS & CONCLUSION

- Requirement of Automation at Registration, to reduce the rush and for ease of data management and billing.
- Requirement of bigger waiting area with electronic token number display system to streamline the OPD system.
- Requirement of additional sign boards .

RECOMMENDATIONS & CONCLUSION

- Need for introduction of EMRs in the hospital.
- Citizen charter and Patient charter to be displayed .
- Reassessment of HR requirement of the hospital.
- Need to increase the ratio of Permanent vis-à-vis Contractual staff.
- Need additional Pharmacists.

RECOMMENDATIONS & CONCLUSION

- Hospital Infection Control Committee needs to be earmarked and need to brief all concerned regularly.
- Mock drills w.r.t fire fighting and disaster management need to be periodically conducted and documented.
- Basic Pharmacy Management System software needs to be procured and installed for smooth functioning of Medical Stores.

RECOMMENDATIONS & CONCLUSION

- The functioning of CMO is challenging with several responsibilities with no administrative powers.
- The CMO has no financial powers, financial powers are with the CEO only.
- DCB is a self financing body under the MoD. Budget allotted is limited. Many times procurement gets stalled for want of funds.
- Addl funds should be released, delegation of administrative & financial powers to CMO should be looked into.

END OF
PART ONE



**PART- II STUDY ON EXISTING LEVEL OF
I.T PENETRATION IN THE
MEDICAL STORES OF CANTONMENT GENERAL HOSPITAL**



RATIONALE

- Role of pharmacists has evolved from compounder & supplier of pharmaceutical products
- to that of a clinical pharmacist who is provider of Pharmaceutical care.
- Pharmacy Practice Regulations, 2015 & EHR Standards, 2016 have necessitated this study.

REVIEW OF LITERATURE

- WHO Report 1994 - The Role of Pharmacists in the Health Care System, Modern role : Care Giver, Decision Maker, Communicator, Leader, Manager , Lifelong Learner, Teacher.
- Indian Pharmacopeia,2014,Addendum 2016
- National List of Essential Medicines,2015
- National Formulary of India, 2016
- Cochrane Collaboration (Database).

REVIEW OF LITERATURE

- Pharmacy Practice Regulations,2015.
- EHR,Standards,2016 .
- A roadmap for implementation of EHR,2016 by Sunil Kumar Srivastava , Ph.D 31 Oct 2016.

PROBLEM STATEMENT

- To study the existing level of I.T penetration in the Medical stores of Cantonment General Hospital and suggest achievable changes

SPECIFIC OBJECTIVES

- To obtain information on the role of the present day hospital pharmacies.
- To obtain information on the level of automation and the degree of use of I.T in hospital pharmacies in India and other developed & developing countries to perform their present day role.
- To study the organisation, functions & role of the medical stores of the hospital under investigation.
- To determine the level of automation & the degree of use of I.T in Medical Stores of the hospital under study.

SPECIFIC OBJECTIVES

- To investigate the feasibility of implementation of modern I.T in the hospital pharmacy.
- To identify the barriers in implementation of automation and adoption of modern I.T in the hospital pharmacy.
- To recommend strategies for adoption of modern I.T & automation in the hospital pharmacy.

METHODOLOGY

- Study Setting : The study has been carried out at the Medical Stores of Cantonment General Hospital.

METHODOLOGY

- Materials & Methods: The following methodology was adopted for the study:
- Review of Literature
- Document Study
 - Ledgers of the Consumable items
 - Indent cum issue vouchers (Convenience Sampling)
 - Indenting Procedure (Policy document)
 - SOP for Local Purchase of Consumables

METHODOLOGY

- Interview with the functionaries:

Structured Interview with the help of a Questionnaire to obtain data regarding:

- Organisation of Medical Stores

- HR of the Medical Stores

- Education Level

- Job Description & Role

- Availability of Computer Hardware & Software

- View of pharmacy functionaries regarding automation & adoption of Modern I.T

METHODOLOGY

- By Observation –

- Procedure to carry out various functions in the Medical Stores
- Availability of Computers & Printers
- Availability of Software
- Networking with Hospital LAN
- Availability of Automation Equipment
- Availability of Internet connection

SCOPE OF THE STUDY

- The Pharmacy deals with all types of Medical stores – both consumables & non-consumables.
- The study is restricted to only Consumable Medical Stores.
- The aspects of functioning of Medical stores that impact the actual & potential use of I.T & automation have been studied.

CONSTRAINTS

- Availability of time has been a constraint as this is a Single Investigator Study.
- Most quantitative data has been collected on the basis of Convenience Sampling.

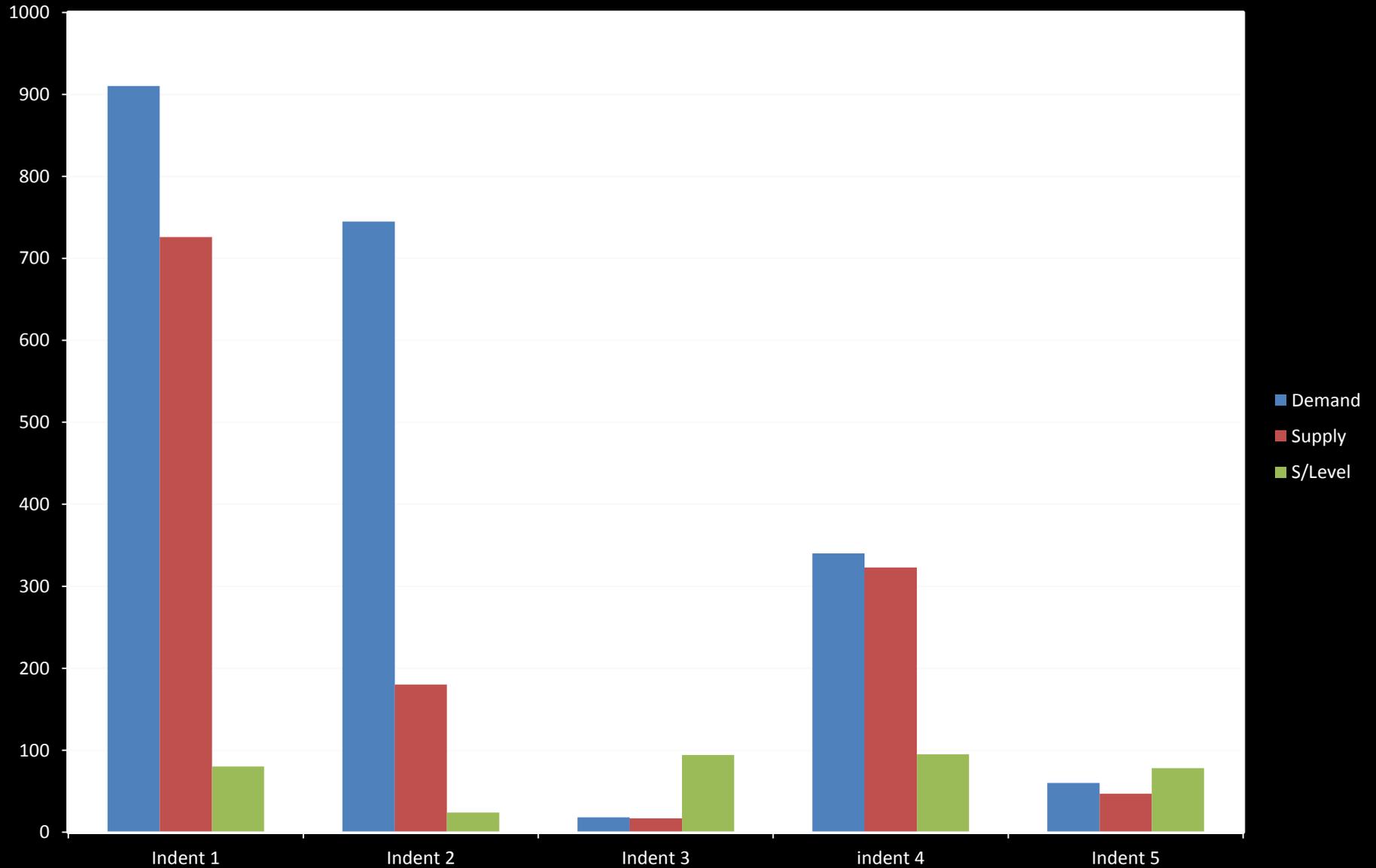
FINDINGS

- Stock out of drugs:
 - Stock out of common drugs do occur .
 - Reminders/Show cause/black listing of vendors.
 - Details of Stock out drugs was told not to be included in the study.
 - Stock out of drugs also occurs due to paucity of funds.
- Service Level

FINDINGS

Sr. No of Voucher	No. of Units demanded	No of units supplied	Service level
00515	18200	14520	80%
00516	14900	3600	24%
00517	356	336	94%
00518	6800	6450	95%
00519	1200	940	78%

SERVICE LEVEL GRAPHICAL REPRESENTATION



FINDINGS

- Traditional Role:
 - The medical stores of the hospital under study performs only the traditional role of procurement & distribution.
 - I.T is used for supporting functions of the organisation.
 - Even the compounding functions that were performed by the pharmacists are no longer in vogue in most of the hospital pharmacies.

DISCUSSION

- Situation in Developed Countries :
 - Modern role of the pharmacists is to provide pharmaceutical care linking patient safety through medication management.
 - To discharge these functions & to practice EBM, access to I.T is essential.
 - Pharmacists are now members of the Care Delivery Team & involved in patient care for a better patient outcome .
 - The pharmacists have access to the EHR & full access to information, enabling them to plan, advice & monitor the medication management aspect of the care.
 - CPOE along with the CDSS is integrated with the Pharmacy Information Management System.

CPOE

Order Entry

Alarms

ADT

Layout

HIPAA

Help

Close

Facility **ADL Goodsam Demo**

Unit **01**

Resident **CARSON, JOHN**

Pic Info

Acct: **123510** MedRecNo: **123510** Room: Admit: **11-02-03** Disch: **Male** Age: **95** Wgt: **149 lbs** PCP:

Rx	End Date	Status
ASPIR-TRIN 32511-10-07		ACTIVE
COLUMADIN 2.5 11-10-07		ACTIVE
LASIX 20 MG T/11-10-07		ACTIVE
ENEMA READY 11-04-07		ACTIVE
BISACODYL 10 11-04-07		ACTIVE
EGL MILK OF M/11-04-07		ACTIVE
ZYPREXA 10 M/10-26-07		ACTIVE
ASPIR-TRIN 32510-06-07		DRAFT
NORVASC 5 MC09-30-07		DRAFT
COLUMADIN 6 M/09-30-07		ACTIVE
BUSPAR 5 MG 109-30-07		ACTIVE
FOSAMAX 70 M/09-29-07		ACTIVE
ZYPREXA ZYDI09-24-07		D/C
ZYPREXA ZYDI09-23-07		D/C
ZOFRAN 4 MG 09-16-07		ACTIVE
SINEMET-25/1009-16-07		ACTIVE
LASIX 20 MG T/09-06-07		ACTIVE
ACETAMINOPHE08-24-07		ACTIVE
BL ZINC GLUCC08-24-07		ACTIVE

Procedure	End Date	Status
APPLY OINTMEI11-10-07		ACTIVE
CHANGE DRES11-10-07		D/C
CHANGE DRES10-07-07		DRAFT
O2@2LM NC 09-30-07		ACTIVE
APPLY OINTMEI09-30-07		ACTIVE
CHANGE DRES09-30-07		ACTIVE

TREATMENT

Diet Type	End Date	Status
REGULAR 11-02-07		ACTIVE
CARB CONTROL09-30-07		ACTIVE
REGULAR 09-16-07		D/C

DIETS

Lab Type	End Date	Status
BLOOD 10-07-07		DRAFT
URINE 09-30-07		ACTIVE

LABS

Procedure	End Date	Status
ULTRASOUND 11-10-07		ACTIVE
X-RAY 10-04-07		DRAFT

RADIOLOGY

Rehab Type	End Date	Status
PHYSICAL THEF10-04-07		D/C

REHAB

Selected	End Date	Status
NO ALCOHOL 09-30-07		ACTIVE

ACTIVITIES

Date	Dx	Description
09-04-2007	332.	PARKINSON'S DISEASE*
09-04-2007	331.0	ALZHEIMER'S DISEASE

Allergies

Precautions

	09-10-07	07-28-07	N/A	N/A	N/A
Temp		99			
Pulse		78			
Resp		14			
SBP / DBP	121 / 76	126 / 82			
Weight		149			

Virtual Body

Care Plan

Progress Notes

ADLs

Visits

Notifications

Summary

DISCUSSION

- **Need for better Trained & Qualified Pharmacists**

- To perform their role effectively & to gain confidence of the clinicians for their acceptability as a member of the patient care delivery team, the pharmacists have to be better trained than what they are now.
- The PCI,GOI has notified the Pharm.D Regulations which is a 6 year integrated course after class 12th, dealing with Clinical Pharmacy & is different from the 4 year B.Pharma course/1 year Diploma in Pharmacy(D.Pharma).

- **Patient Safety/Medication Errors**

- The biggest patient safety concern is that of medication errors that occur at the Prescribing stage.
- The physician is required to remain updated on a large number of medical products which are available in the market today, which is a difficult proposition.

DISCUSSION

- Pharmaceutical Care : Indian Context

- The PPR, 2015 was enacted by MOHFW/ PCI to train pharmacists to deliver Pharmaceutical care.
- A total of 30 seats for Pharm.D & 10 seats for Pharm.D (Post Baccalaureate) per institution has been sanctioned .
- 222 colleges/institutions spread over 13 states of the country, have been approved by the PCI for running these courses till date.
- Development of training facilities & infrastructure development is still required. In this infrastructure need, I.T will have a major share.

DISCUSSION

- Pharmacy Automation

➤ This hospital medical stores lacks Pharmacy automation, which is essential to improve patient safety, eliminates manual intervention which are prone to errors.

- Automation/Technology Available

- ✓ BCMA

➤ Use of Barcode Medication Administration is the least costly amongst the IT based automation system for medication management.

- ✓ RFID

➤ The RFID technology though simple in concept, is costly to implement. It has a great potential in inventory management.

BCMA & RFID IMAGES



DISCUSSION

- **UDDS**

- Unit Dose packaging & dispensing is an I.T based on robotics & has great role in reducing medication errors.
- Hospitals like Aster Medcity, Kerala has adopted this automated system of UDDS in India.

- **Pneumatic Tube Transportation System**

- Logistics is another area which can improve efficiency, considerably.
- Many corporate hospitals in India have adopted PTTs. Its operation & control is through use of I.T.

UDDS/ROBOTIC PHARMACY AT ASTER MEDCITY



PNEUMATIC TUBE TRANSPORTATION SYSTEM



DISCUSSION

- E - prescribing can be implemented in hospitals . IMA has advocated for e-prescribing of medicines on voluntary basis.
- Needs some system & cultural change , among Physicians.
- Initially more time will be required, for writing a prescription & transmitting to the pharmacy.
- As the clinicians use it for some time, they will become more conversant in its use.
- In this hospital, however, a policy change will be required from Ward based dispensing to pharmacy based dispensing of drugs.

E- PRESCRIPTION

IMS (FOR, Cardiology) (Patient: AARON, JOHN W)

Action View Setup Activities Billing Reports Utilities Windows Help

Add Prescription

Select Template & Drug

Pharmacy: CVS CAREMARK

Drug	Strength	SIG (?)	Days	Qty.	Refill
<input type="checkbox"/> Aggrenox	200-25 mg CAP MPF	1 every morning, 1 every evening	90	180.00	
<input type="checkbox"/> Aldactone	25 mg TABLET	1 every morning, 1 every evening	90	180.00	
<input type="checkbox"/> Altace	5 mg CAPSULE	1 every morning	90	90.00	
<input type="checkbox"/> Amiodrone HCl	200 mg TABLET	1 every morning, 1 every evening	90	180.00	
<input type="checkbox"/> Aspi-81	81 mg TABLET DR	1 every morning	100	100.00	
<input type="checkbox"/> Aspirin	325 mg TABLET	1 every morning	100	100.00	
<input type="checkbox"/> Atacand	16 mg TABLET	1 every morning	90	90.00	
<input type="checkbox"/> Atacand HCT	16-12.5 mg TABLET	1 every morning	90	90.00	
<input type="checkbox"/> Atenolol	50 mg TABLET	1 at night	90	90.00	
<input type="checkbox"/> Avalide	150-12.5 mg TABLET	1 every morning	90	90.00	
<input type="checkbox"/> Avapro	150 mg TABLET	1 every morning	90	90.00	
<input type="checkbox"/> Benicar	20 mg TABLET	1 every morning	90	90.00	
<input type="checkbox"/> BENICAR HCT	20-12.5 mg TABLET	1 every morning	90	90.00	
<input type="checkbox"/> Betapace	120 mg TABLET	1 every morning, 1 every evening	90	180.00	

Add PRN
 Add NTE _/Days
 Add DAW

Allergy: No Known Allergies

Add Drug

Drug* (?)	SIG (?)	Days	Qty: (?)	Unit	Refills	Type	Start Date
1. []	[]	30	.00	[]	[]	Chronic	04/23/11

Category: [] Pharmacy: CVS CAREMARK Rx By: Self Rx No. [] Note: []

No. of Row(s): 1
 [Drug Education](#)
 [Drug drug and drop in template](#)
 [Dosage Calculator](#)
 [Cannot sync. on ePresc.](#)
 [Additional Rx Detail](#)

DISCUSSION

- **Pharmacy Management System**

- Medical stores is one of the most important support deptt for efficient delivery of patient care.
- Most Corporate Hospitals in India have introduced PMS and this is integrated with their HMIS.
- This level of automation improves the efficiency of operation.

- **EHR Standards,2016**

- EHR Stds, 2016 have been published by MOHFW, GOI.
- It will take time to be fully implemented & become operational in all hospitals of the country.
- A research paper on “Roadmap for implementation of EHR Standards, 2016 in India”, has been published by Sunil Kumar Srivastava , Ph.D , on 31 Oct 2016 , gives a holistic approach.

EHR IMAGE

Browser: Patient | URL: https://portal.care180.com:443/care360/app?service=page/PatientSummary | Search: Google

Navigation: QST Portal | SBI Artery | SBI FTP | SBI Blogs | SBI Newsletter | SBI Digital | SBI WebEx | Media SPECS | DxMA | RxAwards | BA | Wikipedia | Google Maps | News (14) | Popular ▾

Quest Diagnostics Inc. WebEx Ent... | Patient | David Smith | Physician Demo Org | Admin ▾ | Preferences ▾ | Support ▾ | What's New? | Help ▾ | Logout

Care360 | Message Center | Patient | Lab Orders | Reports | Last, First | Find Patient | Advanced Search

Summary | Document Visit ▾ | Prescriptions ▾ | Lab Tests ▾ | Flowsheets/Graphs | Radiology ▾ | Diagnostics | Documents ▾

Quick View > Find a Patient > Patient | Configure View

Smith, Thomas 04/05/1956 (54y) Male | e-Patient Link: Requested

H 513-555-1212 | 9837 Maple Ave, Cincinnati, OH 45242 | #9876541 | [Edit/View Details](#)

No Pending Renewals

Allergies/Adverse Reactions: codeine, penicillins | Hide Summary

Recent Requisitions | Write a Lab Order | View All | X

4000860	06/14/2006	Final	✓	✓
4000861	01/22/2006	Final	✓	✓
4000862	05/19/2005	Final		
4000863	06/02/2004	Final		
4000864	06/05/2003	Final		

Patient Problems | Add | View All | X

Esophageal reflux	Smith, David
Hyperlipidemia	Smith, David
Mixed hyperlipidemia	Smith, David
Persistent Toenail Infection	Smith, David

Active Medications | Write a Prescription | Reconcile | View All | X

Lipitor	20 mg	948
---------	-------	-----

Vaccinations | Administer Medication | View All | X

No vaccinations present

Past Medical History | Add | View All | X

No past medical history present

Surgical History | Add | View All | X

Notes in Progress | Start a SOAP Note | View All | X

11/15/2010 - *Diagnosis: Mixed hyperlipidemia, Esophageal reflux*

Recent Vitals | Growth Chart | View All | X

11/15/2010 - L/H: 68.0in; W: 186.0lb; BMI: 28.3; T: 98.2°F; B/P: 210/80 Sitting; P: 75BPM.; R: 20BPM.; O₂Sat:

Other Documents | View All | X

Filename: sinus3.txt	Transfer Summary	11/15/2010
Filename: sinus4.txt		11/15/2010

Clinical Notes | View All | X

Filename: soap_note.pdf	11/15/2010
Diagnosis: Mixed hyperlipidemia, Esophageal reflux	11/15/2010

Allergies/Adverse Reactions | Add | View All | X

codeine
penicillins

Recent Radiology Results | Write a Radiology Order | View All | X

No radiology results present

Diagnostics | View All | X

DISCUSSION

- **Adv of automation**

- All functions of IM can be automated.
- improve efficiency
- reduce wastage
- lower inventory carrying cost
- improve consumer satisfaction
- lead to better patient care

- **Feasibility of Implementation of I.T**

- Review is required to examine the feasibility of implementation of I.T in this hospital, to bridge the gap between what presently exists & what should be.
- Both internal & external environment have their influence on the feasibility of implementation of I.T in the Medical stores .

DISCUSSION

- **External Environment**

- Influencing the feasibility :

- ✓ Technology

- ✓ Socio- economic system

- ✓ Education level

- **Internal Environment**

- Acceptance of need

- Priority in patient safety

- Availability of funds

- Need for change in Organisational culture

- Availability of Support services external to this organisation.

DISCUSSION

- Acceptance of Need at Decision Making Level
 - Bigger & radical measures for implementation will need support at a higher level.
 - The less costly implementation needing less education & training & shorter time lines can be implemented at the hospital level itself.
 - Provided the need is accepted at the decision making level.

RECOMMENDATIONS

SHORT TERM & LONG TERM STRATEGIC DECISIONS

NEED TO BE TAKEN

- SHORT TERM

- Inventory Management:

- ✓ Can be implemented w/o any major cost effect.
- ✓ Training required for use of software is small.
- ✓ First the Idea , the Implications & its Benefits need to be sold to the Stakeholders of the proposed system.

- BCMA :

- ✓ Barcode Medication Management System can be implemented w/o much of cost effect.
- ✓ Training need is also very small.

RECOMMENDATIONS

- **E-Prescribing**

- E- prescribing can be implemented at the basic level.

- **Policy Change**

- All aspects can be gradually introduced as the system matures & the users gain confidence in the system.
- Change in Policy decision, to dispense medication from the Pharmacy instead of the Ward Store.

RECOMMENDATIONS

- **LONG TERM**

- Assessment to be made about :
 - ✓ the availability of the technology in the Indian market
 - ✓ Its Support Facilities
 - ✓ Cost Implications
 - ✓ Training Needs.

- **ADOPTION OF PHARMACEUTICAL CARE**

- ✓ Major initiative taken by the GOI by introduction of Pharm.D courses since 2008 .
- ✓ Inclusion of “Pharmaceutical care aspect” .
- ✓ Pharmacists trained in Pharm.D/ Pharm.D(Post Baccalaureate) courses vide PPR,2015.

RECOMMENDATIONS

- ✓ Major change effort needed at the implementation level.
- ❖ Recruiting these Doctors of Pharmacy trained in Clinical Pharmacy aspects
- ❖ Availability of EHR, CDSS & CPOE .

➤ ACCEPTANCE BY PHYSICIAN

- ✓ The greatest barrier - acceptance by the Physician who is the leader of the patient care team.
- ✓ Of the new role of the Pharmacists/Doctors of Pharmacy & their being a member of the Care Delivery Team.

THANK YOU
FOR YOUR PATIENCE !!!!

FINALLY IT'S OVER,
YOU MAY PROCEED NOW



CONVOCATION
02 JUNE 2017