



Gujarat Medical Services Corporation Ltd. – An analytical study on its working during the last three financial years of its establishment.

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Introduction

- With more than six Crores people and population density of 308 per sq. km. Gujarat has a vision and commitment to provide effective and quality health care to all with special focus on reaching the unreached and serve the underserved.
- One of the highest priority goals of Department of Health & Family Welfare is to make the health system of Gujarat more available, accessible, accountable, equitable, transparent and cost effective.

GMSC

GMSC was set up in dated on 20 July 2012 provide quality drugs, diagnostic equipment and services to “ Govt. Health Facilities” at the most economical cost

An Autonomous Agency to source and supply drugs and medicines to all Medical Institutions in the state

Advantage of Economy of scale

A Specialized Agency with expertise in procurement, storage and distribution



Primary Objective

To deliver Quality Drugs,
Medicines, Surgical and Suture
items in time to the Government
Medical Institutions.

Key Objectives ...

Improving management of drug procurement and supply with special emphasis on logistics

Ensuring quality of Drugs, Medicines, Surgical and Sutures

Ensuring continuous availability of drugs to all government health facilities through decentralized system of storage and distribution

Simplified indenting to facilitate order process for facilities at all levels.

Key Objectives

Continuous monitoring of warehouse inventory through use of Information Technology



Procurement of high quality Medical Equipment



Facilitating the Medical Institutions in maintenance of equipment



Support Services in the Hospitals



Training and sensitization of all stakeholders

Need of the Study

- Access to medicine is reliable
- sustainable supply chain management to procure and distribute required medicines and vaccines in a timely manner.
- Different models of procurement and distribution of medicines and other supplies are followed in different state of India.
- The model followed depends on industrial capacity, priority, demography and other factors.

Review of Literature

- Heinbuch (1995) described an approach to meeting the challenge of healthcare cost reduction through the hospital material management function.
- Alverson (2003) discussed the importance of disciplined inventory management for hospitals, and suggested serious consequences of traditional hospital purchasing including lack of inventory control, missed contract compliance, excess inventory levels, frequent stock-outs and costly emergency deliveries, workflow interruptions, expensive rework, and increased health system labor requirements.
- Burns (2002) discussed aggregation of suppliers and their products through electronic catalogues, visibility of orders and materials, and efficiency in procurement.
- Schneller and Smeltzer (2006) suggested that e-procurement systems can help to significantly reduce purchasing costs through the consolidation of supplier networks and creation of supplier partnerships.

Research Questions

- ❖ What is the medicine policy of the state of Gujarat.
- ❖ How GMSC was established and what steps were undertaken
- ❖ What is the medicine procurement system of the state of Gujarat before and after the establishment of GMSC.
- ❖ What is the medicine storage and distribution system of the GMSC and compare with the situation prior to its establishment.

Objectives

- To study the medicine policy of the state of Gujarat.
- To study the genesis and the process of establishment of GMSC.
- To study the medicine procurement system of the state of Gujarat before and after the establishment of GMSC.
- To study the medicine storage and distribution system of the GMSC and compare with the situation prior to its establishment.
- Give recommendation to GMSC.

Research Methodology

- **Research Design**
 - Exploratory Research Design
- **Sampling Method**
 - Non-probability sampling method : Convient Sampling.
- **Sample Technique**
 - Tabulation
 - Graphical
 - Percentage analysis

Sample size (for Questinnare)

Data Collection

- The collection of data process was conducted utilising all the available resources, including, official communications like orders.
- The data were also collected from the officers and professionals associated with drug management, and the professionals including journalists and writers.
- Experts and professionals were interviewed to collect their opinions, observations and viewpoints.
- pharmacists, pharmacy storekeepers/store officers/store superintendents were also consulted for the study.
- The people were identified based on their works, expressed opinion and willingness to share their views.

Drugs and Medicines

Procurement

Procurement of Drugs

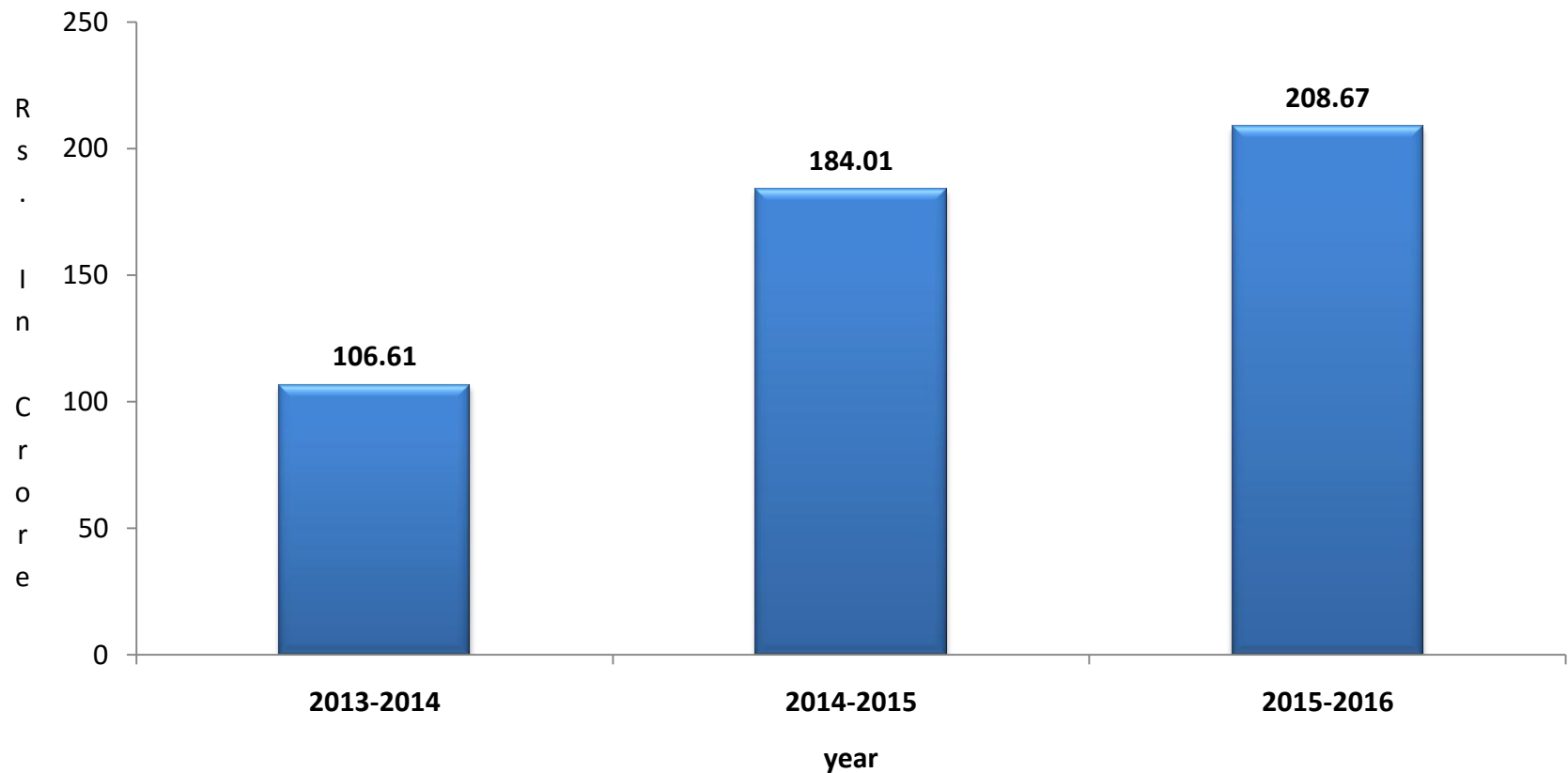
- GMSCCL centrally procures generic drugs for health care Institutions of Gujarat State Through e-tendering process. Tenders are advertised in the widely published newspapers. (Gujarati and English.)
- The New achievements are:-
 - Procurement policy has been revised.
 - Procurement of EDL items has been centralized.
 - Local level purchase by using GMSCCL rate contract is restricted.
 - Committee has been formed for scrutiny of Drug tenders.

Stages of Procurement Process

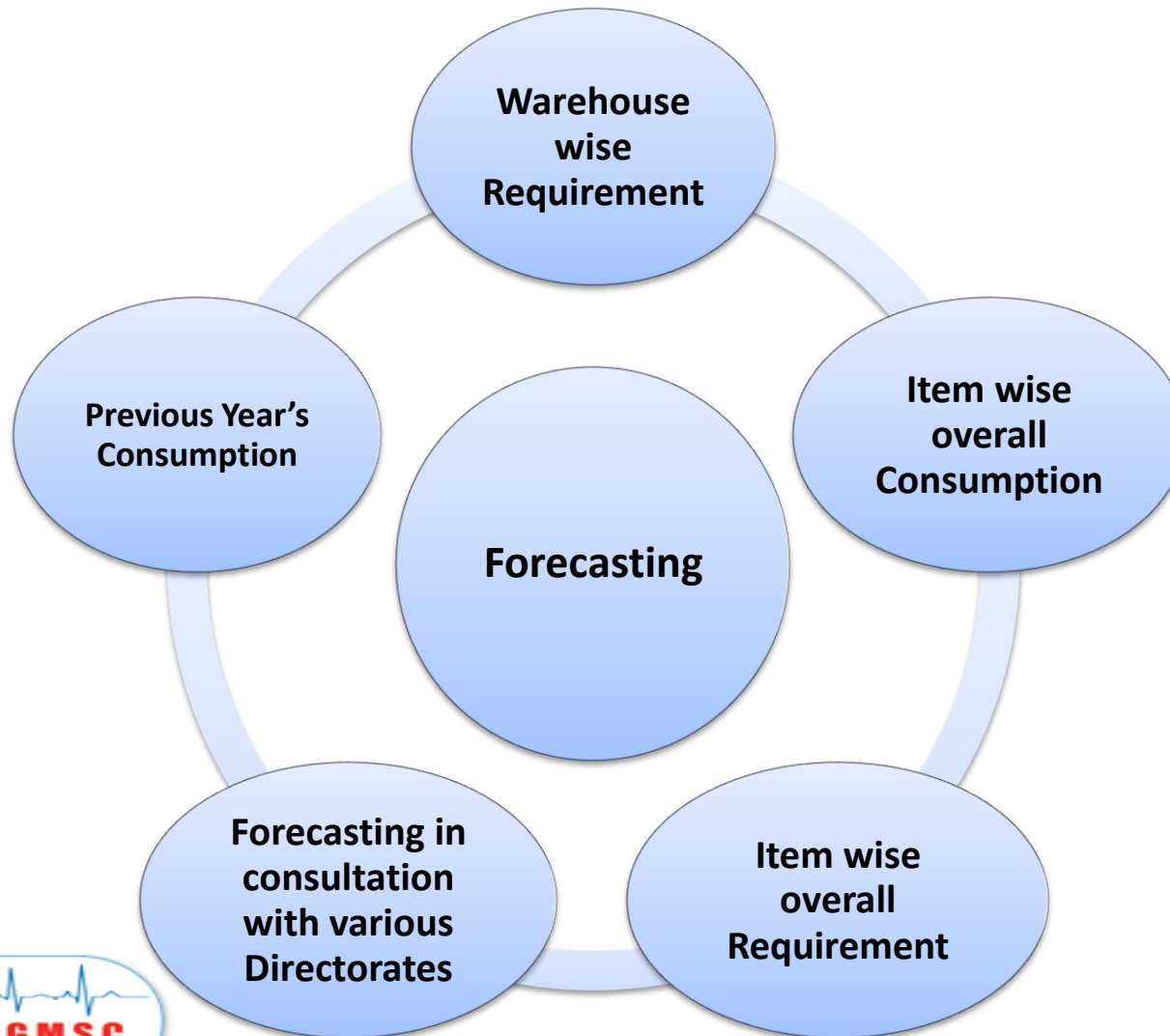


Last three financial year PO

Total value of PO (Drugs)



Forecasting of Requirement...



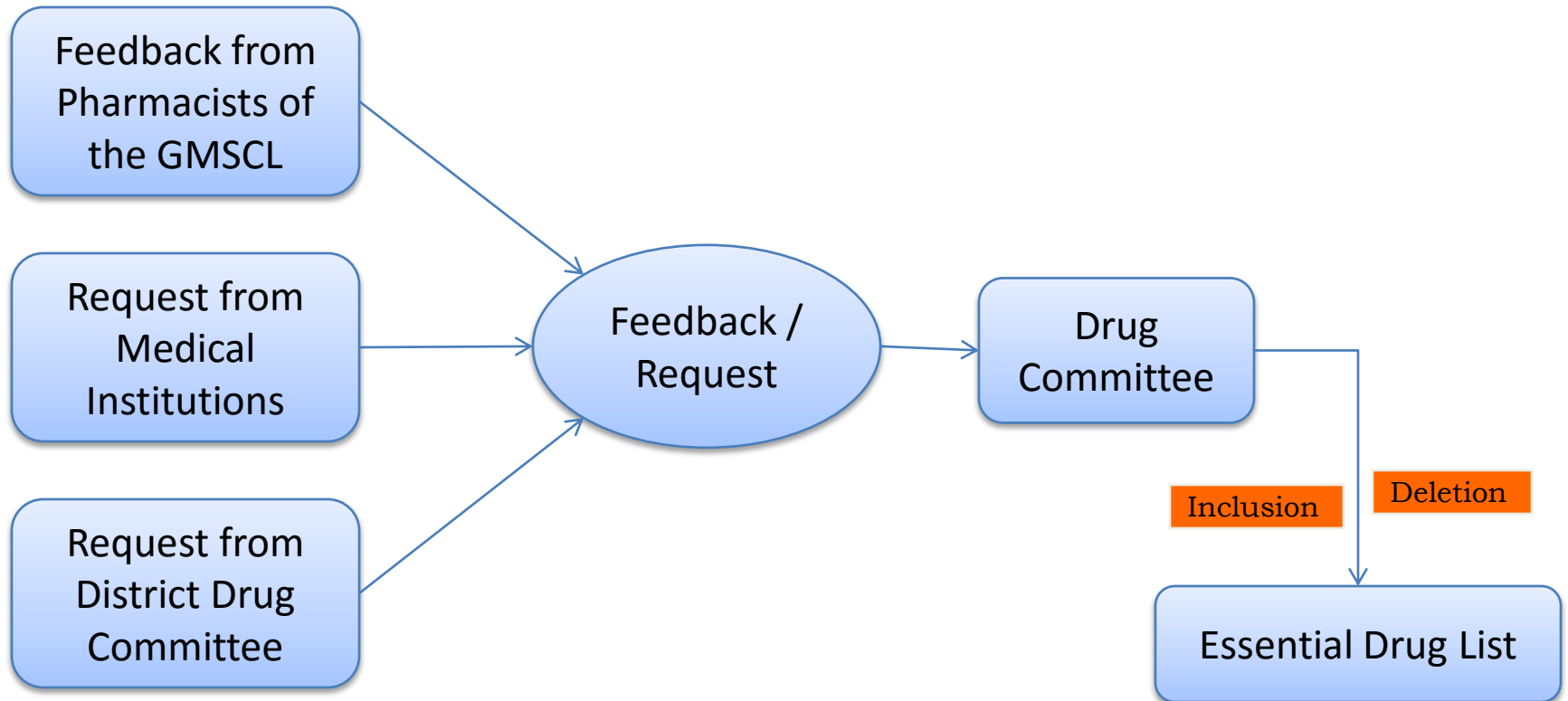
Indenting
based on
systematic
consumption
plan from PHC
level onwards

Prevent excess
stocking
Minimize
wastage due to
expiry

Essential drug list

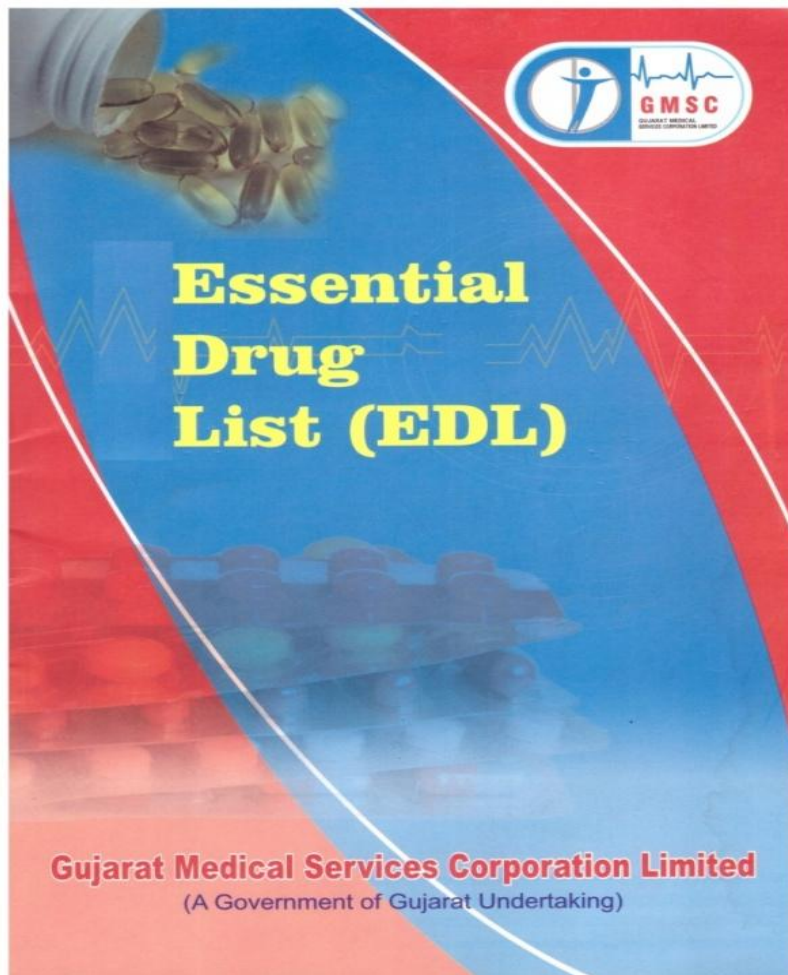
- Essential medicines, as defined by the World Health Organization (WHO) are,
 - “those drugs that satisfy the health care needs of the majority of the population; they should therefore be available at all times in adequate amounts and in appropriate dosage forms, at a price the community can afford.”
- Taking the initiative forward, the Gujarat Medical Services Corporation Limited has come up with a list of Essential Drugs for the State of Gujarat containing a list of drugs that are to be procured and supplied to all the concerned healthcare facilities, irrespective of their inclusion in any other healthcare programme.

Essential Drug List (EDL)



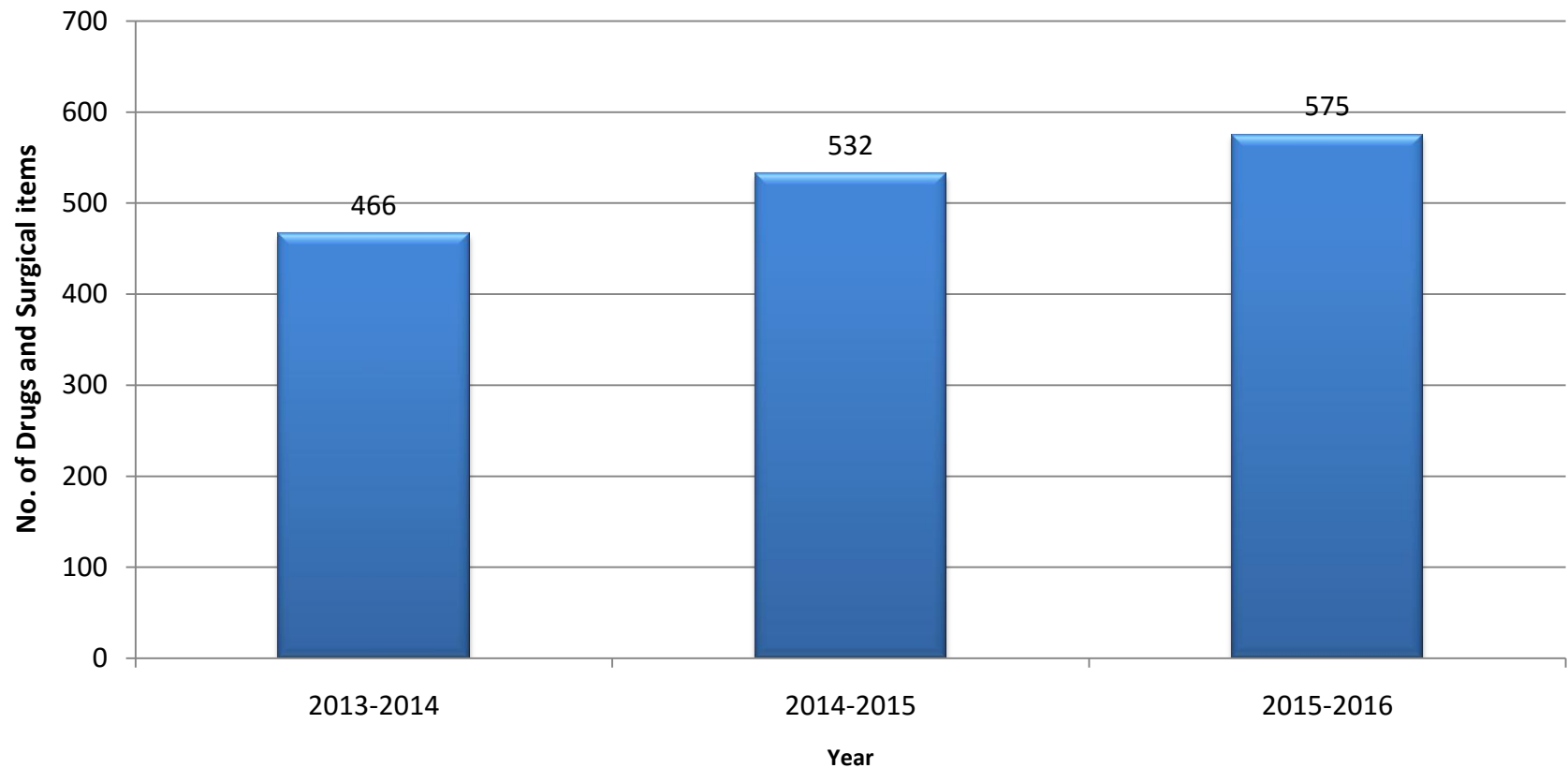
Essential drug list

- First official EDL was published in the year 2004-2005, and since then, this list has been updated every year to keep in pace with the changing technology and requirements.
- The EDL list to be utilized by all the medical and para-medical personnel of all the healthcare facilities of Gujarat is prepared by rigorous and regular brainstorming sessions with experts from various departments and specializations with a commitment to update the list every year.



Essential drug list items in last three year

No. of Drugs and Surgical items in EDL



Standard Treatment Guideline

- The *Rational Use of Medicines* results into a more effective treatment at an affordable cost. Essential Drugs List (EDL) and the Standard Treatment Guidelines (STG) are an important component of promoting Rational Use of Medicines.
- Gujarat Medical Services Corporation Limited under the auspices of Department of Health and Family Welfare, Government of Gujarat finalizes EDL and has undertaken the task to develop STG for the State.
- The objective is to improve the availability of quality drugs at each health facility and to achieve maximum public health improvement using available resources.
- This manual will be useful as ready reference for the health care providers and supply management staff.



STANDARD TREATMENT GUIDELINES

A Manual for Medical Therapeutics



Gujarat Medical Services Corporation Limited
Health and Family Welfare Department
Government of Gujarat

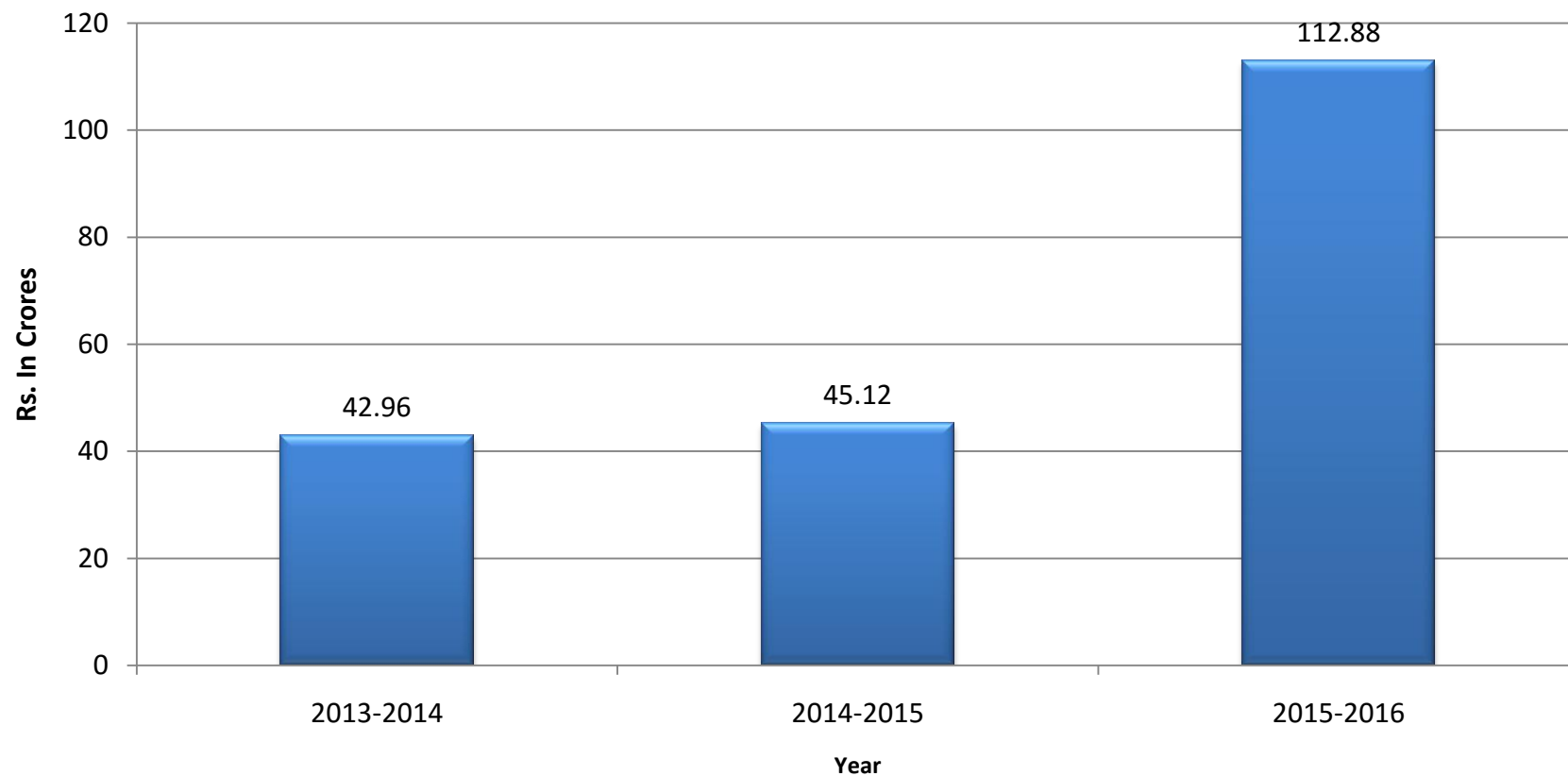


Equipment Procurement

- To procure modern era optimum quality Equipment at competitive rates and to follow transparent procedures.
- To meet the Equipment Purchase of different Primary, Secondary and Tertiary Healthcare Institutions.
- To follow quality parameters for diagnosis, technology and research to provide best healthcare services in Gujarat.
- To meet these objectives, GMSC has incorporated few transformations in its scope of work:
- GMSC floats tenders through e- tendering process, on receiving indent by the various departments through n Procure online services.
- In addition to e-tendering, GMSC also does additional advertising of tenders in Newspapers and on GMSC website

Equipment Procurement

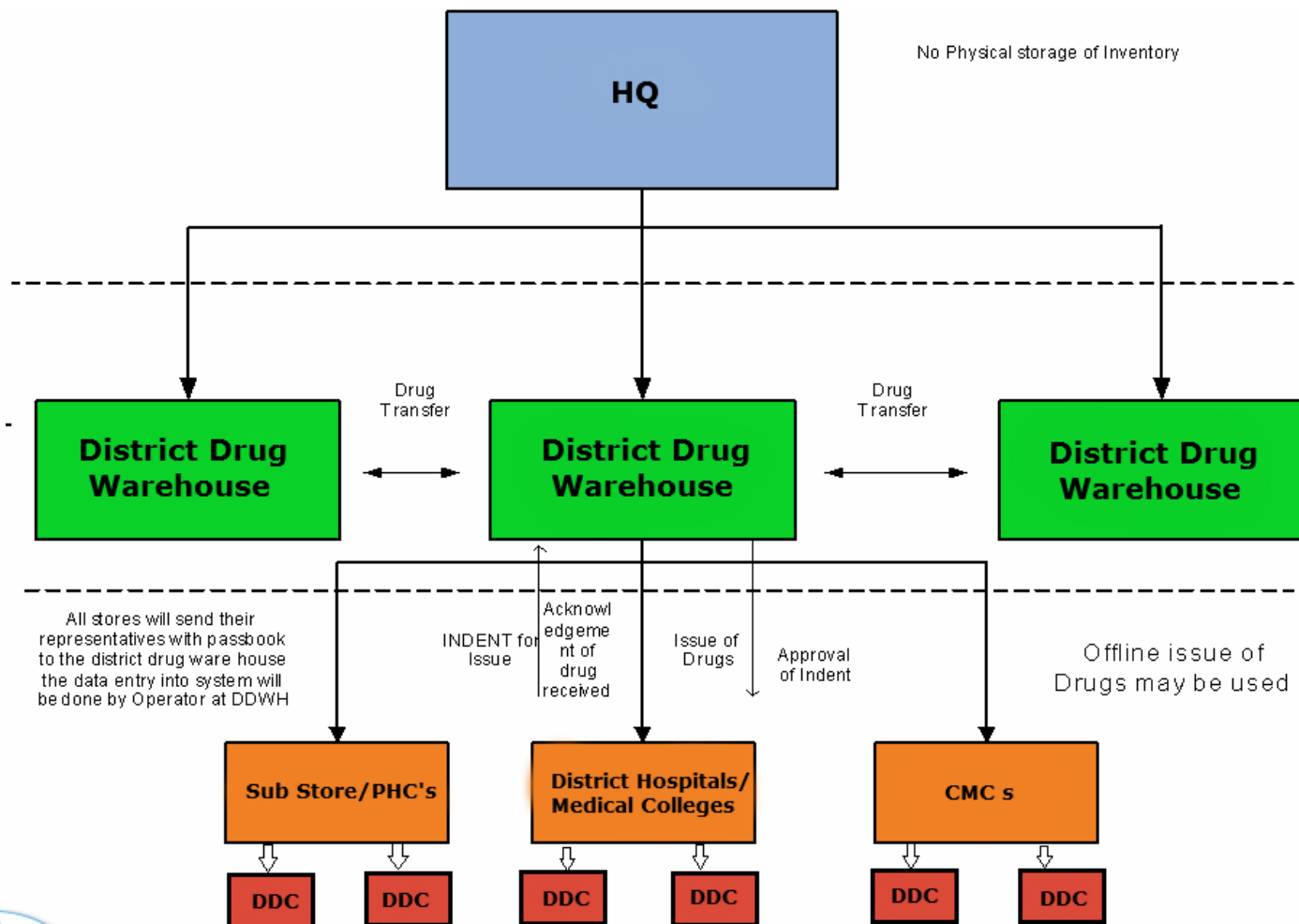
Medical Equipments Purchase Year wise



Drug Distribution System

- The GMSCCL created a chain of warehouses with all required facilities to provide reasonably good storage conditions including 'cold place' for the storage of items.
- Warehouses were established at 7 Locations. At present, and they cover the 33 districts. All the warehouses are of uniform design and structure.

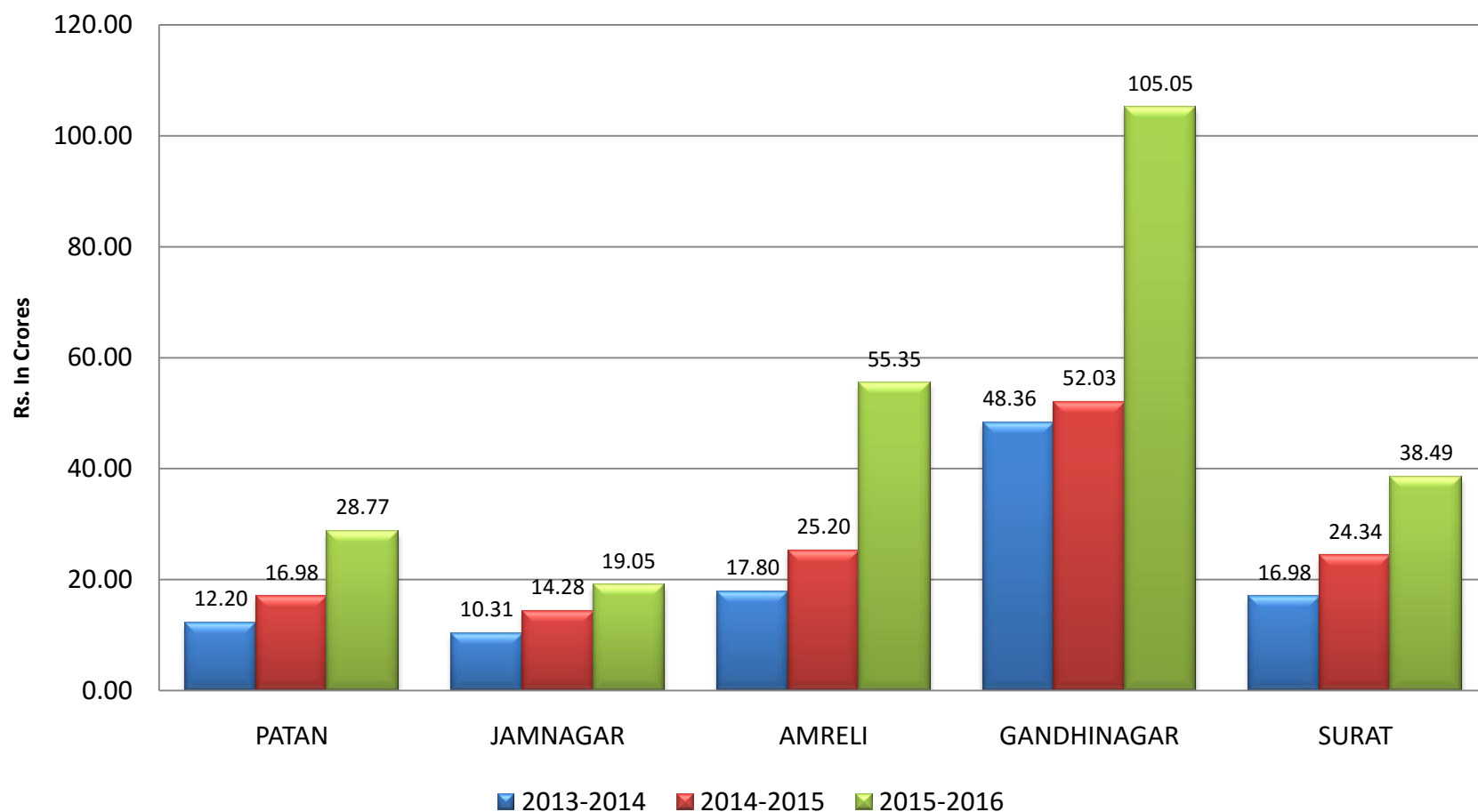
Process Flow



Warehouse



Supply of goods from various warehouses



Management Software (DLIMS)

- Previously An online web-based application named Drug logistics Information and Management System (DLIMS) has been developed by NIC integrating various inter-related activities of the Centre Medical Stores Organization Office. This application is in operational since December 2006 at Gandhinagar.
- These modules have been appreciated by "Silver Award" for National e-Governance, 2008-09 for specific sector Award: Health by Government of India.

Management Software (e- Aushadhi)

- Now supply chain management or inventory management at GMSCCL is managed by a web based application of ***e- Aushadhi***.



The screenshot displays a web browser window with the address bar showing "220.156.189.241/IMCS/hisss/loginLogin.action#". The page header includes the GMSC logo and the text "e-Aushadhi Gujarat Medical Services Corporation Limited A Government of Gujarat Undertaking". Navigation links for "Patient Test Reports", "Enquiry", and "Employee List" are present. The main content area features a banner for "i-MCS Human Resource & Finance Management System" with a background image of a calculator. Below the banner, a text box describes the i-MCS system as an integrated medical corporation system. To the right, a "LOGIN" form contains fields for "Username" and "Password", a "Forgot Password?" link, and a "Login" button. A message "Invalid User Name/Password!" is displayed below the form. The footer contains contact information for Gujarat Medical Services Corporation Limited and a copyright notice for CDAC Noida.

Login Application

220.156.189.241/IMCS/hisss/loginLogin.action#

 **e-Aushadhi** Gujarat Medical Services Corporation Limited
A Government of Gujarat Undertaking

Patient Test Reports Enquiry Employee List

 **i-MCS**
Human Resource & Finance Management System

integrated- Medical Corporation System (i-MCS)

i-MCS is a blend of various statutory bodies like EMMS, HFMS and e-Aushadhi. EMMS takes care of all the equipment handling and its maintenance, HFMS being the care taker of Human Resource and Finance System. e-Aushadhi is a web based supply chain management application which deals with Purchase, Inventory Management & Distribution of various drugs etc.

LOGIN

Username

Password

[Forgot Password?](#)

Invalid User Name/Password!

Gujarat Medical Services Corporation Limited, Block No 14, Gandhinagar - 382010
Telephone No. - 079-23250767 Fax No.- 079-23257586 email comp-IMCS@gujarat.gov.in

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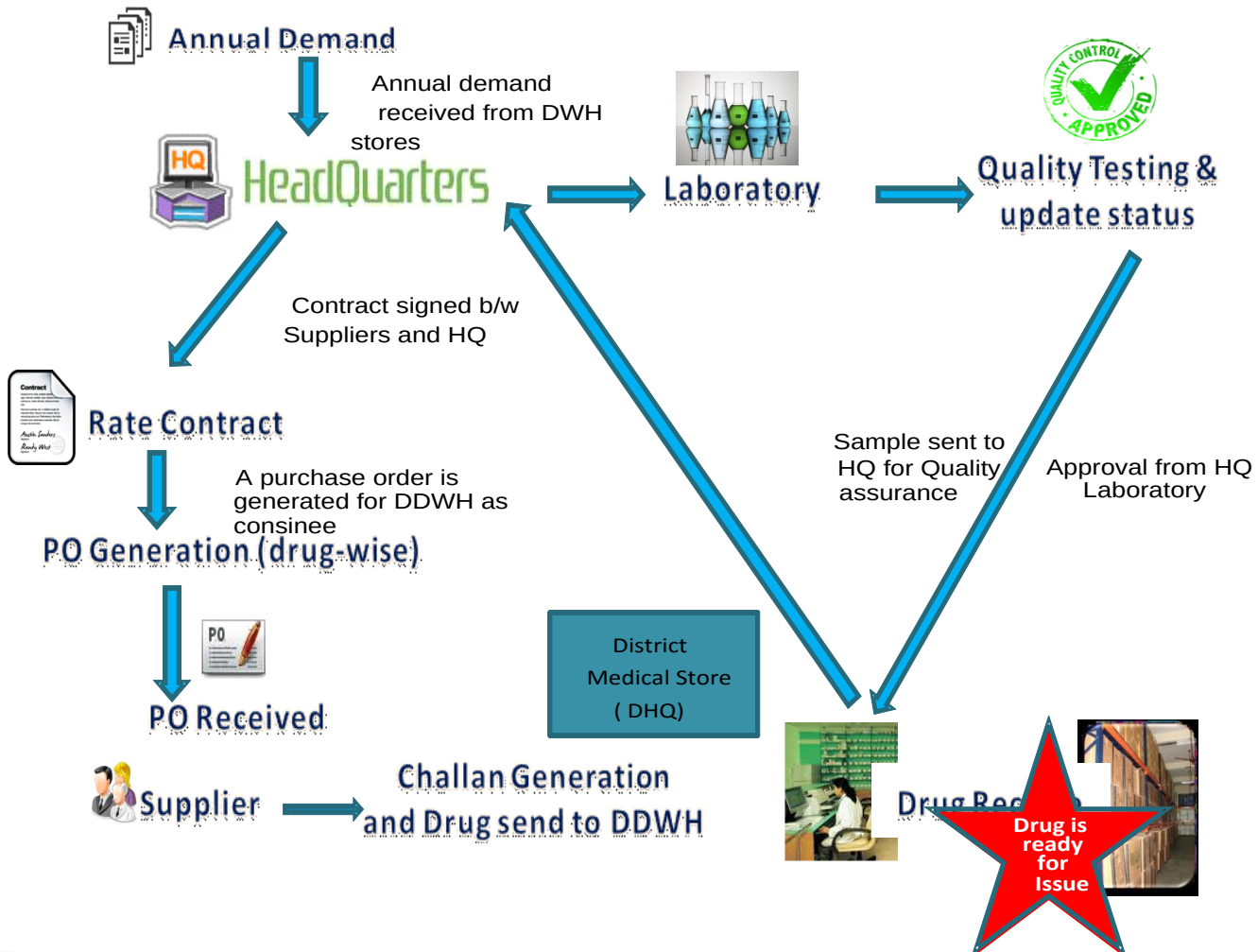
 **GMSC**
GUJARAT MEDICAL SERVICES CORPORATION

Windows Taskbar: Login Application... CoH Microsoft PowerP... 11:41 AM 1/20/2016

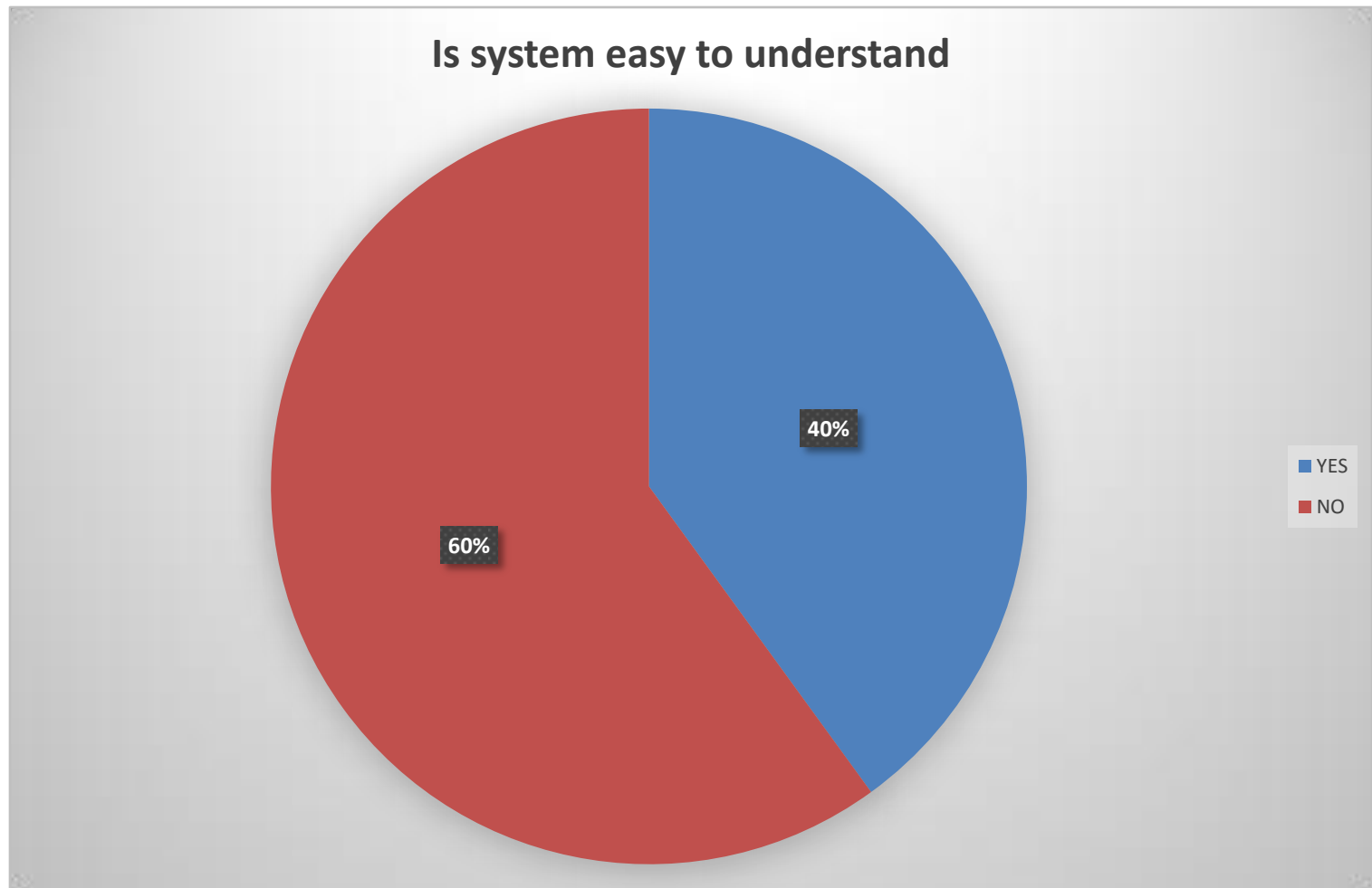
e- Aushadhi

- Monitor Drugs information
- Define the items into Groups, Sub groups, Categories, Codification of Drugs.
- Automatic Indent generation as per planning
- Maintain expiry Date / Shelf life for an item
- Search items using a number of search criteria
- Transfer of Drugs among Drug Warehouses
- Drug Distribution to Patients with all statistical Data about Drugs, Doctors
- Define and maintain various levels of Stores
- Link all drug warehouse hierarchically
- Maintain control (such as quantity tracking) on stocks and their replenishment.
- Reserve items within District WH / CHC / PHC.
- Record transactions while moving items from one location to another.
- Alarming Expiry Drugs, SMS facility at all level

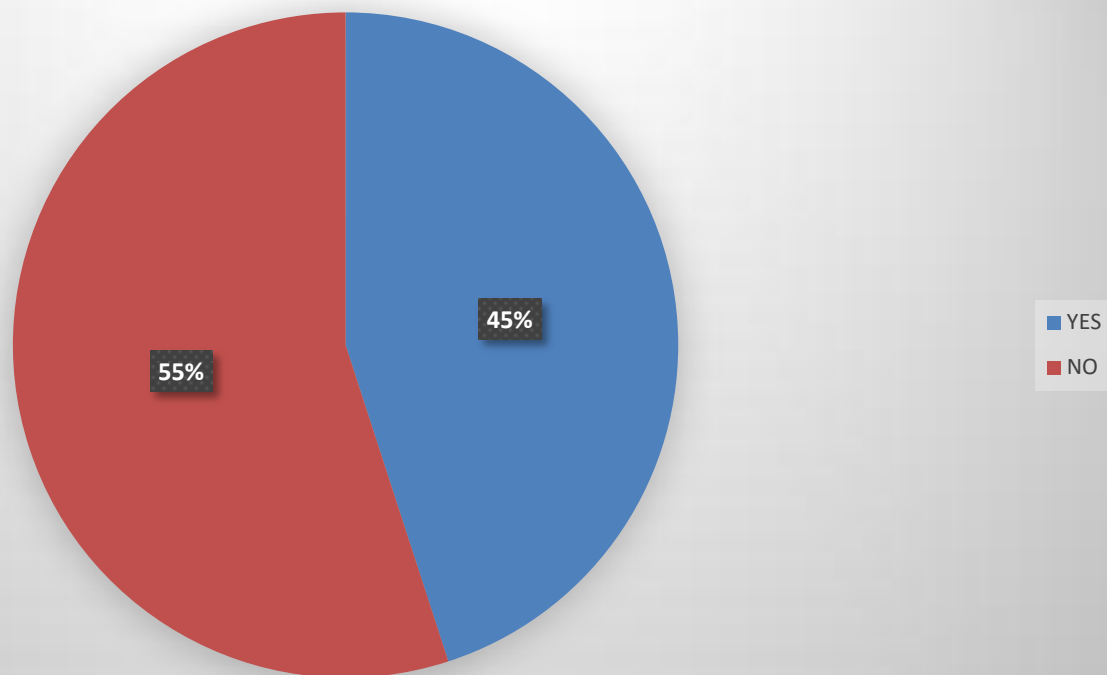
Work Flow



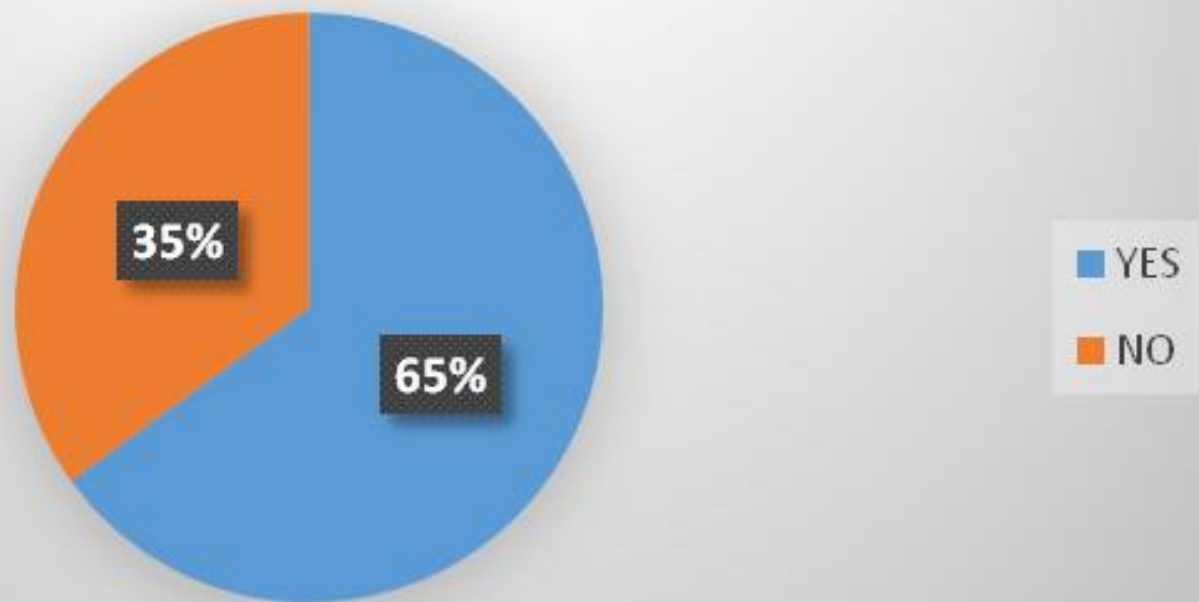
e- Aushadhi implementation



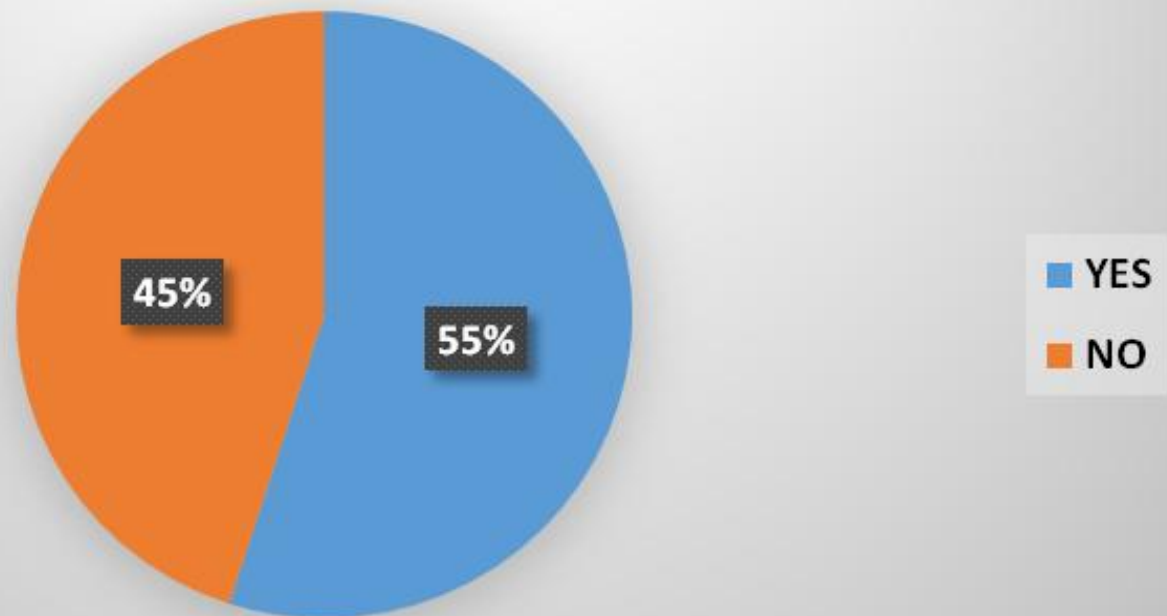
Implementation met your expectations



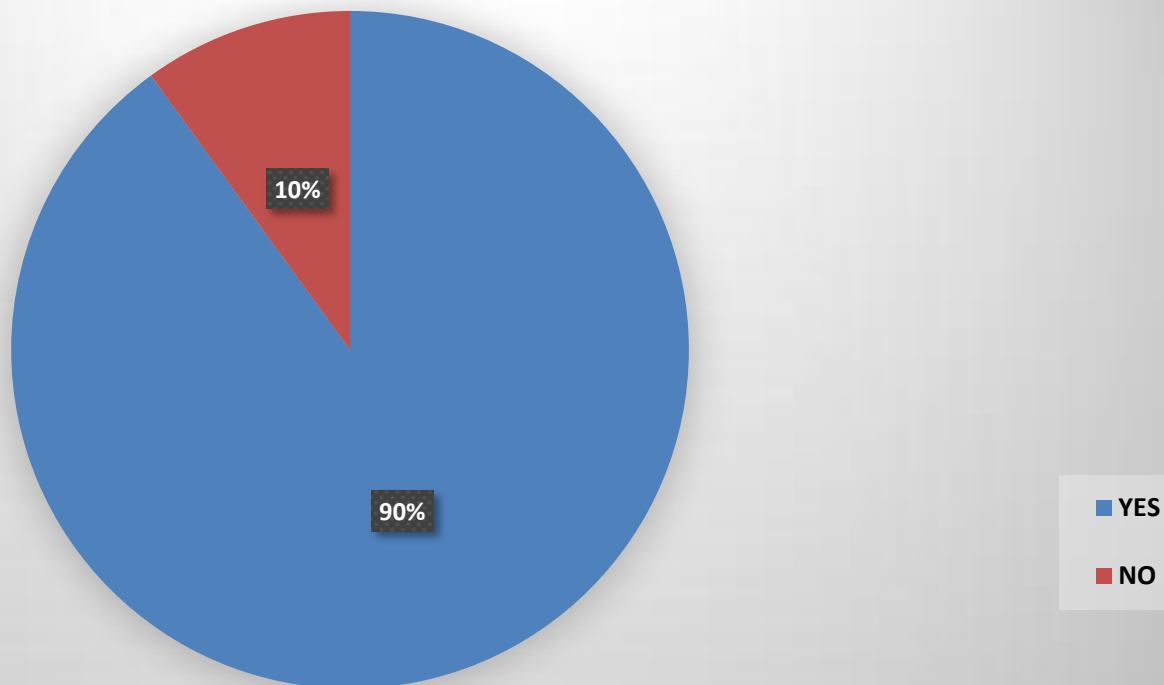
Adequate time and training was provided for implementation?



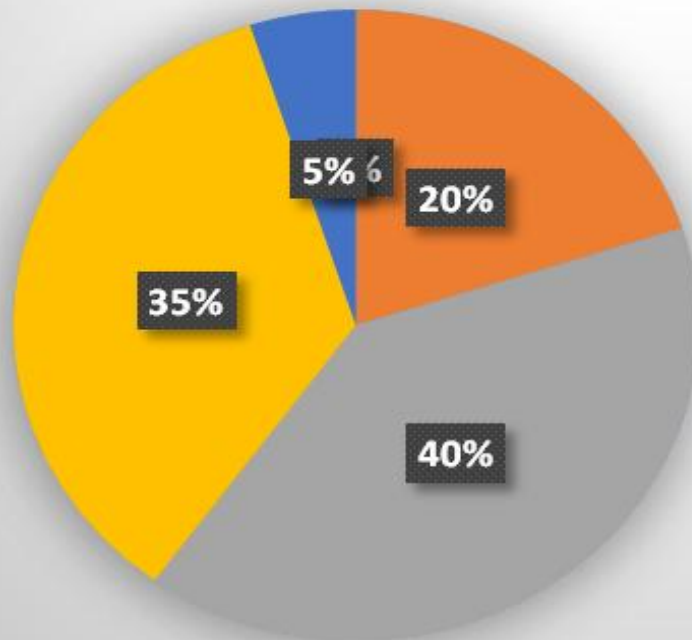
e-Aushadhi will make your work easier?



The problems associated with e-Aushadhi are solved on time?



RATING OF E-AUSHADHI

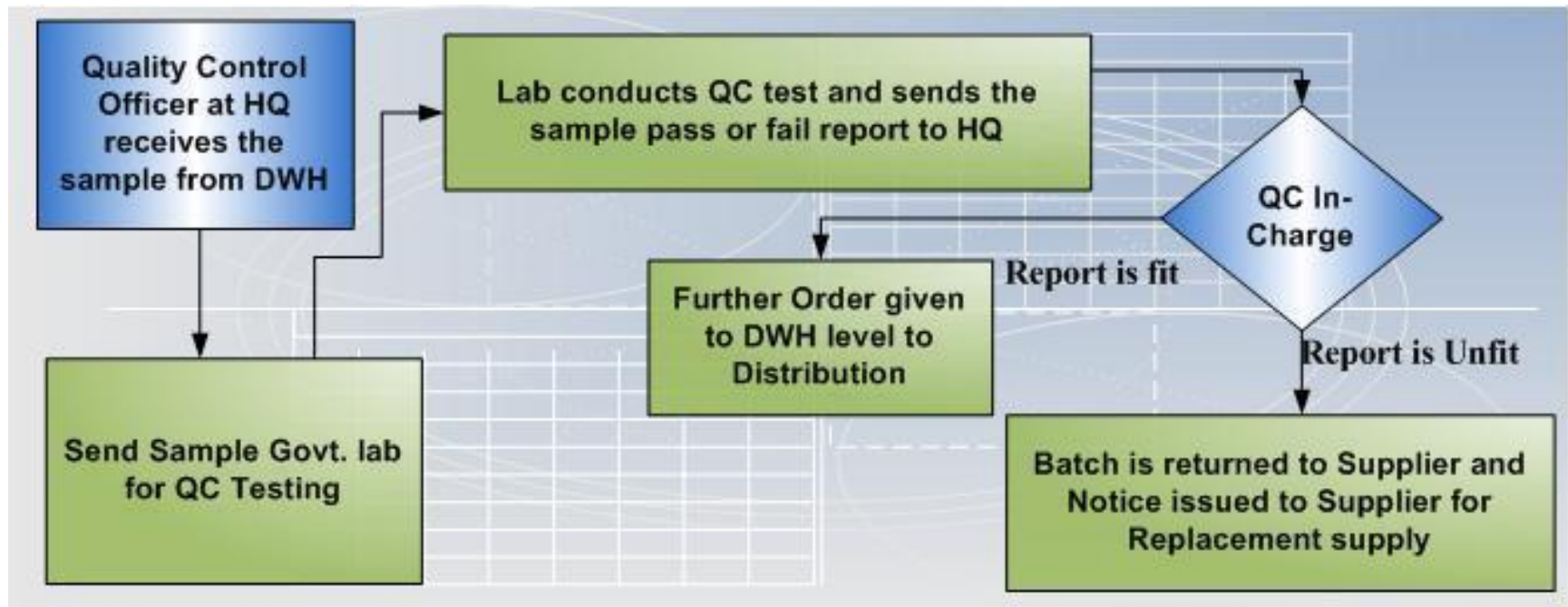


- How do you rate e-Aushadhi over all? Excellent
- How do you rate e-Aushadhi over all? Very Good
- How do you rate e-Aushadhi over all? Good
- How do you rate e-Aushadhi over all? Average
- How do you rate e-Aushadhi over all? Bad

Quality Assurance of Drugs

- GMSCCL assures quality of drugs supply to all Health Institutions of Gujarat Government.
- This is assured by pre-dispatch testing and testing as per Drugs and cosmetics Act 1940 & rules there under.
- Thus GMSCCL keeps watch on the quality Drugs supply to the Government Health Institutions.

Process Flow



Performance last three year in QC

PERFORMANCE AS PER DRUGS & COSMETICS ACT 1940

Sr No	Name of Activity	Achievement in 2013-14	Achievement in 2014-15	Achievement in 2015-16
1	Number of sample (drugs) taken(by Manager (QC))	789	692	584
2	Number Of Not Standard Drugs	118	71	41
3	General circular for Not of Standard Drugs	28	15	10
4	Recovery Order (Rs in Lac.)	85,66,893	47,25,399	80,40,248
5	Replacement (in Rs)	13,51,553	1,00,322	6,88,345
6	Number of Firm Debar	10	14	8

Recommendation

- The Gujarat Medical Services Corporation Ltd (GMSCL) could introduce certain innovations within a period of three years of its establishment that are worth emulating by other Indian states.
- The state of GMSCL to introduce many new concept/s in matters related to medicine procurement, storage, distribution and dispensing after 2013.
- Compared to the earlier system, the GMSCL could make wonderful changes in the drug situation in Gujarat within three year so fits existence both in making the medicines available in government hospitals and ensuring their quality.
- The system aimed at bringing enhanced transparency across all levels and hence found a big resistance in implementation and non-cooperation.

Conclusion

- A team of committed and dedicated officials of GMSCCL could introduce many innovations in the system that helped to revolutionize drug procurement in the state.
- GMSCCL could introduce and popularize the concepts of good warehousing and storage practices in drug store management in Gujarat.
- The community pharmacies and their working are very much professional and scientific both in structure, appearance and functioning.

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Thank You!

