Summer Training at
Price Water House Coopers,
Mumbai

Study on Process Flow, Gap Analysis &Designing of SOPs For Six Department: For India's Leading Government Aided Trust Hospital For Children & Women

By
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INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr. Rutvi Sharma (P.T.)** student of MBA Hospital and Health Management (MBA-HM) from the IIHMR University, Jaipur has undergone Summer Training at **PricewaterhouseCoopers, Mumbai** from 04.04.2016 to 03.06.2016.

The Candidate has herself completed the project assigned to her during summer training. Her approach to the project was sincere and proactive. This summer training is partial fulfillment of the course requirement recommended for the award of MBA in Health & Hospital Management. I wish her all success in all her future endeavors.

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pwc

June 3, 2016

To Whomsoever It May Concern

This is to certify that **Ms. Dr Rutvi Atul Sharma (Emp Id: 726229)** has undergone her training with the **Advisory** division, **Mumbai** from **April 04, 2016** to **June 03, 2016**. She was associated with the **Consulting** SBU.

She has exhibited a keen interest in learning and has positive attitude. She is sincere and hard working. The efforts put in by her for the project and the analysis of the subject carried out during the training was outstanding.

We wish **Dr Rutvi Atul Sharma,** the best in her future endeavors.

Mervin

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Acknowledgement

An endeavor over a period can only be successful with the advice and support of well-wishers. The satiation and euphoria that accompany the successful completion of the project would be incomplete without the mention of the people who made it possible.

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List of Abbreviations

- PwC – Price water house Coopers
- SOP- Standard Operating Procedure
- NABH- National Accreditation Board For Hospital & HealthCare Providers
- OPD- Outpatient Department
- IPD- Inpatient Department
- HMIS- Hospital Management Information System
- SBU- Strategic Business Unit
- MIS- Management Information System

Introduction ofPwC

&

Organogram Structure

PricewaterhouseCoopers is a multinationalprofessional services network headquartered in London, United Kingdom. It is the largest professional services firm in the world, and is one of the Big Four auditors, along with Deloitte, EY and KPMG. PwC is a network of firms in 157 countries, 756 locations including India, with more than 208,100 people working. The firm was established in 1998 by a merger between Coopers & Lybrand and Price Waterhouse. The trading name was shortened to PwC in September 2010 as part of a rebranding. The PricewaterhouseCoopers name was formed by the combination of the names of Price Waterhouse and Coopers & Lybrand, following their merger in 1998. On 20 September 2010, PricewaterhouseCoopers rebranded itself as PwC, although the legal name of the firm remained PricewaterhouseCoopers.

PwC- INDIA

In India, PwC offers a comprehensive portfolio of Advisory and Tax & Regulatory services each, in turn, presents a basket of exceptionally defined deliverables. Network firms of PwC in India also provide services in Assurance as per the applicable rules and regulations in India providing organizations with the advice they need, wherever they may be located, our highly qualified, experienced professionals, who have wide-ranging knowledge of the Indian business environment, listen to different points of view to help organizations solve their business issues and identify and maximize the opportunities they seek. Our industry specialization allows us to help co-create solutions with our clients for their sector & field of interest.

PwC Line of Services

PwC provides three service lines (the 2014 revenue shares are listed in parentheses):

- Assurance (45%)

- Advisory (29%) – consulting activities which covers Strategy, Performance Improvement, Transactions Services, Business Recovery Services, Corporate Finance, Business Valuation, Sustainability and Crisis Management in a range of specialist areas such as accountancy and actuarial advisory.
- Tax (26%) – International tax planning & compliance with local tax laws, customs, human resource consulting, legal services & transfer pricing

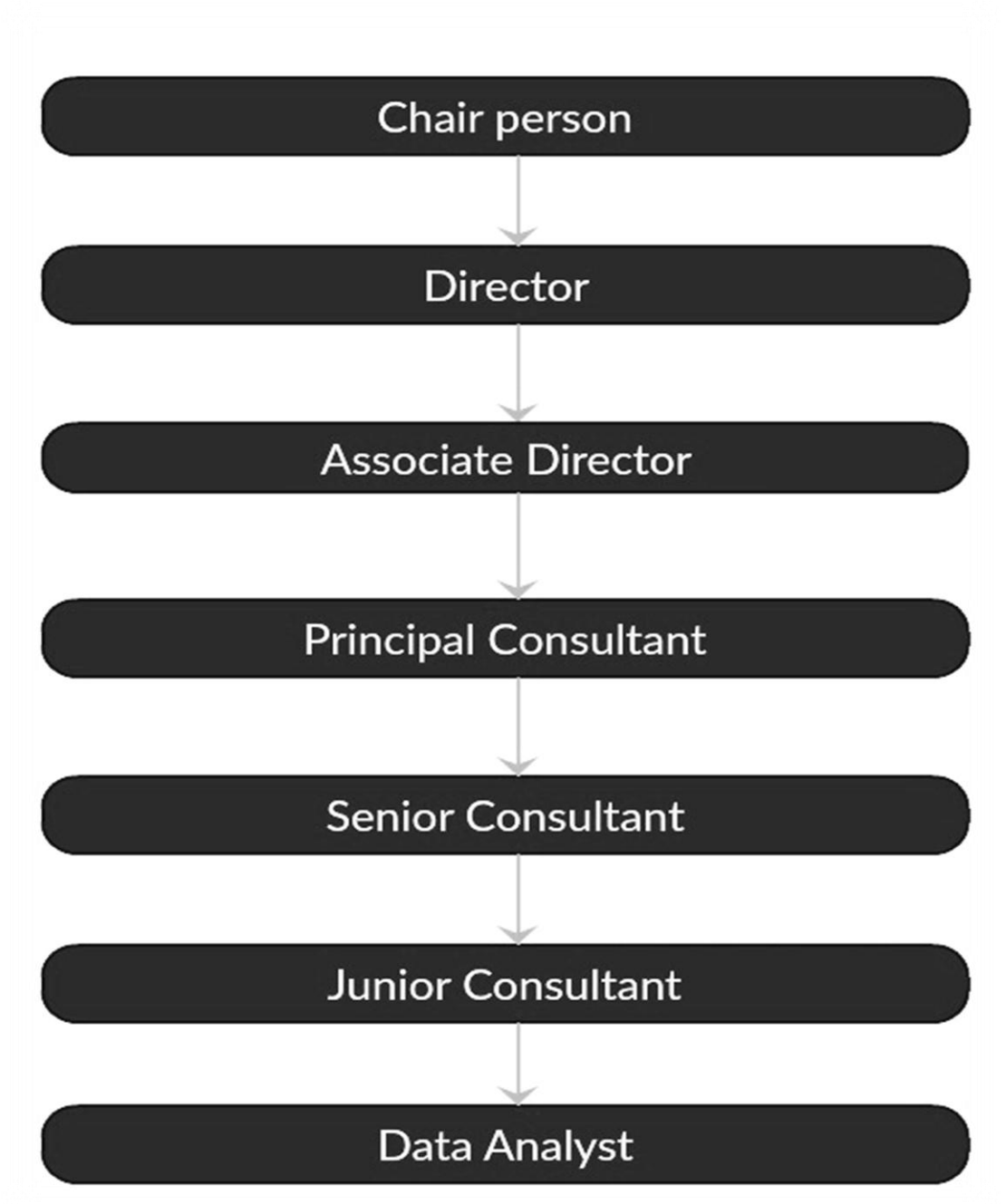
Deliverable for the following types of Industry:

Aerospace & Defense, Automotive, Capital Projects, Infrastructure, Chemical, Education, Entertainment & Media, Financial Services, Government & Public Sector, Healthcare, Industry Manufacturing, Metal, Oil & Gas, Power Mining, Pharmaceutical & Life Sciences, Private Equity, Retail & Consumers, Technology &Telecom etc.

Leader:

- Deepak Kapoor, Chairman and Territory Senior Partner
- Shyamal Mukherjee, the Strategy, Growth and Brand Leader for the India firm.
- Bharti Gupta Ramola, the Markets Leader
- Deepankar Sanwalka, our Advisory Leader, based in Gurgaon &also leads our Consulting practice.
- Gautam Mehra, Lead PwC's Tax and Regulatory Services (TRS) team & our Asset Management practice.
- Satyavati Berera is the Chief Operating Officer of PwC India.
- Ketan Dalal, the Regional Managing Partner for the west.
- Rohit Bhasin, the Leader of Partner Affairs function
- Dr. Rana Mehta, the Partner of Health Care PwC, India

Organogram


Chair person
Director
Associate Director
Principal Consultant
Senior Consultant
Junior Consultant
Data Analyst

PwC HealthCare India

The Indian healthcare industry, valued at US$ 65 billion (Rs. 4.36 trillion), is growing exponentially. In the next decade, increasing consumer awareness and demand for better facilities will redefine the country's second largest service sector employer. Healthcare in India today provides corporations with a unique opportunity for innovation, differentiation and profits.

In the future, the key challenge for the industry will be to meet healthcare needs across sectors, from coping with modern diseases to providing basic access to primary healthcare, public health engineering, disease surveillance and monitoring. Although healthcare challenges can vary from region to region, health systems around the world have the same objective: to finance and deliver the highest possible quality of care to the maximum number of people at the lowest possible cost. Indian healthcare is experiencing a new wave of opportunity. Providers are reinventing existing delivery models to bring healthcare closer to the patient.

PwC Healthcare practice works closely with governments, funding agencies, payers, providers and private investors, on engagements in every sector of the industry. PwC has helped implement major health reforms, public health policy initiatives, as well as strategies and solutions for various clients.

The dedicated team of specialists brings a diverse range of client engagement and analytical skills in healthcare strategy, technical feasibilities, operations improvement, healthcare deals and technology experience.

Ranked by revenue, PwC is the world's third largest healthcare professional services firm. It is one of the only four global consulting networks with leadership positions in each of the key sectors of pharmaceutical and life sciences, payer, provider and government healthcare consulting. Company's global network of more than 5,000 health professionals includes leading minds in medicine, bioscience, IT, clinical operations, business administration and health policy. Their thought leadership and extensive research provide our engagement team's access to competitive intelligence, perspectives on leading practices and analysis of trends affecting health-related industries.

Healthcare industry players accomplish their missions in today's dynamic and competitive environment. It provides health organizations with expert guidance not just on healthcare issues in their local markets but also on operating in global markets.

Purpose &Learning of Summer Training

Institutional learning has always proved beneficial in delivering the theoretical knowledge when a potential candidate endeavors the new career, but the exposure of implementing this learning into real practical environment through on the job training helps to puts a foundation stone for the prospective candidate. Chances for work, its presentations and mistakes done during this period are the something, which will not be, forgot and repeated respectively. This is an opportunity to develop a deep understanding about the type of work a company offers, their limitation, indication contraindication, scopes etc.

The Purpose of this summer internship was

1. Learn more about the health care industry and healthcare consultancies
2. Application of my learning understanding and experience in the field of Hospital into my Project effectively.
3. Learning more about the field and the industry and the work profile and gain valuable work experience.
4. To decide the path through which I want to explore the Industry.
5. Gain valuable Networking Contacts.

Thus, summer training becomes an integral part for MBA in Hospital and Healthcare Administration.

Experience & Learning at Price WaterhouseCoopers (PwC)

I was appointed as Intern IN ADVISORY CONSULTING STRATEGIC BUSSINESS UNIT (SBU) for two months. Internship at consultancy like PWC, gave an opportunity to me to understand scope of health care & approach of consultancy in healthcare business. However, being at one place the variety of projects a consultancy offers treated me with immense knowledge and kept my excitement high to learn and discover the kind of projects it does throughout. Market analysis, due diligence, SOP formulation, financial analysis and business model studies and review for hospitals & health care organizations like NGOs. Working here, I discovered that the horizon for the candidate working in consultancy is wide and expanded and is not limited to a section of a health care. I realized the importance of remaining updated about our own field, present market statistics and thus importance of reading and updating the knowledge and skills timely. Apart from work, how “BIG FOUR” like PwC has an integrated systemic management and information technology for

each employee is commendable. Learning the system itself was a type of new learning other than the usual project work especially the induction training followed by E-LEARNS. The skills for the using software using different tools like SMART, client engagement process, review meeting Proposal formulation, using MIS are some of the example of foundation learning for the company and the project.

Learning from Internship:

About the Consultancy:

- Scope and work of Consultancy
- E-learns
- Software and tools like SMART and Microsoft Visio to Design flow charts
- How to design and make effective PPT. (Webinar Conducted by Vikram Juneja)
- Timesheet Compliance
- Ethics Compliance

About the Project:

- Routine workflow of the departments (under study) of hospital?
- How to do the process mapping of Six revenue generating department of a hospital?
- Documentation in a Professional way using NABH guidelines.
- On the site exposure.
- Client Engagement Process (review Meetings & Formal handling of client on the site).
- Kind of Questions to be formulated and asked to interview the staff.
- Formulation of SOPs and Gap Analysis statement.
- Process Flowchart
- NABH compliance and integration with the processes

Executive Summary

This Report is on Process flow, Gap analysis and SOP designing of six departments of a government aided trust hospital. SOPs especially when it comes to the practice of medicine and operation of a department, its relevance and importance becomes critical to ensure safety. Many Corporate Hospitals and Healthcare service providers have opted for SOPs as a strategic tool to ensure the same line of services and Quality delivery for maintaining the BRAND INTERGRITY & EQUITY.

As aspirant for the NABH accreditation for Pediatric and Maternity hospital and to standardized PwC has been engaged by this trust Hospitals to provide assistance in updating and where needed develop standard operating procedures (SOPs) for selected departments of:

- Hospital for Children
- Maternity Hospital

The Project started on 26th of April 2016 with the process flow mapping of the departments under study. The process Mapping had done through interview and observation of processes where feasible. A Gap statement of these departments was prepared and Process flow mapped in Flow charts for better understanding of staff for reference. This was with repeated review meetings with the management and staff as required. Clear role and responsibilities has been defined and productivity measures such as Quality Parameters vis-à-vis NABH guidelines, MIS/statistics for each department, turn-around times, etc., have been laid down. SOPs for the OPD & IPD Registration and Billing, Pharmacy, Procurement, Stores were designed. How the MIS would integrate with the current routine process has been discussed in detail. However, the study has certain limitations but not that major to affect the executional variations in Operations. Like, Process mapping of certain departmentcould not be performed through observational analysis for all the departments along with the Interview sessions but due to Patient Care area. Improvement through Training given to the respective staffs reflected in the functional improvement and better delivery of Quality Care could not be mapped due to time constraint.

The staff during the review meeting were made to understand how SOP in place minimizes errors, clears the way forward by avoiding uncertainties and serves as a vital tool to transfer knowledge and skill? The Advantages of SOPs are more in real critical and other situation than what has been discuss in the report, but only the SOP formulation is not enough. It was also explainedthat the process in sequence should be practiced by both Old and New staff to ensure the same treatment approach, operational execution and operational effectiveness.Training of the staff should be done regularly so as to keep in line with the newly designed SOPs and their feedback should be taken for the same.

The Report

Introduction

Definition of the SOP

Standard Operating Procedures (SOPs) are uniformly written procedures, with detailed instructions to record routine operations, processes and practices, which are followed within a business organization.
"The purpose of a SOP is to carry out the operations correctly and always in the same manner. A SOP should be available at the place where the work is done".

SOP refers to instructions normally written which are proposed to document how to perform a certain activity.SOPs should contain adequate details in clearly directing working staff through a particular procedure and by means to establish uniformity in the routine functions of the department. Each SOP should have a definite purpose but be written in a general format that can be easily followed by a broad audience. By laying out defined processes, the chief function of an SOP is to specifically avert procedural deviancies.

SOPs for the departments ought to be written in a uniform manner. A standard format should be followed with consistent font size, unit title and section headers throughout. It should include page numbers, date of initial approval, date it was effective from, within the department and date of revision if applicable.

The key elements of the SOP at a minimum should include the objective of the SOP, definition of significant terms and acronyms, defined list of responsible authority and details outlining the procedures with attachments of examples if applicable. It is important to reference applicable guidance and regulations within the SOP, such as NABH clause – AAC1, etc. SOPs should be signed by the group's Administrator or Director, with the date of approval that signifies the SOPs are associated with internal policies. Existing SOPs should be reviewed at regular period to reassess applicability of the policy. Annual review is recommended and review prior to sponsor interactions is advised.

Distribution, education and training on new departmental SOPs should be regular. It is important to document the date staff have been appropriately trained and are deemed competent to perform new SOPs implemented by the department. Staff should be monitored consistently and receive refresher training at regular intervals to ensure compliance.

The initial preparation of SOPs could be time consuming, but the long-term return on investment (ROI) is worth the effort.

Need for writing SOPs

1. To serve as a training document for teaching users about the process for which the SOP was written.
2. To provide people with all the safety, health, environment and operational information necessary to perform a job properly.
3. SOPs act as Clinical Guidelines.
4. SOPs and CQI in Healthcare-The key concepts in CQI[4] i.e. reduction in variation and improvement of processes has need for standards as a basic.
5. SOPs specify job steps that help standardize services and therefore quality.

One of the most useful systems to streamline business is having a Standard Operating Procedures (SOP) manual. The key reasons why many companies or organization rely on SOP is to help them in assuring that consistency and a certain quality of some products or services is maintained. They can also serve as very vital tools when one wants to operationalize and communicate key corporate policies, regulations of the government as well as any best practices.

Review of Literature

The origins of the term SOP are obscure. The Encyclopedia Britannica indicates that the abbreviation came into use around the mid-1900s and was already in use during World War II. Today, SOPs exist in contexts ranging from military operations to business routines, and from manufacturing processes to medical activities.

In military circles, the term *standard operating procedure* or *standing operating procedure* is used to describe a procedure or set of procedures for the performance of a given action or for a reaction to a given event. There is a popular misconception that SOPs are standardized across the universe of practice. However, the very nature of an SOP is that it is not universally applied, such as across a large military element like a corps or division but rather describes the unique operating procedure of a smaller unit like a battalion or company within that larger element. That the operating procedure in question is said to be *standing* indicates that it is in effect until further notice, and that it may later be amended or dissolved.

In present day healthcare, clinicians, nurses, paramedical staff are familiar with SOPs in restricted contexts, staff are also aware of use of SOPs in the context of functioning of the department, procedures to be followed.

An idea whose time has now come is the introduction of SOPs into routine clinical practice that is, not only for special patients (e.g. those who are unconscious) or for special circumstances (e.g. patient brought dead) but for every patient in everyday clinical care. These are a specific set of practices that are required to be initiated and followed when specific circumstances arise. In emergency room physicians have SOPs for patients who are brought in an unconscious state nurses in an operating theater have SOPs for the forceps and swabs that they hand over to the operating surgeons and laboratory technicians have SOPs for handling, testing, and subsequently discarding body fluids obtained from patients.

SOPs are more specific than guidelines and are defined in greater detail. They provide a comprehensive set of rigid criteria outlining the management steps for a single clinical condition or aspects of organization

For the common health care provider, guidelines require local adaptation to suit local circumstances and to achieve a feeling of ownership, both of which are important factors in guideline uptake and use. SOPs, therefore, help bridge the gap between evidence-based medicine, clinical practice guidelines, and the local realities at the point-of-care.

In a study of the treatment of sepsis, Kortgen *et al*. (2006) found that the use of SOPs facilitated the implementation of new therapeutic strategies, particularly as bundles or packages, thereby improving the standard of care. To start with the general consultation, SOPs regarding the structure of outpatient consultations are necessary for every patient to ensure that the patient and/or his family are aware of the nature of the diagnosis, the prognosis, the nature and duration of treatment, the time course of treatment response, possible adverse effects of treatment, and related issues; some of such education will need to be repeated at follow-up visits because no client will remember all that has been conveyed at the first meeting. Such SOPs can be constructed by structuring the duration and component parts of the consultation. Research shows that in longer consultations doctors prescribe less, listen better to their patients, identify more problems, explore more psychosocial problems, and provide more health promotion. If these measures are viewed as a proxy for quality, longer consultations appear better. In longer consultations, the patient gives more information, especially about lifestyle and social behaviors. The consultation can be structured as an SOP with component parts that include the duration of consultation, social behavior, agreement, rapport building, partnership building, giving directions, giving information, asking questions and counseling.

Incorporating reminders in the form of SOPs can improve the rate of compliance with the relevant guidelines. For organizations or institutions which wish that certain activities are done by following a strict set of steps like, the standard operating procedures, SOPs could come in handy for them. The SOPs will help to guarantee

that consistency and maintenance of certain desired standards in the production of a given product or the provision of certain services are attained and maintained. Hospital chains like Apollo, Fortis, Wockhart, Global and Sterling etc. after their initial expansion have opted for SOP formulation for almost each and every department so as to manage the same consistency of the process along their chains & for quality assurance and thus better division of labor, lesser unnecessary repetition of the steps & thus more customer satisfaction. Effective SOPs have proved to be significantly of a great help to healthcare business owners save an enormous amount of time, energy, financial resources and beyond.

SOPS are necessary to incorporate aspects of treatment which are not highlighted in guidelines or which are parts of different guidelines. This will ensure that attention is paid to areas as diverse as problem-solving, communication, social support, family burden, and caregiver stress. SOPs are necessary to monitor medication compliance, a variable that can make or break the success of a psychopharmacological treatment plan.

All SOPs should be prominently available in the clinician's consulting chamber, in the outpatient department, in the hospital wards, in any zone related to patient care and in supportive services areas.

To a certain extent, SOPs also exist for aspects of record-keeping and hospital administration. An extension of such structure into routine clinical care is what we are now suggesting. The use of SOPs will have the added advantages of utilizing an optimized process for care, implementation of best evidence-based medicine, cost-effectiveness, improved continuing medical education, improved induction of new hospital staff, integrated quality control, transparency and enhanced protection from malpractice. When all these SOPs are in place, the quality of patient care will substantially improve.

The formulation of SOPs for routine clinical practice at all levels of care is a potential activity that the Society should address in the future. Such SOPs will of necessity be templates that can be customized to individual contexts, depending on what happens to be practical and expedient in the environment in which they are applied.

Importance of Standards Operating Procedures (SOPs) In Organizations:

I. Standardization of processes

"As per Donabedian, standards are professionally developed expressions of the range of acceptable variations of a norm or criterion".

- The SOP makes it easy to find out what policies and procedures are in place to handle repetitive tasks.
- Well-written SOPs explained visually through a flowchart or annotated illustrations, if needed, make it easier for employees to do their jobs. They don't have to guess how you want a task done because they can follow a procedure made easy to reference on the computer or as a printout. Through a standard routine, employees enjoy more predictability in their jobs and can hone their skills on each task to raise their overall performance.

II. Reduced the learning curve/training time for new employees

- When someone is new on the job, well-written and researched SOP can be a lifeline to them to be able to know how things work. As employees transition to new responsibilities, they may have ability to get a crash course in performing the duties if there is an internal employee transfer.If the role is filled externally, the advantage of a new external perspective is overshadowed by an additional learning curve as an orchestrated transition may not take place. SOPs provide employees with a framework for completing role requirements while reducing dependence on co-worker's availability for answering questions.

III. Ensuring the Understanding of the Role

- SOPs ensure an understanding of the role. The ability to clearly articulate roles and responsibilities provides guarantee that an individual understands the roles and responsibilities.

IV. Ensuring Consistency in the Performance of Duties.

- Employees may believe that they are consistently performing duties but SOPs may suggest the contrary. SOPs provide a surplus level for the assurance of consistency. The value of consistency comprises higher

quality results in operations and financial reporting. The result is heightened creditability of operational and financial reporting.

- Organizations that implement SOPs and ensure that they are intermittently updated will be able to allocated efforts on process improvements and strategic objectives, which will deliver long term growth.

V. As an Educational tool:

- Familiarize the entire research team on the specific tasks performed by the departments participating in the research protocol
- Educate the drug company/investigator on regulatory guidelines and SOPs already in place for departments such as radiology, nuclear medicine and radiation therapy in the performance of day-to-day procedures
- Train current and new employees to assure consistent performance of the research protocol

VI. Ensured the business continuity

- When a main staff member is on leave or not in the office for some reason, work does not have to stand still. By referring to the SOP someone else can take over the urgent tasks and do them correctly the first time.

VII. Allocating tasks becomes a no-brainer

- A good SOP will include the organogram of the business, as well as have a short job description and contact details for staff member. If you need to delegate a specific task, you can see at a glance who will be able to help you or advise you. Micromanaging of the task is not required, as it is clear who is responsible for what.

VIII. Ensure that the clients are getting the best possible experience with you

- Because there is a standard way of dealing with client queries, refunds, promotions, follow-up etc each client is treated fairly and equally, enhancing their interactions with the company and thus provide the best possible client service.

IX. Quality Control

- Your customers depend on a product or service to be of a certain minimum quality. SOPs help you reduce the errors, or variations.
- The customers depend on a product or service to be of a certain minimum quality. SOPs help to reduce the errors, or variations, that occur in the mass production of a product or the duplication of a service.

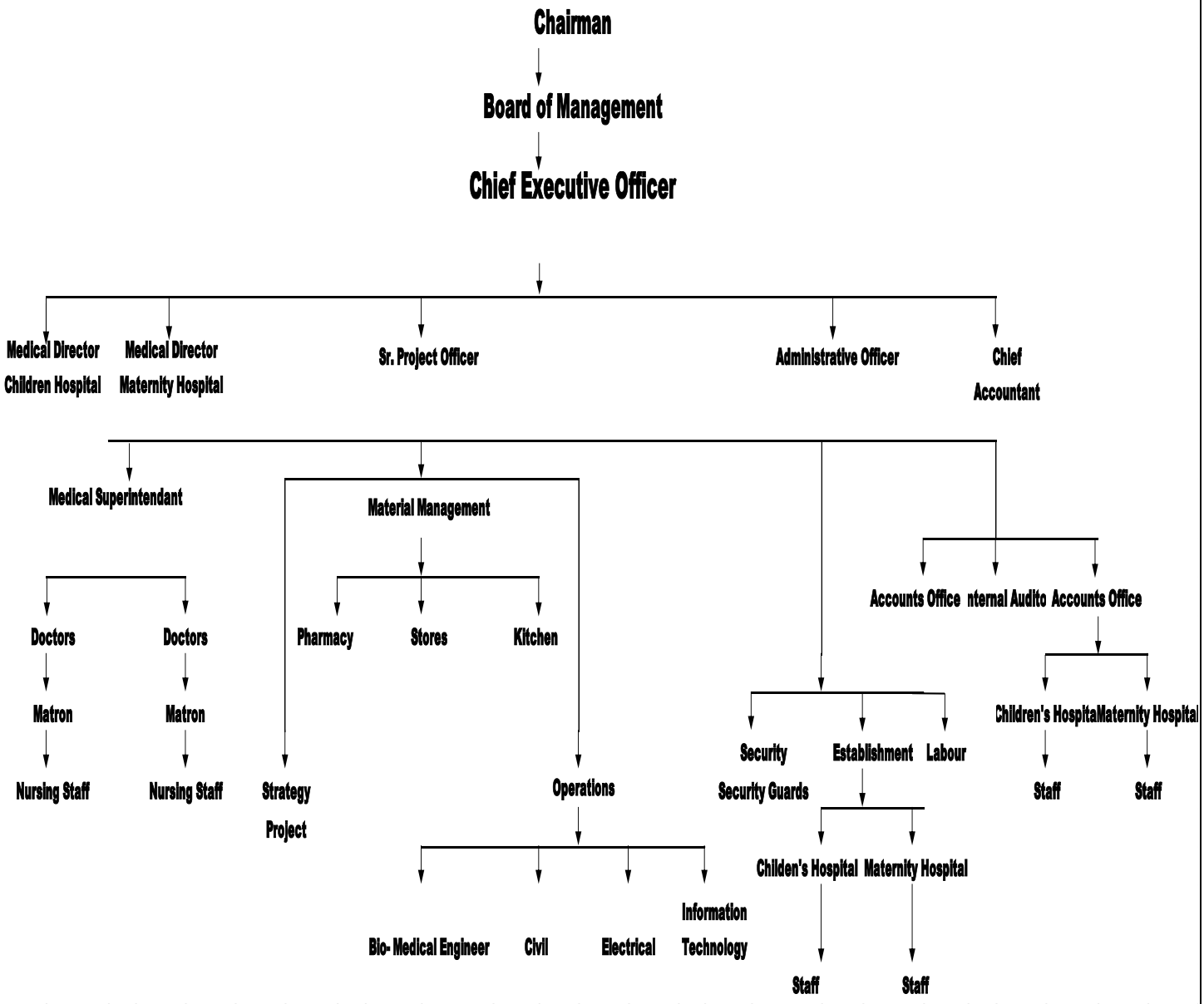
As aspirant for the NABH accreditation for pediatric and Maternity hospital and to standardized the processes the trust has approached PWC Health Care Consultancy to design the SOPs for their following six departments:

- Admission for Children and Maternity Hospital
- Billing for Children and Maternity Hospital
- Pharmacy
- Procurement
- Stores
- Support Processes

Introduction of Hospital

Located in the heart of Mumbai, Trust and government aided Hospital for Children and Women's pledges to extend its services to people regardless of their socio-economic status and is India's leading hospital for children. Believing strongly in the fact, that quality healthcare should not be restricted to only certain sections of society, the hospital offers state of the art services for neonatal and pediatric care & gynecological and obstetric conditions at affordable costs.

Organisation Chart of Hospital for Children & Maternity Hospital



Children Hospital

A teaching hospital of world-wide repute, this 300 bed hospital is propelled by a highly accomplished team of over 60 s specialists devoting themselves to the care of over 100,000 children on an outpatient basis, and almost 10,000 children as inpatients, annually.

Children were treated for a wide spectrum of rare and complex conditions, in an environment that does its best to keep their spirits high. Besides providing comprehensive clinical care, it also offers rehabilitation and family focused methods to promote a healthy environment for the child, thus striving to prevent childhood

diseases.

The Children hospital has the largest Neonatal Intensive Care Unit (NICU) in the West Zone of India. It also acts as a tertiary level referral center, is a nodal center for Clubfoot in Maharashtra and is the only center for Neonatal/ Dialysis in Western India in its effort to provide universal healthcare

Services of Children's Hospital

Specialty Services

- General Medicine
- General Surgery
- Emergency Department
- Neonatal Intensive Care Unit (NICU)
- The Intensive Care Unit (PICU)
- Immunization clinic

Super Specialty Services

- High risk OPD
- PediatricAnesthesia
- Pediatric Burns and Plastic surgery
- Pediatric Dermatology
- Pediatric Cardiology
- Pediatric Dentistry
- Pediatric Endocrinology
- Pediatric ENT
- Pediatric Haemato-Oncology and immunology
- Pediatric-liver clinic
- Pediatric and Peri-natal HIV clinic
- Pediatric Nephrology
- Pediatric Neurology
- Pediatric Neurosurgery

- Pediatric Ophthalmology
- PediatricOrthopedics
- Pediatric Tuberculosis Clinic
- Pediatric Urology
- Well Baby Clinic
- Clubfoot Clinic
- Epilepsy Clinic

Supportive Services

- Audiology & Speech therapy
- Blood bank
- Nutrition- Dietitian
- Physiotherapy & Occupational Therapy
- Pathology
- Radiology
- Social Service Department

Expansion in Education

As India's first specialized hospital has further expanded its reach in medicine by opening up world of knowledge to aspiring postgraduate professionals in the field and Nursing.

Maternity Hospital

The Maternity Hospital specializes in offering affordable obstetric and gynecological services to women across all level of society, catering to their changing needs through different stages of their lives. The hospital does not limit its services to its patients alone. It acts as a tertiary level referral centre as well as helps rehabilitate these women and their families by presenting them methods of improving the health and sanitation around their environment and thus ensuring a healthy life for their whole family. With a dedicated team of over 20 specialists doctors this 305-bed hospital, the hospital sees more than 10,000 inpatients and over 100,000 outpatients annually.

Services of Maternity Hospital

Specialty Services

- Obstetrics
- Gynecology
- Family Planning Clinic
- Well Women Clinic
- Dental Clinic
- Endocrinology
- Endoscopic Surgeries
- Fetal Medicine
- Gynecologic
- Oncology
- Gynecologic Surgery
- High Risk Pregnancy Clinic
- Immunology
- Nutrition and Exercise Clinic
- Peri-natal Counseling for High Risk Fetuses and Neonates
- Preconception and Premarital Counseling
- Reproductive and infertility clinic
- Tertiary Level Neonatal Intensive care Services
- Uro-gynaecology

Supportive Services

- Anesthesiology
- Blood bank
- Pathology Lab
- Physiotherapy
- Social Service Department
- Ultrasonography
- Radiology

Expansion in Education

As Maternity hospital has further expanded its reach in medicine by opening up our world of knowledge to aspiring postgraduate professionals in the Obstetric and Gynecological field and Nursing.

Rationale:

These are the government aidedtrust based hospital, which provides services to mother and child without socioeconomic status. Since this organization is functioning from 1929 departmental process are not much developed and the staff compliance levels are not much adherent to NABH standards.Even prior there was no

defined set of Operating Procedures for routine processes.The Hospital is undergoing Infrastructural and Technology renovation to meet the increase of disease burden, changing demands of the service delivery of Healthcare and Patient Management and environmental changes with changing times. There is high turnover of the staff which could lead in variation in operating routine processes and the service delivery of Healthcare and Patient Management from the standard protocol of Hospital.Thus both the factors (the advancement in infrastructure & technology and High turnover of staff) suggests for the need of SOP formulation, as the care approach and service delivered to each and every patient should be of same standard out beyond the fact of their socio-economic status.

Research Questions:

- How the processes of the six departments under study can be standardized with the available resources?
- Is there any duplication of work, any obsolete procedures are being followed?

Objectives:

- To develop the process mapping of current document process of department under study
- To identify the duplication, lacunae of work flow process and suggest ways to prevent the same.
- To develop Standard Operating Procedures (SOPS) in compliance to NABH standards

Methodology:

- Type of Study: Qualitative Study
- Sample Size: 40(process owners of study departments)
- Area of Work: OPD,IPD, Billing, Pharmacy, Procurement, Stores(general, Medical, kitchen).
- Sampling: Non Probability, Purposive

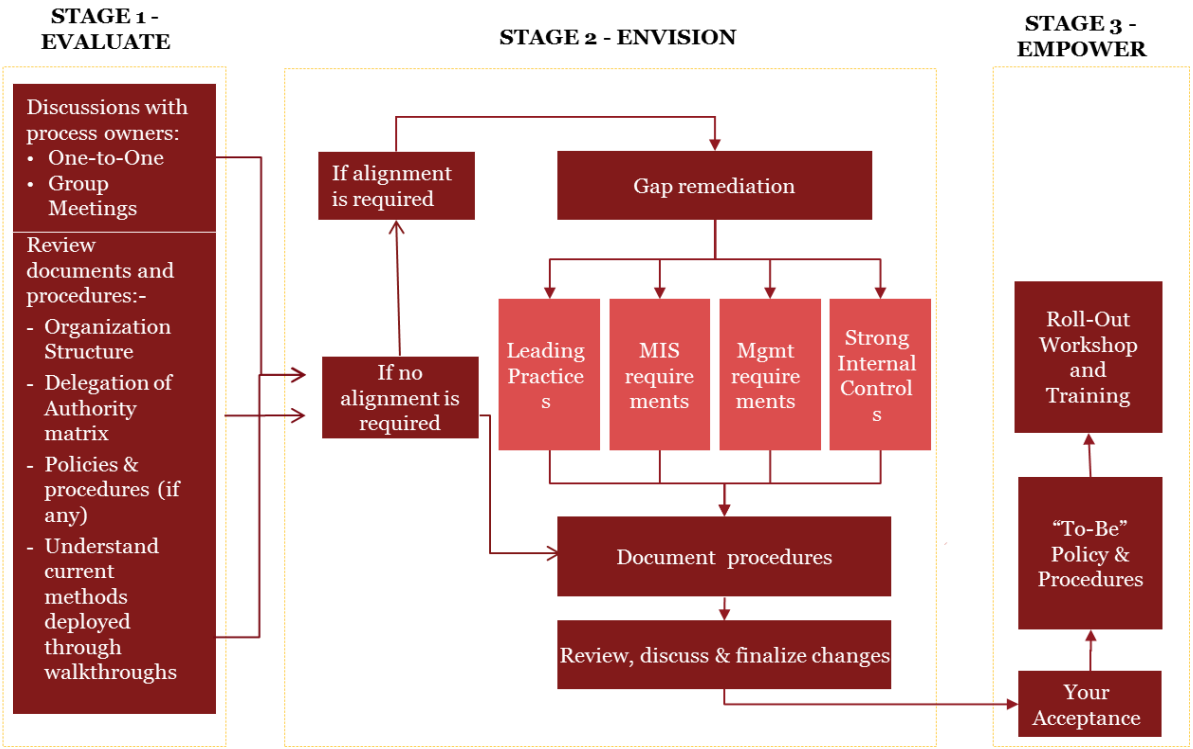
- Tools & Techniques:

➢ Process mapping through Interviewing of process owners, identifying the lacunae and duplication of Process.

➢ Up gradation of work flow process of departments with a realistic approach with the available resources

- Integration of department with the HMIS (care works software)
- Designing the standard workflow through a Flow chart for each process using Microsoft Visio
- Framing of SOPs
- A rough draft was prepared and discussed with the process owners of departments
- Finalization of SOPs in compliance to NABH standards
    - Interview Schedule
    - Checklist & Auditing

Walkthroughs to be done in a manner that most transaction types/ scenarios are covered.



Results and Discussions:

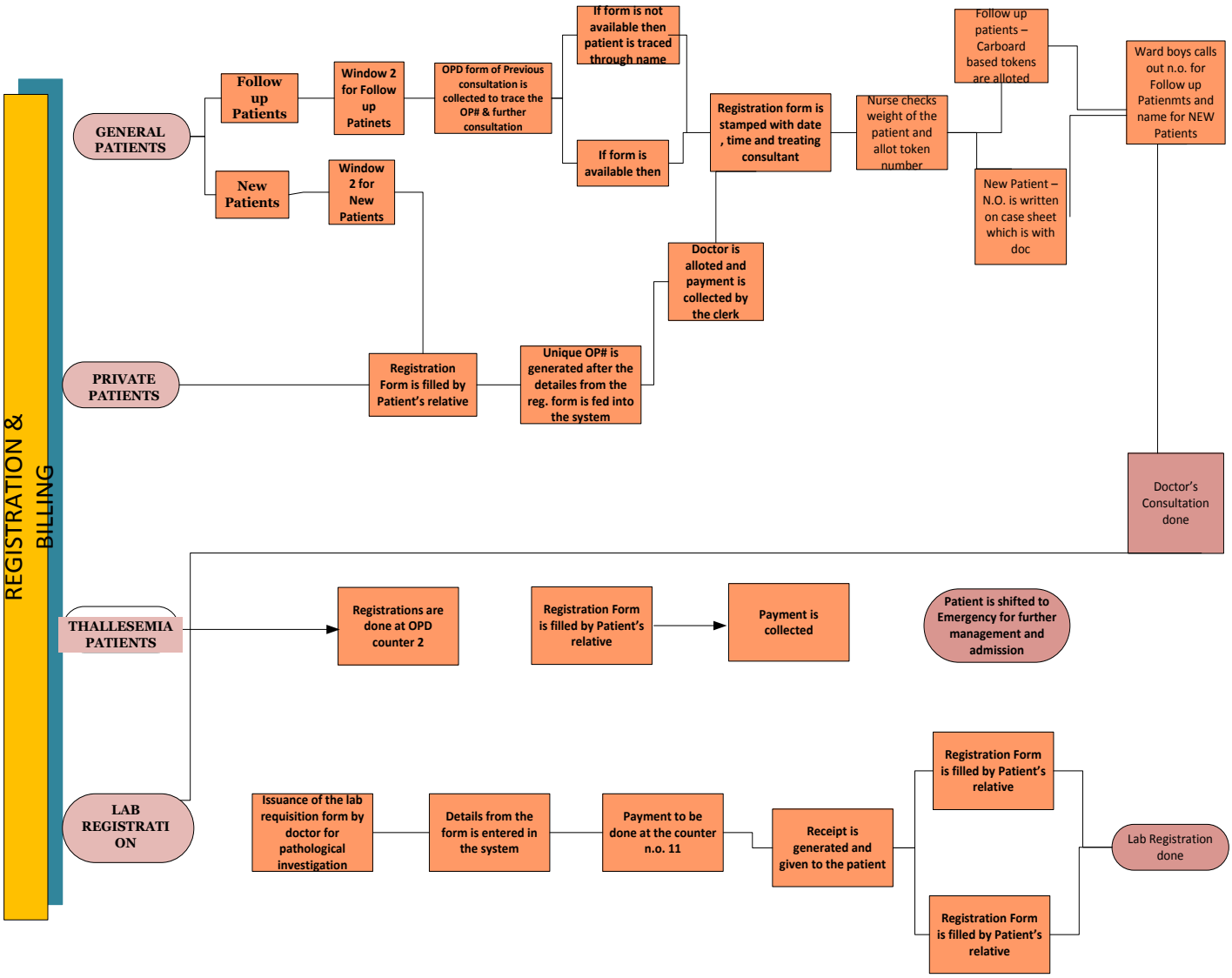
- As a result, at the end of the project, the study could successfully fulfill the objectives into:
    - Detailed Departmental Process documented after interviewing the authority staff and analyzed for Gap and duplication.
    - Suggestions and Recommendations for the Duplication and Gaps.

- Formulation of Standard Operating Procedure for Departments, inclusion of New Process and Training of the respective staffs

The Process Flow and the Gap Statement of each department under study are presented below in detail

Registration and Billing – OPD Children

a. Process Flow



b. Gap Analysis

OP Registration and Billing for Children							
Sr. No	Gap	Detailing of the Gap	Recommendation	NABH Clause applicable	Risk	Risk Classification	Category
1	Scope of work	Services provided by the	To display the same in	AAC 1: The	Mandatory as	M	Infrastructure

	- general displays	**hospital, not provided by the hospital are not displayed uniformly across the hospital.**	**English and Marathi language Services which are not available in the hospital should also be displayed (eg: CT, MRI, some complex surgeries, etc) not available with the hospital, so that patients are informed**	**organization defines and displays the healthcare services that it provides.**	**per NABH guidelines. Patients won't know which services are not available with the hospital**		
2	**Scope of work -**	**Patients of what age are accepted and attended in the hospital are not displayed uniformly across the hospital**	**To display patients up to what age are considered to be admitted / attended in OPD EG: To Display Patients from zero days to eighteen years are accepted and admitted in the hospital for availing medical treatment**	**AAC 1: The organization defines and displays the healthcare services that it provides.**	**Requirement as per NABH guidelines. Patients won't know which services are not available with the hospital**	**M**	**Infrastructure**
3	**Name plate at registration window**	**Though there are two separate windows, display plate at registration window reads as "2" for both new patients and follow up patients,**	**For new patient registration window it could read as "2A" and for follow up could read as "2B"**		**It could lead to confusion while making a queue for registrations. New plates will lead to easy identification**	**L**	**Infrastructure**
4	**Mandatory registration form for new patients**	**Registration forms are given to new patients only when the queue of new patients increases, other wise clerk asks the details verbally and enters in system.**	**Registration forms should be given to all patients as a hospital policy. The patient should give the required details and sign the form, so that it is kept as a record with hospital**		**Patients/relative details should be available to track them Patients are liable to give correct and true medical history and identity**	**M**	**Operational**
5	**Patient registration card**	**Currently, patients are given OP registration form, which has their details generated from the system**	**The hospital could consider giving "Patient Registration Card" in addition to the registration form, which will act as unique identification. The patient can get this card during each visit**		**Registration papers which are given to patients may get torn or wear out over time. Patient registration card with lamination will have longer life and easy to**	**M**	**Operational**

					maintain		
6	General consent is to be taken when patient enters organization		General consent to be taken from patients at time of registration. This could be in particular only for OPD consultation. Detailed and other consents can be taken at time of IP admission. Required consent forms should be available with the department	PRE 4b: General consent for treatment is obtained when the patient enters the organization.	Requirement as per NABH guidelines. Patients are liable to accept the rules/policies of hospital and comply with those while they are admitted in the hospital	H	Operational
7	Private Paper Register for private patients	Hospital maintains two registers for private patients which has details like a. Patients Name, Age, Sex, Time b. Doctor's name c. OPD No. and Type (New or Old or Renewal) d. Receipt No Manual entries are required to be done in two registers which takes time	Since the required data is/should be available through system through MIS, the hospital need not maintain registers	NA	Duplication of work. Time of clerks/cashiers can be saved as this information is already available through the system	H	Operational
8	Token numbers for new and follow up patients	Token numbers cards are given only to follow patients. For new patients, separate token numbers are mentioned on the registration paper. The papers are kept in doctor room for new patients and ward boy calls out patient name. However for follow up patients, token numbers are called out	Token number cards could be given for new patients also. The hospital can continue the system of entering the details in the register, through a separate serial number	NA	Standardization could be implemented for new and follow up patients	L	Operational
9	Blood samples collection transport to room 18	Patients are asked to carry the blood samples to room 18 in separate building by themselves. As informed, after shifting to new premises, lab would still be in adjacent	Hospitals staff to carry the samples in safe and secure manner (this is already being followed in Maternity Hospital)	AAC 6e: Documented procedures guide ordering of tests, collection, identification, handling, safe	Requirement as per NAH guidelines. Chances of blood samples getting damaged while transfer as	M	Operational

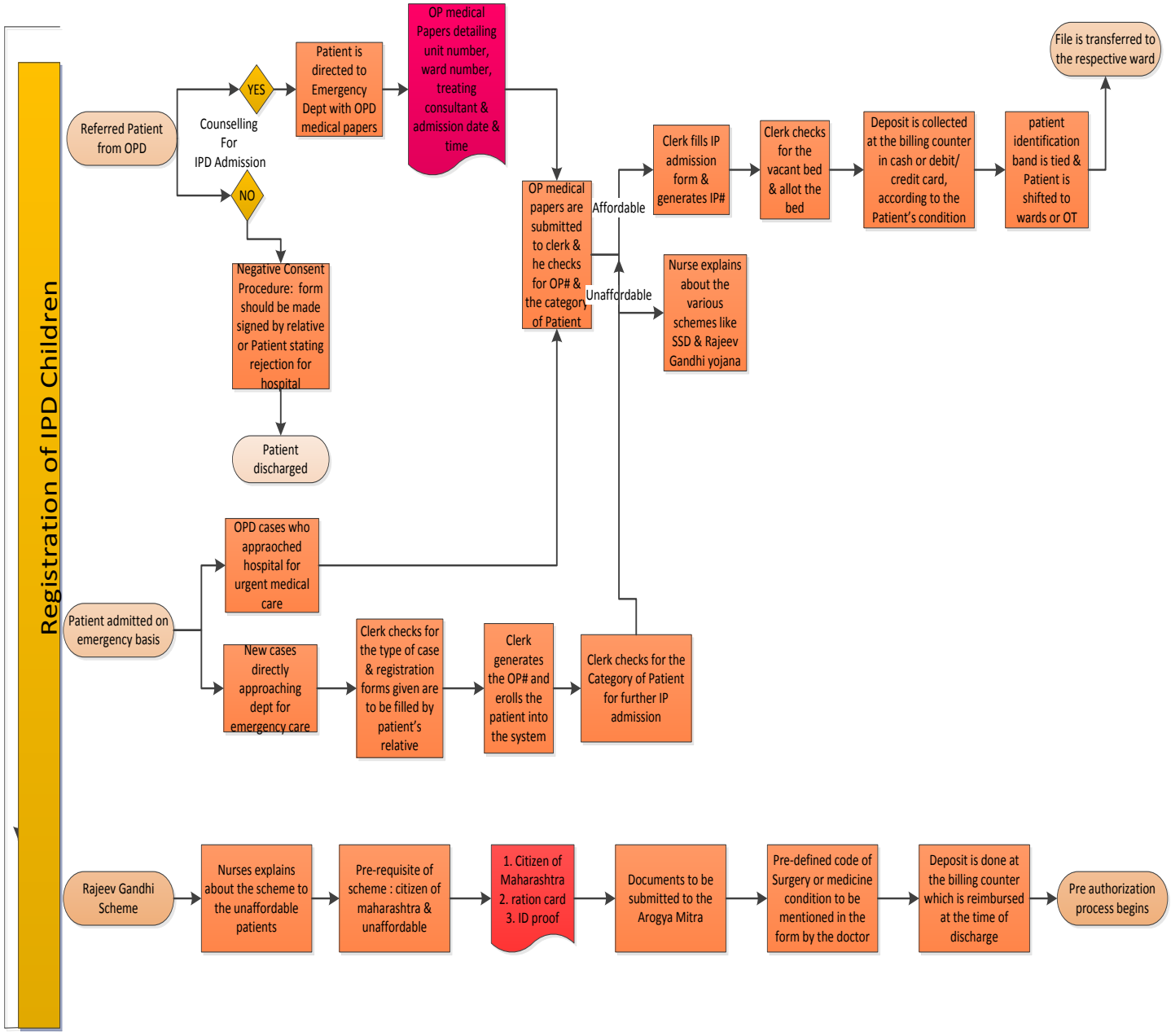
		building, and patients would require to carry the samples by themselves		**ransportation, processing and disposal of specimens.**	**patients may/maynot carry in safe and secure manner.**		
10	**Centralized lab processing**	**Blood sample collection and processing is done at two separate departments.**	**Ideally all the tests should be performed at one department. There can be blood sample collection area in the OPD**		**Duplication of resources Resources deployed at room 16 could be utilized better in central lab department**	**M**	**Operational**
11	**Lab interface of equipment and report writing**	**Most of the reports results are written manually by the technician on pre defined stationary format at the OPD lab (room 16) and also in some investigations at main laboratory. There are increased chances of typing errors which could lead to misrepresentation of lab results from patient to patient**	**Ideally the equipment should be interfaced and reports should be generated automatically to reduce chances of error. All the reports should be labelled with patient stickers so that patient identifcation is easy**	**AAC 6h: Results are reported in a standardised manner.**	**Increased chances of typing errors which could lead to misrepresentatio n of lab results from patient to patient**	**H**	**Operational**
12	**Registration and admission of Thalessemia patients**	**Thalassemia patients are admitted as IPD patients from the OPD registration counter 2 Thalassemia patients are sent to casualty department immediately post filling of registration form. Applicable fees are also paid at OP registration counter. Patient are directed to emergency and IP admission department after recommendation by the doctor.**	**If all IP admissions are done through the emergency and IP department, then can Thalassemia patients too be admitted directly from emergency and IP department, and the patients may not go to the OP registration department**		**Patients have to go to OP and then to emergency department. Keeping it at one location could save time of patients and lead to easy management**	**L**	**Operational**

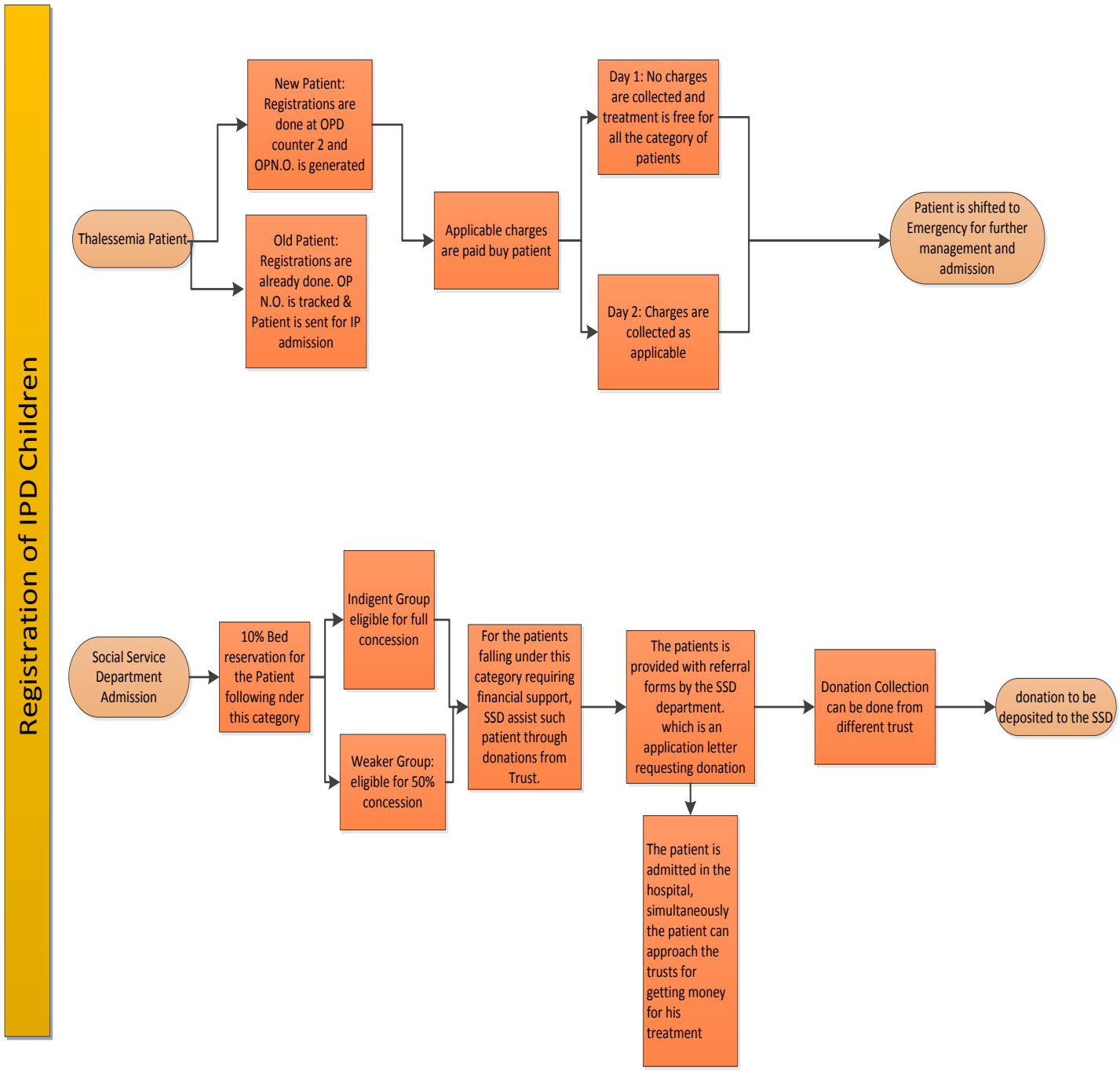
13	Lab report dispatch from OP registration counter	Lab investigation reprots are sent to registration department from room no 16 Inward/outward registers are required to be maintained.	Reports to be dispatched from room no 16 directly, instead of sending those to OP registration counter		Additional work to OPD staff. Extra register inward/outside are required to be maintained.	L	Operational
MIS / NABH							
14	OPD waiting time / TAT	The time patient has to spend in the hospital for meeting the patient from time of registration is not being monitored	AAC 12: Patient care is continuous and multidisciplinary in nature. G. The organisation ensures continuity of care while adhering to defined timelines and informs the caregiver and/or the patient/family whenever there is a change in schedule. CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement. d. Monitoring includes patient satisfaction which also incorporates waiting time for services.	AAC 12: Patient care is continuous and multidisciplinary in nature. CQI 4: The organisation identifies key indicators to monitor the managerial		H	Operational
15	OPD satisfacation index	Not being monitored	CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement. d. Monitoring includes patient satisfaction which also incorporates waiting time for services.	CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement.		M	Operational

16	Patient Rights and Education	Patient rights and education is displayed in the IP area opp IP billing counter However the display are in small fonts and the one done in Marathi is not readable. Also there is no display of PRE in OP area	As a patient, rights and responsibilities should be displayed at the OPD and IP registration counter in a language that the patient can understand PRE 1. The organisation protects patient and family rights and informs them about their responsibilities during care. a. Patient and family rights and responsibilities are documented and displayed.	PRE 1. The organisation protects patient and family rights and informs them about their responsibilities during care.		M	Infrastructure
17	MIS to be generated and kept as a record with the department/management	Number of new and follow patients registered	System Generated				
		Number of patients registered specialty wise	System Generated				
		Number of patients registered doctor wise	System Generated				
		Number of patients registered for private OP consultation	System Generated				
		Number of patients converted from general category to CRP	System Generated				
		Number of patients coming for OP consultation is mentioned in register with token number	Register				
		Number of new patients and follow up patients	Register				
		Cross verification with registration counter and emergency department for number of patients registered at their counter and those mentioned in OP register	Register				
		Doctor wise revenue report	System Generated				

IPD CHILDREN REGISTRATION AND BILLING

a. Process Flow


Registration of IPD Children
Referred Patient from OPD
Counselling For IPD Admission
YES
NO
Patient is directed to Emergency Dept with OPD medical papers
OP medical Papers detailing unit number, ward number, treating consultant & admission date & time
Negative Consent Procedure: form should be made signed by relative or Patient stating rejection for hospital
Patient discharged
OP medical papers are submitted to clerk & he checks for OP# & the category of Patient
Affordable
Unaffordable
Clerk fills IP admission form & generates IP#
Clerk checks for the vacant bed & allot the bed
Deposit is collected at the billing counter in cash or debit/ credit card, according to the Patient's condition
patient identification band is tied & Patient is shifted to wards or OT
File is transferred to the respective ward
Nurse explains about the various schemes like SSD & Rajeev Gandhi yojana
Patient admitted on emergency basis
OPD cases who appraoched hospital for urgent medical care
New cases directly approaching dept for emergency care
Clerk checks for the type of case & registration forms given are to be filled by patient's relative
Clerk generates the OP# and erolls the patient into the system
Clerk checks for the Category of Patient for further IP admission
Rajeev Gandhi Scheme
Nurses explains about the scheme to the unaffordable patients
Pre-requisite of scheme : citizen of maharashtra & unaffordable
1. Citizen of Maharashtra
2. ration card
3. ID proof
Documents to be submitted to the Arogya Mitra
Pre-defined code of Surgery or medicine condition to be mentioned in the form by the doctor
Deposit is done at the billing counter which is reimbursed at the time of discharge
Pre authorization process begins


Registration of IPD Children
Thalessemia Patient
New Patient: Registrations are done at OPD counter 2 and OPN.O. is generated
Old Patient: Registrations are already done. OP N.O. is tracked & Patient is sent for IP admission
Applicable charges are paid buy patient
Day 1: No charges are collected and treatment is free for all the category of patients
Day 2: Charges are collected as applicable
Patient is shifted to Emergency for further management and admission
Social Service Department Admission
10% Bed reservation for the Patient following nder this category
Indigent Group eligible for full concession
Weaker Group: eligible for 50% concession
For the patients falling under this category requiring financial support, SSD assist such patient through donations from Trust.
The patients is provided with referral forms by the SSD department. which is an application letter requesting donation
The patient is admitted in the hospital, simultaneously the patient can approach the trusts for getting money for his treatment
Donation Collection can be done from different trust
donation to be deposited to the SSD

b.Gap Analysis

Emergency & IP Admission							
Sr No	**Gap**	**Detailing of the Gap**	**Recommendation**	**NABH Clause applicable**	**Risk**	**Risk Classification**	**Category**
1	**Display of name of department**	**Not dispalyed as emergency and IP admission in bi lingual language**	**To be displayed in English and Marathi**		**Mandatory as per NABH guidelines. Patients wont know which services are not available with the hospital**	**L**	**Infrastructure**
2	**Equipments in department**	**One (1) casaulty bed and one (1) patient warmer, Defibrillator are kept in ward.**	**Looking at the workload, the current set of equipment and infrastructure is inadequate. Additions in number of beds and other items to be done**	**COP 4: The organisation plans for handling community emergencies, epidemics and other disasters.**	**Department is not equipped adequately to cater to the work load. In case of mass casualty/emergency, there could be problem managing patients**	**M**	**Infrastructure**
3	**Trasfer of patients from emergency department to other departments in the hospital**	**Patients are transferred by hospital staff and parents. However transfer is not done in safe and secure manner. Strecthers do not have side railing for patient safey. Wheelchairs and strecthers should do not have adequate safety maeasures.**	**Wheelchairs and strechers should have safety straps and belts that should be tied to the patient for safe and secure transfer. If possible strechers of small length specially designed for pediatric patients could be used**	**AAC 3: There is an appropriate mechanism for transfer (in and out) or referral of patients.**	**Could lead to patient fall, accident if proper care/measure not taken**	**M**	**Infrastructure**

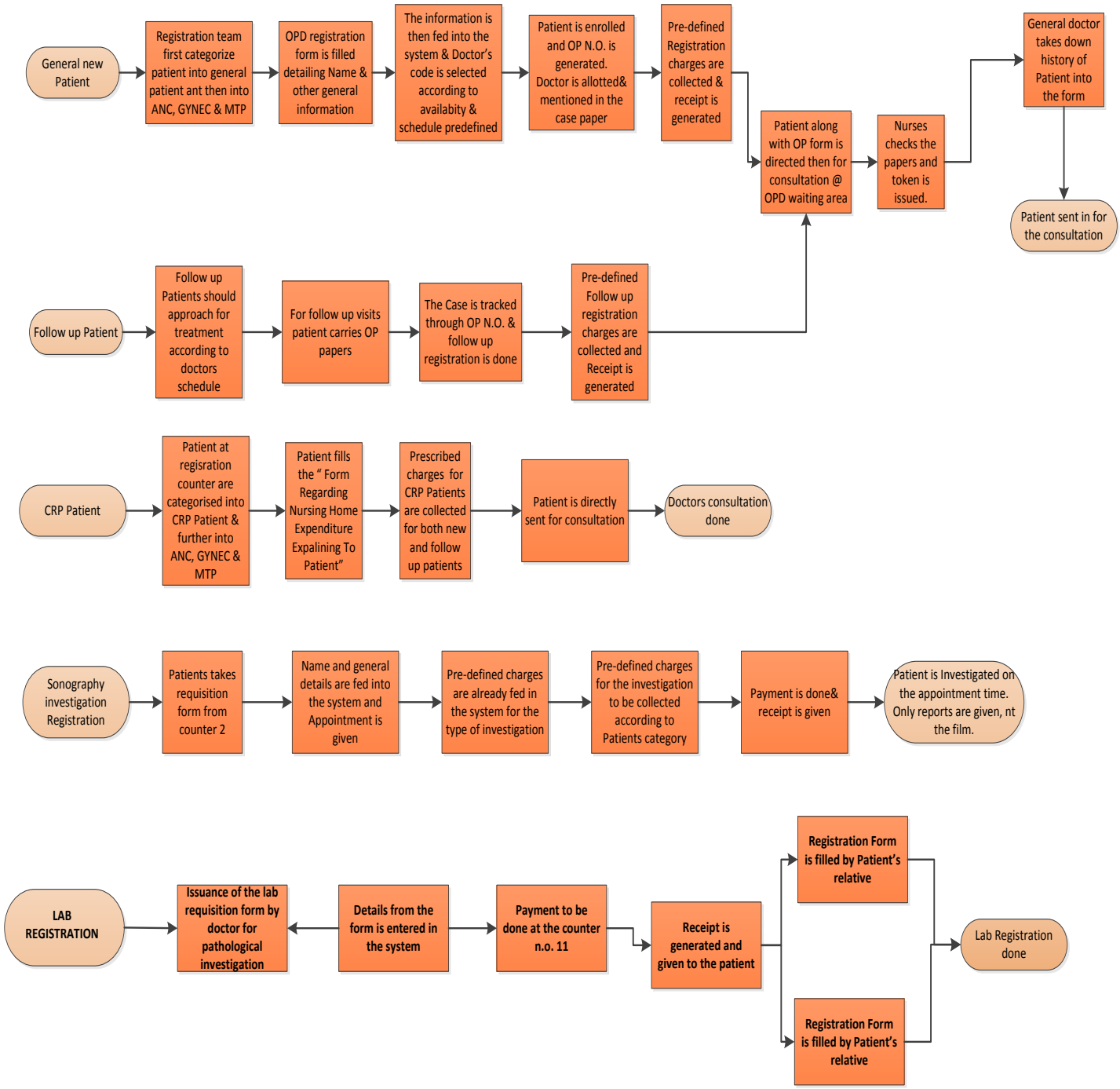
4	Bed availability and allocation of beds	Number of beds available in each ward are not available through the system. Even if available, the staff is not aware as to how to check the same.	Should be made available to the staff, so that they are aware of vacant and occupied beds. Occupancy rates and other indicators to be monitored accordingly	CQI 4c: Monitoring includes utilisation of space, manpower and equipment.	Utilization statistics not available with the department Staff to be aware of number of beds occupied and available ward wise	L	Operational
5	Stickers for patients being admitted in the hospital	It was observed that all the sheets of the patient file, and related documents do not have the stickers and at many places the detailing of the patient detail is done manually.	To eliminate errors, labelling of each new paper should be done through stickers only		Some sheets can go undocumented, which could be misused To bring consistency across, all sheets to be labelled with stickers	L	Operational
6	Patient band	Patient band given to the patient has details of patient, bed number, doctor name and other related information written by the clerk/nurse in ballpen ink	Instead, sticker which has all the details could be used		Ink on the patient band if wiped out, can lead to incorrect patient identification	L	Operational
7	Initial assessment form	Nursing initial assessment form are available in some cases, however doctors initial assessment forms were not available	To be made available for both doctors and nurses initial assessment Nursing assessment and doctor assessment to be done at time of admission	AAC 4: Patients cared for by the organisation undergo an established initial assessment.	Requirement of NABH guidelines Initial assesssment not being done by nurses and doctors, could lead to extra work in ward patient management.	H	Operational

8	Pain management	Initial assessment form do no have smiley signs for pain management	To be made part of the initial assessment form	COP 8 : Documented policies and procedures guide appropriate pain management.	Requirement of NABH guidelines Pain management can assist doctors/nursing staff to understand the pain that the patient is suffering from	H	Operational
9	Consent forms	All consent forms not available in the department (like those in the maternity hospital)	To be made available	PRE 4: A documented procedure for obtaining patient and/or family's consent exists for informed decision making about their care.	Requirement as per NABH guidelines. Patients are liable to accept the rules/policies of hospital and comply with those while they are admitted in the hospital	M	Operational
10	Some processes to be documented like	Transfer of patient to other hospital - when, why, how Patient brought from other hospital Internal transfers - if applicable	Made part of the SOP document			M	Operational
MIS / NABH							
11	Time taken for initial assessment and details of initial assessment		CQI 3. The organisation identifies key indicators to monitor the clinical structures, processes and outcomes, which are used as tools for continual improvement. A. Monitoring includes appropriate patient assessment.	CQI 3. The organisation identifies key indicators to monitor the clinical structures, processes and outcomes, which are used as tools for continual improvement. AAC 4. Patients cared for by the organisation		H	

			AAC 4. Patients cared for by the organisation undergo an established initial assessment. **a. The organisation defines and documents the content of the initial assessment for the out–patients, in-patients and emergency patients.**	**undergo an established initial assessment.**			
12	**MIS to be generated and kept as a record with the department/management**	**Length of Stay**	**System Generated**				
		Bed Occupancy	**System Generated**				
		Number of admissions in general category	**System Generated**				
		Number of admissions in private category	**System Generated**				
		Number of admissions in Indigent Patient category	**System Generated**				
		Number of admissions in Weaker Patient category	**System Generated**				
		Number of admissions in RGJAY category	**System Generated**				

OPD Registration and Billing Maternity

a. Process Flow



b.Gap Analysis

OP Registration and Billing Maternity						
Sr No	**Gap**	**Detailing of the Gap**	**Recommendation**	**NABH Clause applicable**	**Risk**	**Category**

1	Scope of work - general displays	Services provided by the hospital, not provided by the hospital are not displayed uniformly across the hospital.	To display the same in English and Marathi language Services which are not available in the hospital should also be displayed (eg: CT, MRI, some complex surgeries, etc) not available with the hospital, so that patients are informed	AAC 1: The organisation defines and displays the healthcare services that it provides.	M	Infrastructure
2	Scope of work -	OPD of Nowrosjee Maternity Hospital provides various medical services "Only for women patients" - Gyanec, Delivery, Infertility and MTP	"Only women patient admitted in the hospital should be displayed at OP and IP registration area	AAC 1: The organisation defines and displays the healthcare services that it provides.	M	Infrastructure
	Mandatory registration form for new patients	Registration forms are given to new patients only when the queue of new patients increases, other wise clerk asks the details verbally and enters in system.	Registration forms should be given to all patients as a hospital policy. The patient should give the required details and sign the form, so that it is kept as a record with hospital		M	Operational
3	Token numbers	The hospital does not practice system of issuing token numbers to OPD patients. Patients sit on chairs on first cum first serve basis, and as and when, patients go in for OPD consultation, each patient moves to next chair	Token number system could be implemented. This will reduce efforts on then women to changing chairs. May be something which is followed in Jerbai or token announcement / display system could be considered		L	Operational
4	Centralized lab processing	Blood sample collection and processing is done at two separate departments.	Ideally all the tests should be performed at one department. There can be blood sample collection area in the OPD		M	Operational
5	Lab interface of equipment and report writing	Most of the reports results are written manually by the technician on pre defined stationary format. There are increased chances of typing errors which could lead to	Ideally the equipment should be interfaced and reports should be generated automatically to reduce chances of error. All the reports should be labelled with patient	AAC 6h: Results are reported in a standardised manner.	H	Operational

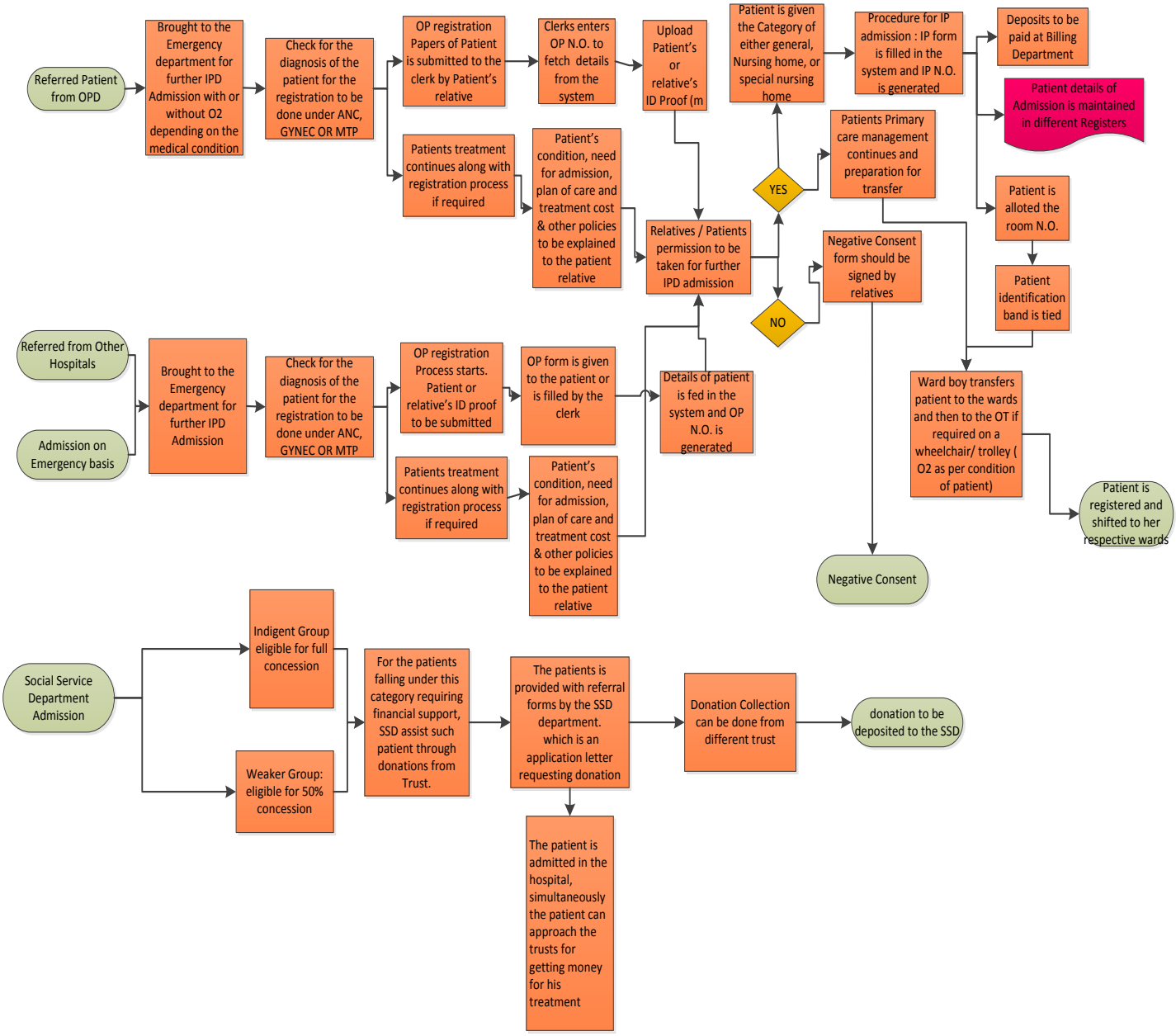
		misrepresentation of lab results from patient to patient	stickers so that patient identifcation is easy			
6	Change in OP number of patients	OP number for maternity patients changes after delivery, for gynaec patients it changes after 3 years and for MTP patients after each case	Ideally it should remain same. If the hospital wants to give new OP number as a policy, then a unique number which will be separate than the OP number should be created. Unique number required as per NABH guidelines		H	Operational
MIS / NABH						
7	OPD waiting time / TAT	The time patient has to spend in the hospital for meeting the patient from time of registration is not being monitored	AAC 12: Patient care is continuous and multidisciplinary in nature. G. The organisation ensures continuity of care while adhering to defined timelines and informs the caregiver and/or the patient/family whenever there is a change in schedule. CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement. d. Monitoring includes patient satisfaction which also incorporates waiting time for services.	AAC 12: Patient care is continuous and multidisciplinary in nature. CQI 4: The organisation identifies key indicators to monitor the managerial	H	
8	OPD satisfacation index	Not being monitored	CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement. d. Monitoring includes	CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for	M	

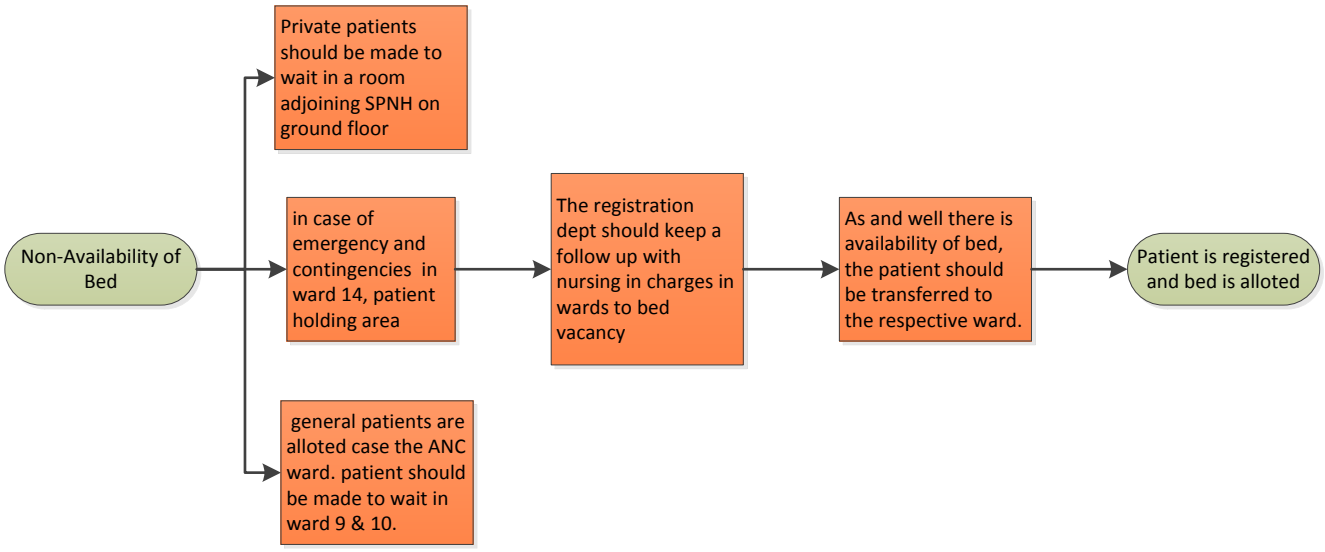
			patient satisfaction which also incorporates waiting time for services.	continual improvement.		
9	Patient Rights and Education	Patient rights and education is displayed in the IP area opp IP billing counter However the display are in small fonts and the one done in Marathi is not readable. Also there is no display of PRE in OP area	As a patient, rights and responsibilities should be displayed at the OPD and IP registration counter in a language that the patient can understand PRE 1. The organisation protects patient and family rights and informs them about their responsibilities during care. a. Patient and family rights and responsibilities are documented and displayed.	PRE 1. The organisation protects patient and family rights and informs them about their responsibilities during care.	M	Infrastructure
10	MIS to be generated and kept as a record with the department/management	Number of new and follow patients registered	System Generated			
		Number of patients registered specialty wise	System Generated			
		Number of patients registered doctor wise	System Generated			
		Number of patients registered for private OP consultation	System Generated			
		Number of patients converted from general category to CRP	System Generated			
		Number of patients coming for OP consultation is mentioned in register with token number	Register			
		Number of new patients and follow up patients	Register			
		Cross verification with registration counter and emergency department for number of patients registered at their counter and those mentioned in OP register	Regsiter			

		Doctor wise revenue report	**System Generated**			

IPD Registration and Billing

a. Process Flow


Referred Patient from OPD
Brought to the Emergency department for further IPD Admission with or without O2 depending on the medical condition
Check for the diagnosis of the patient for the registration to be done under ANC, GYNEC OR MTP
OP registration Papers of Patient is submitted to the clerk by Patient's relative
Clerks enters OP N.O. to fetch details from the system
Upload Patient's or relative's ID Proof (m
Patient is given the Category of either general, Nursing home, or special nursing home
Procedure for IP admission : IP form is filled in the system and IP N.O. is generated
Deposits to be paid at Billing Department
Patient details of Admission is maintained in different Registers
Patients treatment continues along with registration process if required
Patient's condition, need for admission, plan of care and treatment cost & other policies to be explained to the patient relative
Relatives / Patients permission to be taken for further IPD admission
YES
NO
Patients Primary care management continues and preparation for transfer
Negative Consent form should be signed by relatives
Patient is alloted the room N.O.
Patient identification band is tied
Referred from Other Hospitals
Admission on Emergency basis
Brought to the Emergency department for further IPD Admission
Check for the diagnosis of the patient for the registration to be done under ANC, GYNEC OR MTP
OP registration Process starts. Patient or relative's ID proof to be submitted
OP form is given to the patient or is filled by the clerk
Details of patient is fed in the system and OP N.O. is generated
Patients treatment continues along with registration process if required
Patient's condition, need for admission, plan of care and treatment cost & other policies to be explained to the patient relative
Ward boy transfers patient to the wards and then to the OT if required on a wheelchair/ trolley (O2 as per condition of patient)
Patient is registered and shifted to her respective wards
Negative Consent
Social Service Department Admission
Indigent Group eligible for full concession
Weaker Group: eligible for 50% concession
For the patients falling under this category requiring financial support, SSD assist such patient through donations from Trust.
The patients is provided with referral forms by the SSD department. which is an application letter requesting donation
Donation Collection can be done from different trust
donation to be deposited to the SSD
The patient is admitted in the hospital, simultaneously the patient can approach the trusts for getting money for his treatment



b.Gap Analysis

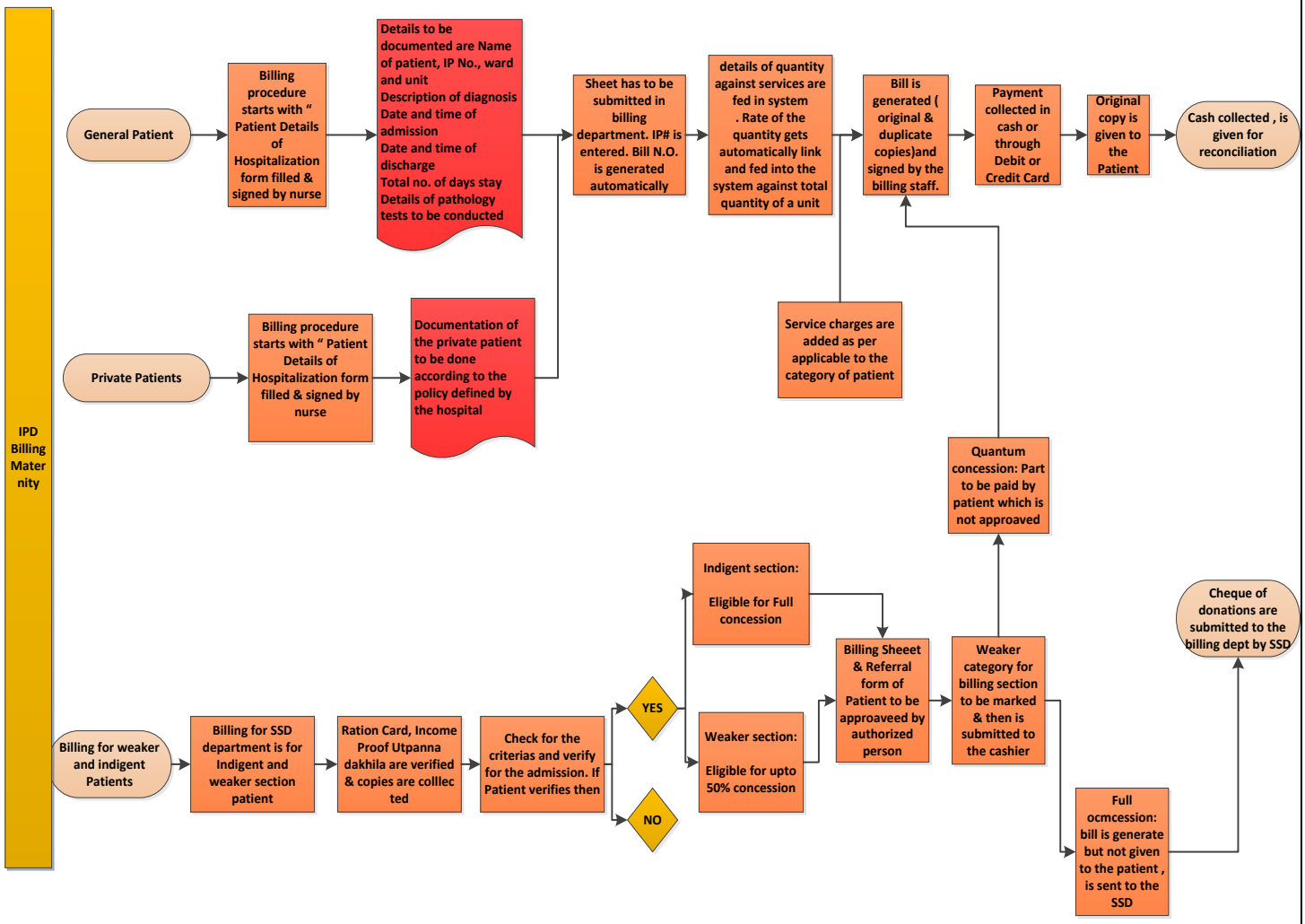
Emergency & IP Admission						
1	Display of name of department	Not dispalyed as emergency and IP admission in bi lingual language	To be displayed in English and Marathi		L	Infrastructure
2	Trasfer of patients from emergency department to other departments in the hospital	Patients are transferred by hospital staff. However transfer is not done in safe and secure manner. Strecthers do not have side railing for patient safey. Wheelchairs and strecthers should do not have adequate safety maeasures.	Wheelchairs and strechers should have safety straps and belts that should be tied to the patient for safe and secure transfer. Process for transfer of patients to procedure room, Operation theatre should be defined and followed, in terms who will take the patient, how will the shifting be done, etc	AAC 3: There is an appropriate mechanism for transfer (in and out) or referral of patients.	M	Infrastructure
3	Bed availability and allocation of beds	Number of beds available in each ward are not available through the system. Even if available, the staff is not aware as to how to check the same.	Should be made available to the staff, so that they are aware of vacant and occupied beds. Occupancy rates and other indicators to be monitored accordingly	CQI 4c: Monitoring includes utilisation of space, manpower and equipment.	L	Operational

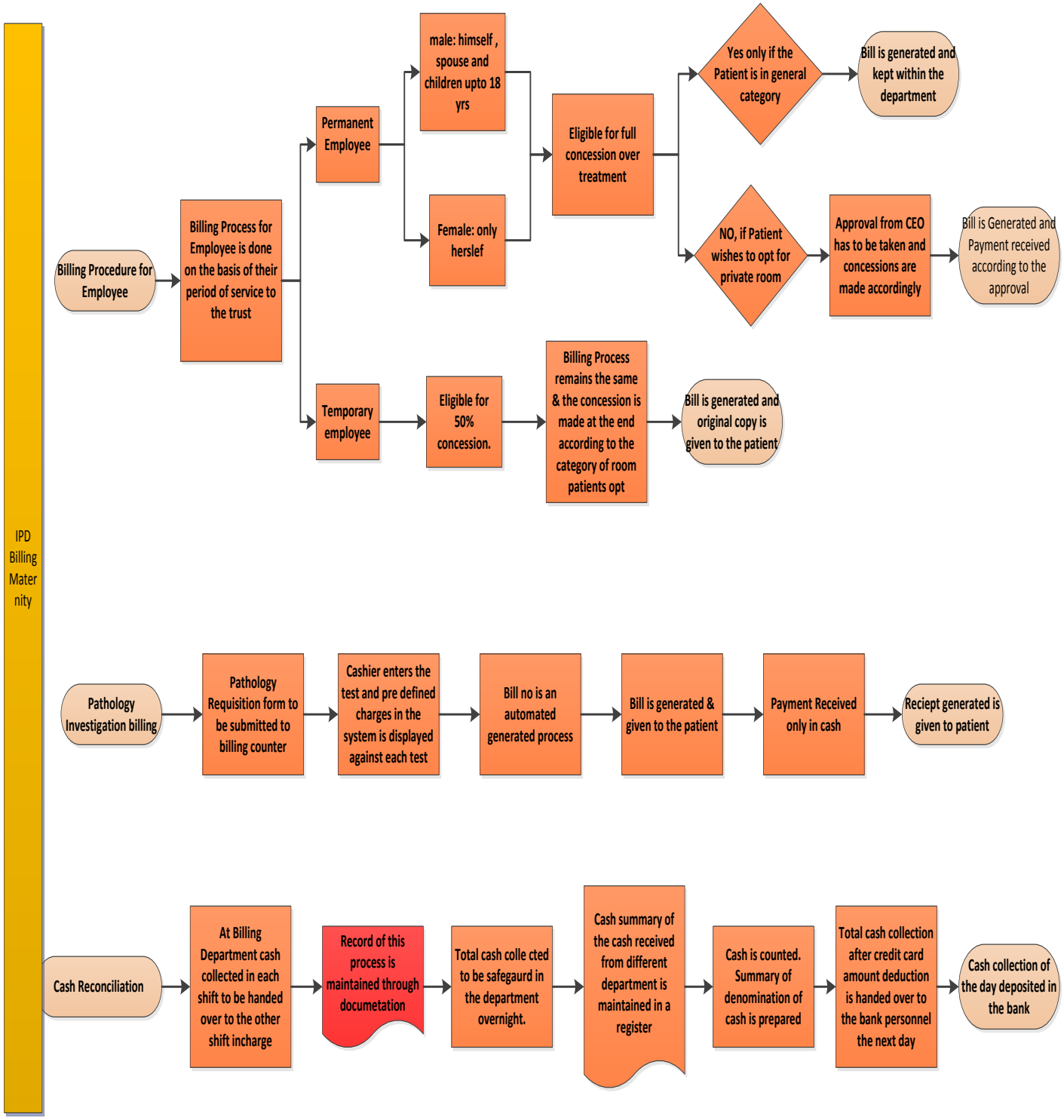
4	Patient relatives id proofs and other details	Patient relatives ID proof is asked for at time of admission	Can keep a protocol of collecting patient relative ID proof only for MTP patients, why is it required for all the patients ??		M	Operational
5	Patient band	Same color code band for obstectric and gyneac patient	Different color coded bands could be used to identify patients - obs could be pink color and gyneac could be green color		L	Operational
6	Initial assessment form	Nursing initial assessment form are available in some cases, however doctors initial assessment forms were not available	To be made available for both doctors and nurses initial assessment Nursing assessment and doctor assessment to be done at time of admission	AAC 4: Patients cared for by the organisation undergo an established initial assessment.	H	Operational
7	Pain management	Initial assessment form do no have smiley signs for pain management	To be made part of the initial assessment form	COP 8 : Documented policies and procedures guide appropriate pain management.	H	Operational
8	Patient details in all the forms	It was observed that all the sheets of the patient file, and related documents do not have the stickers and at many places the detailing of the patient detail is done manually.	To eliminate errors, labelling of each new paper should be done through stickers only		L	
9	Some processes to be documented like	Transfer of patient to other hospital - when, why, how Patient brought from other hospital Internal transfers - if applicable	Made part of the SOP document		L	
MIS / NABH						

	Time taken for initial assessment and details of initial assessment		**CQI 3. The organisation identifies key indicators to monitor the clinical structures, processes and outcomes, which are used as tools for continual improvement.** **A. Monitoring includes appropriate patient assessment.** **AAC 4. Patients cared for by the organisation undergo an established initial assessment.** **a. The organisation defines and documents the content of the initial assessment for the out–patients, in-patients and emergency patients.**	**CQI 3. The organisation identifies key indicators to monitor the clinical structures, processes and outcomes, which are used as tools for continual improvement.** **AAC 4. Patients cared for by the organisation undergo an established initial assessment.**	**H**	
	MIS to be generated and kept as a record with the department/management	**Length of Stay**	**System Generated**			
		Bed Occupancy	**System Generated**			
		Number of admissions in general category	**System Generated**			
		Number of admissions in private category	**System Generated**			
		Number of admissions in Indigent Patient category	**System Generated**			
		Number of admissions in Weaker Patient category	**System Generated**			

IPD Billing Maternity

a. Process Flow




IPD Billing Maternity
Billing Procedure for Employee
Billing Process for Employee is done on the basis of their period of service to the trust
Permanent Employee
male: himself , spouse and children upto 18 yrs
Female: only herslef
Temporary employee
Eligible for 50% concession.
Billing Process remains the same & the concession is made at the end according to the category of room patients opt
Bill is generated and original copy is given to the patient
Eligible for full concession over treatment
Yes only if the Patient is in general category
Bill is generated and kept within the department
NO, if Patient wishes to opt for private room
Approval from CEO has to be taken and concessions are made accordingly
Bill is Generated and Payment received according to the approval
Pathology Investigation billing
Pathology Requisition form to be submitted to billing counter
Cashier enters the test and pre defined charges in the system is displayed against each test
Bill no is an automated generated process
Bill is generated & given to the patient
Payment Received only in cash
Reciept generated is given to patient
Cash Reconciliation
At Billing Department cash collected in each shift to be handed over to the other shift incharge
Record of this process is maintained through documetation
Total cash colle cted to be safegaurd in the department overnight.
Cash summary of the cash received from different department is maintained in a register
Cash is counted. Summary of denomination of cash is prepared
Total cash collection after credit card amount deduction is handed over to the bank personnel the next day
Cash collection of the day deposited in the bank

b.Gap Analysis

IPD Billing Maternity						
1	Consolidated bill to patients	ERP system has in built provision for creation of billing as Interim, Draft, Final and Consolidated. However department gives only Final bill copy to patient. Payment receipts for pahtology investigations are separate and are not counted in final bill preparation, since the patient has already paid for this	Consolidated bill copy could be given to the patients (Though patient has paid separately for investigations as and when required, however, as separte line items, a consolidated bill could be generated and given to the patients) This would be more required from any insurance company perspective		L	Operational
2	Length of stay calculation for patients	Number of days patient admitted in the hospital is entered manually by the cashier while preparing the bill, which increases the chances of error. The system does not capture the length of stay of the patient after imputing the admission date and discharge date	Ideally system should auto calculate from admission date to discharge date and calculate the charges accordingly	CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement.	H	Operational / Revenue
3	Interim Bill	Interim bills are not generated and given to the patients. The hospital settles the complete bill at time of discharge	For patients who are going to stay for more than 2-3 weeks, interim bills could be given to the patients. The hospital can implement this for private patient and then if this works they could consider this for general patients too		M	Operational / Revenue
4	Provision of entering free slip number for concessions granted in system not use	ERP system has in built provision of entering serial number/Free Slip No of the SSD form at time of granting concessions. Since SSD documents are not numbered, the billing department is not able to enter the free slip number/SSD form number	Free Slip document number in system should be entered to evidence that all concessions are supported through proper approved SSD documents. Also there will be tracking of forms at both the department		M	Language

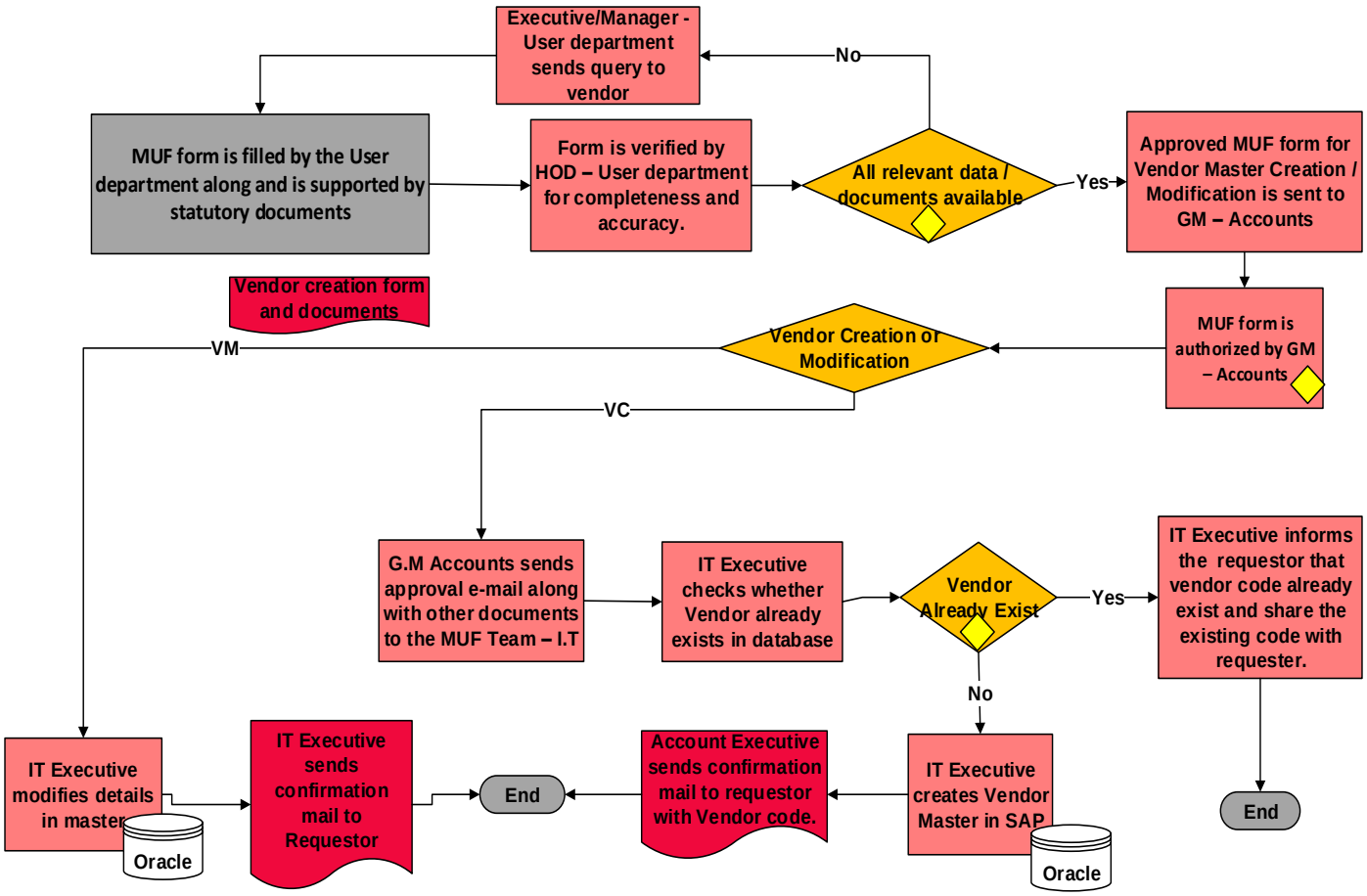
		in the system. Currently any number is entered to bypass this in built provision.				
5	**Authority name/code for concessions**	**Currently, name of person approving concession in SSD form does not match to name of the person in ERP system for granting concession. EG: SSD form may have name of MD/MS, however in system concession would be given against name of CEO Name of authority/code entered by billing should be same as mentioned on SSD forms**	**All designated level authorized to sign SSD forms should be defined in ERP system and accordingly correct designated level should be selected**		**L**	**Operational**
6	**Coversion of Company code from Self to Credit companies given to SSD/Billing department**	**At time of admission, company code for all patients are "SELF" whereas right to change company code from Self to IP _IPF or SSD patients or IP weaker" based on approved documents by billing dept/cashier/SSD dept.**	**However as best practice, right to change status of company code should be given to person other than perosn who approves or perform billing rights. Such rights sould be entrusted to IT team for better seggregation of work.**		**H**	**Operational**
7	**Code number vary in the system and nurses sheet for patient billing**	**Code for services that the patient has availed and those which are to be billed to do not match. There are separate codes for same services in the billing sheet and system. The cashier uses some other code for the services that have been mentioned in the billing sheet**	**There should be consistency in the codes at both levels. Either the stationary to be revised or codes in the system to be changed**		**L**	**Operational**
8	**Time of discharge not mentioned in billing sheet**	**Time of discharge not mentioned in billing sheet**	**To be part of billing sheet / patient bill ?**		**M**	
MIS / NABH						

8	ALOS	Not being monitored through system	Ideally ALOS should be monitored through the system and it should auto calculate from admission date to discharge CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement. c. average length of stay	CQI 4: The organisation identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement.	H	
9	MIS to be generated and kept as a record with the department/management	Total bills generated	System Generated			
		Category wise number of bill generated	System Generated			
		Total revenue receipts	System Generated			
		Category wise revenue receipts	System Generated			
		Refund bills	System Generated			
		Cancelled bills	System Generated			
		Cash reconciliation	System Generated			
		Cash deposit	System Generated			

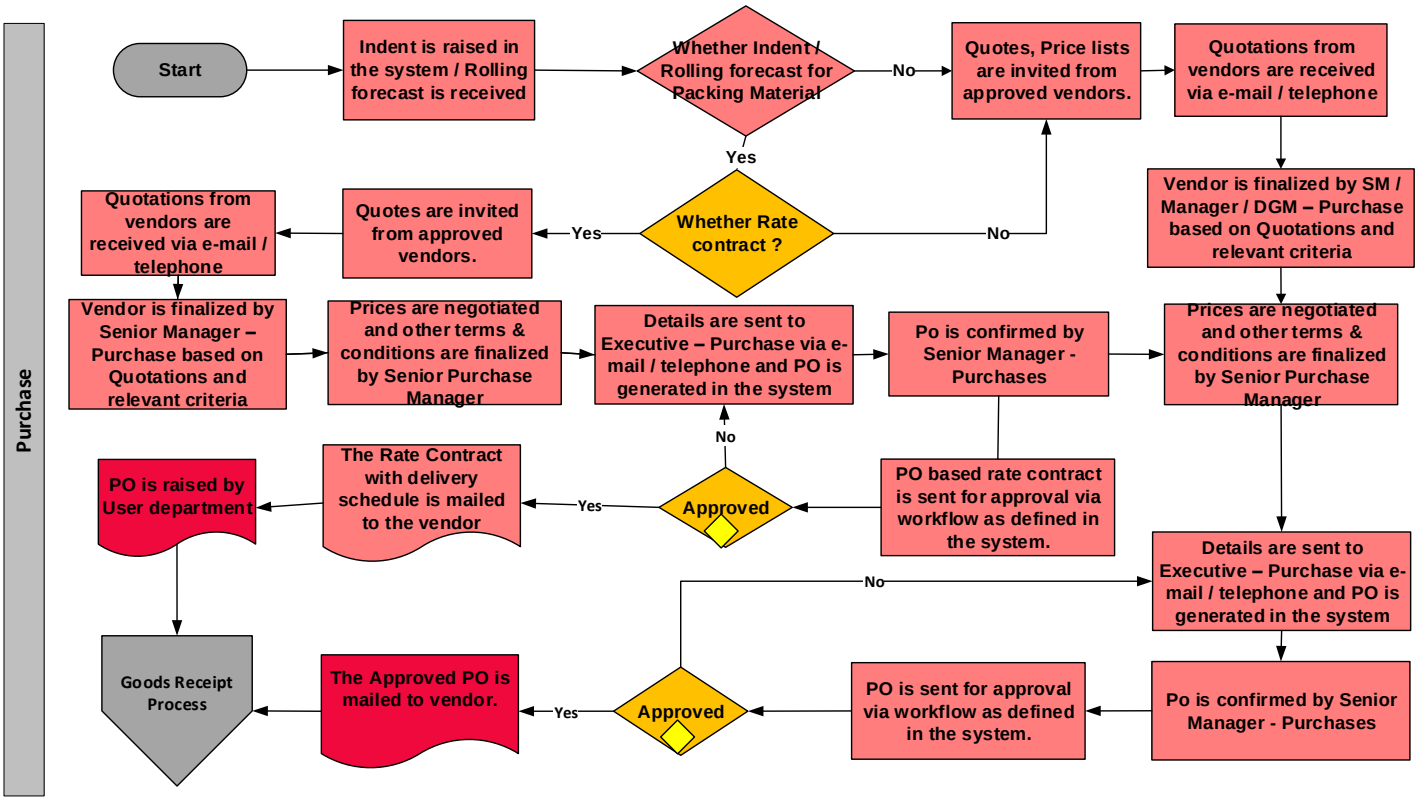
Pharmacy and Procurement

a. Process Flow

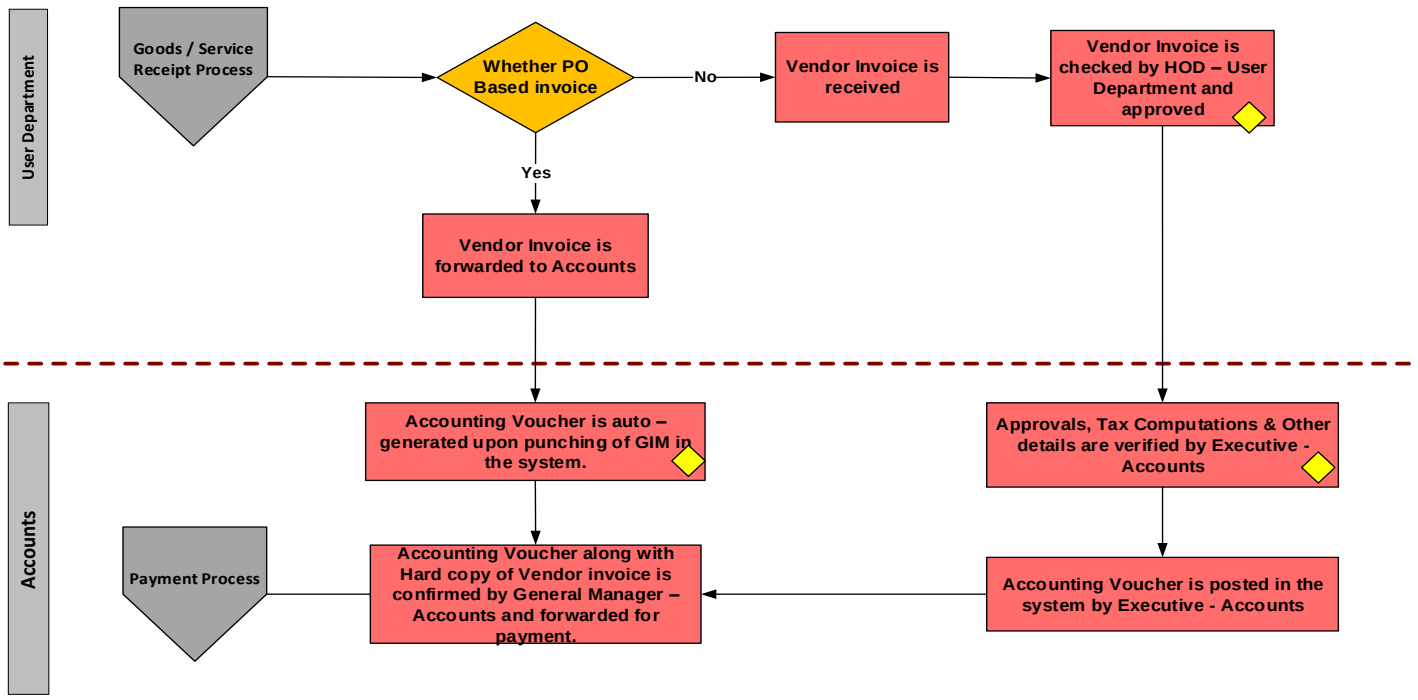
2.1 Vendor Master Creation and Modification



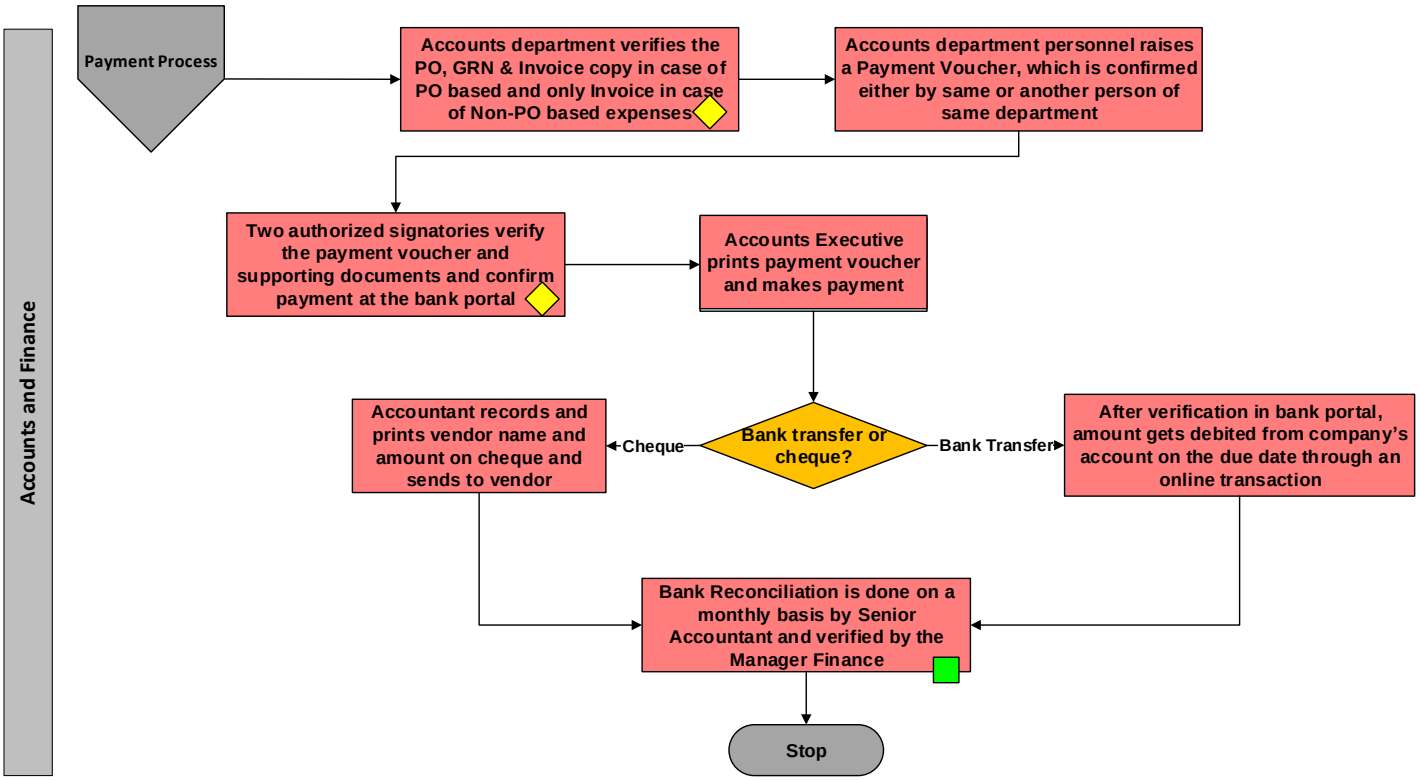
2.2 Vendor Selection and Negotiation



2.4 Invoice Booking Process



2.5 Payment process



b. Gap Analysis

Pharmacy							
Sr. No	Heading	Detailed Observation	Risk	NABH Clause applicable, if any	Recommendation	Risk Classification	Category
1	Need to initiate the process of Budget monitoring	Annual budgets are devised to control pharmacy expenditure. However, actual spends are not monitored against budgeted expenditure. Further, no guidelines are available for carry forward of budgets, unbudgeted expenditure and approval mechanism	1). Unbudgeted Expenditure may take place 2). Non-availability of meaningful data for decision making	ROM	Budget vs Actual should be monitored on a monthly basis and reported to management. Monitoring of actual spends vis-à-vis budget needs to be done a periodic basis	M	Reporting

		where budget gets exceeded.			**for the following: 1). Tracking savings / excess expenditure over budgeted costs 2). Identifying root causes for major deviations from budgeted expenditure. 3). Identifying unbudgeted expenditure**		
2	**Lack of formal process for requesting quotes for Non-tender Items**	**As per current process, quotes for non- tender items are taken from vendors informally over telecon. There is no formal process for requesting quotes from vendors. No documentation exists to substantiate the request for quotes**	**1). Lack of documentation to support QCS**	**NA**	**A request for quote form should be in place to support the request of quotes which contains the standard terms and conditions. The quotes shall be communicated by all vendors only in the standard form.**	**H**	**Process**
3	**Need to strengthen the access rights pertaining to Vendor master**	**Access rights to create vendors in the system are given to the Pharmacy team whp performs functions of vendor selection and PO creation. It is to be noted that a periodic vendor master review does not take place to ensuret that duplicate, fictitious, dummy vendors do not exist.**	**1). Duplicate vendors 2) Fictitious vendors 3). Unauthorized changes to vendor master**	**NA**	**Rights to create / amend vendors should be given to person other than perosn who approves or perform vendor selection or Po creation. Such rights sould be entrusted to IT team for better seggregation of work.**	**H**	**I.T**

4	**Need to implement segregation of duties in the procurement process**	**All activities in the system like creation of Indent, PO and GRN are carried out by the same person i.e. Pharmacist In-charge.**	**1). Unauthorized PO creation/amendment 2). Unauthorized GRN creation/ amendment**	**NA**	**In the current scenario, we suggest that Indent and GRN may be created by the Warehouse pharmacist instead of pharmacy in-charge**	**H**	**Process**
5	**Inadequate system controls over Item and Vendor code creation**	**Item and Vendor are filled by the Pharmacist In-charge at the time of creating the Vendor/Item master and are not auto-generated. The sequence of the code has been decided internally by the company**	**1). Duplicte Item/Vendor codes**	**NA**	**System changes may be explored to ensure Item and Vendor code can be system generated based on class of items.**	**L**	**I.T**
6	**Need to formulate an approved vendor list for requesting quotes for non-tendering items**	**There is no approved vendor list for non-tendering items which gives out the list of vendors that are eligible(i.e. have the capacity and meet compliance requirements of the organisation) and from whom the quotes shall be requested.**	**1). Transactions with ineligible vendors**	**NA**	**An approved Vendor list should be formulated based on which quotes shall be requested from empanelled vendors.**	**L**	**Process**

7	Need to initiate process for tracking of emergency procurement	Emergency procurement is not being monitored on a periodic basis to aid decision making	1). Excess cost due to frequent emergency procurement 2). Lack of root cause analysis of frequent emergency procurement to aid decision-making	NA	Emergency procurement should be monitored on a quarterly basis and report submitted to CEO/ Medical Director. For frequent emergency purchases, hospital to consider entering into contracts	M	Reporting
8	Lack of a periodic Vendor master review process	A periodic review of vendor master does not take place to ensure removal of inactive, duplicate, fictitious and dummy vendor codes.	1). Duplicte Vendor codes 2). Fictitious / Dummy vendor codes	NA	Purchase team to block all inactive / duplicate / defaulting vendors post approval from the concerned head	M	Reporting
9	Lack of a periodic Item master review process	A periodic review of item master does not take place to ensure removal of duplicate, fictitious and dummy item codes.	1). Duplicte Item codes	NA	Purchase team to review Item Master on a periodic basis to check for duplicate/ inactive / inaccurate rates	L	Reporting
10	Need to initiate a periodic process of Open PO monitoring	Open PO's are not monitored on a periodic basis. No guidelines are in place for short closing of PO's that lay down the responsibilities, timelines, approval matrix for short closing open PO's.	1). Excess cost of procuring drugs where the rates of drugs have decreased	NA	List of all open PO's should be generated on monthly basis through the system. Any open POs should be closed along with coordination with concerned team if the PO is open for more	M	Reporting

					than prescribed limit (45 days)		
11	**Inadequate controls over implementation and monitoring of Discount policy on pharmacy drugs**	**Pharmacy sells drugs to patients at discounted rates. The discounts to be passed on are governed by a discount policy. To give effect to this policy, selling prices are filled in at the time of passing GRN by the Pharmacy In-charge. The selling prices are not actual MRP's but discounted rates. However, there is no review process to ensure that rates are entered at the time of GRN in accordance with the policy.**	**1). Erroneous / Wrongful selling price leading to non-compliance with the discount policy**	**NA**	**The hospital sells drugs at discounted rates based on discount policy. However a process needs to be in place for reviewing the policy from time to time and obtaining adequate approvals on a yearly basis. Alternatively, these discounts may also be benchmarked with market discounts to increase profitability. (For e.g. certain pharmacy stores only give 10% discount across the board.) A periodic review should be in place to ensure that proper selling rates have been inserted everytime at the time of passing GRN**	**H**	**Process**

12	Need to define re-order levels for pharmacy drugs	Pharmacy In-charge checks stocks on a daily basis and determines the requirement of pharmacy drugs to be ordered. The entire process is dependent upon the judgement and experience of the pharmacy In-charge. No minimum stock levels, re-order levels have been defined for pharmacy drugs based on their consumption pattern, lead time, availability etc.	1). Stock out of essential drugs	NA	Pharmacy team should define re-order levels for pharmacy drugs based on consumption pattern, lead time, availability and document the same. Opportunities for inclusion of the same in the HMIS system should be explored	M	Process
13	Non-compliance with NABH requirement pertaining to Inventory Control Storage practices	As per NABH guidelines, Sound inventory control practises should guide storage of medications in all areas throughout the organisation. However in the current scenario, storage of pharmacy drugs are dependent on storage space available.	1). Non-compliance with NABH guidelines	MOM 3. c MOM 13. d	Pharmacy team should follow inventory control practises based on Vitality, Essentiality, Desirability (VED).	H	Process

14	**Non-compliance with NABH requirement pertaining to temperature monitoring for drugs stored under controlled temperature**	**NABH guidelines required that temperature monitoring should be done at regular intervals to ensure that drugs store under controlled temperature are stored as per required temperature. However, no monitoring is done to ensure that drugs are stored under the required temperature.**	**1). Storage at excess temperature leading to spoilage of temperature controlled drugs 2). Non-compliance with NABH guidelines**	**MOM 3.a**	**A standard template should be devised and temperature should be monitored on a daily basis at all places where temperature controlled drugs are maintained.**	**L**	**Process**
15	**Lack of a formal Vendor Evaluation process**	**In the current process, theres is lack of a formal vendor evaluation process wherein vendors are periodically evaluated and rated based on defined parameters such as timeliness of delivery, adherence to quality parameters, market reputation etc)**	**1). Non-compliance with the terms of the contract**	**NA**	**A formal vendor evaluation process should be put in place to evaluate vendors periodically based on pre-defined parameters. A standard vendor evaluation form may be devised which shall cover all the parameters and shall be used for the process.**	**M**	**Process**

16	Need to strengthen controls around concessional sales of pharmacy drugs	Pharmacy dispenses medicines on a concessional basis to SSD patients. As per current process, patients under the SSD scheme are given a stamped prescription in duplicate out of which the duplicate copy is retained by the SSD department. At the time of dispensing of medicines, pharmacist collects the first copy of the stamped prescription and issues drugs against the same. At the end of day all the first copies of prescription are handed over to SSD by pharmacist. However, no reconciliation is carried out between actual issue (first copy) and duplicate copy of original prescription.	1). Manipulation of SSD prescription	NA	The stock given by pharmacy should be reconciled with the duplicate copy of the prescription maintained by SSD. Alternatively, having the entire process carried out through system should be explored.	H	Process
17	Non-compliance with NABH guidelines pertaining to documented policies for Adverse drug reaction (ADR)	In case of an Adverse drug reaction, clinical staff prepares an incident report and submits the same to Medical superintendent. Medical superintendent reviews the same, signs and forwards the same to Medical Director for approval. However a documented policy is not in place contains at the minimum, the following: 1). Clear definition as to what constitutes ADR 2). Action points to be taken 3). Periodic reporting 4). Responsibilities & Authorities	1). Non-compliance with NABH guidelines	MOM 8.	A documented policy & procedure document should be formulated for Adverse drug reaction and adequate training should be imparted on the same to all clinical staff.	M	Process

18	Non-compliance with NABH guidelines pertaining to documented policies for Medication error or sentinental events	In case of an Medication error or sentinental event, clinical staff prepares an incident report and submits the same to Medical superintendent. Medical superintendent reviews the same, signs and forwards the same to Medical Director for approval. However a documented policy is not in place which should, at a minimum contain the following: 1). Clear definition as to what constitutes ' Medication error' 2). Action points to be taken 3). Periodic reporting 4). Responsibilities & Authorities	1). Non-compliance with NABH guidelines	MOM 8.	A documented policy & procedure document should be formulated for Adverse drug reaction and adequate training should be imparted on the same to all clinical staff.	H	Process
19	Non-compliance with NABH guidelines pertaining to documented policies & procedures that guide the safe and rational prescription of medication	No documented policy/ guidelines on Prescription of Medication which should at a minimum contain the following:	1). Non-compliance with NABH guidelines	MOM 4.	A documented policy & procedure document should be formulated for prescription of drugs and adequate training should be imparted on the same to all clinical staff.	H	Process
20	Self - administration (Patients own oral medications)	No documented procedure and policy pertaining to self-administation of pharmacy drugs like patients who are on chronic therapy (e.g. Conditions like Hypertension, Diabetes mellitus, Cancer, TB)		NA	A documented policy & procedure document should be formulated for Self-administration and adequate training should be imparted on the same to all	H	Process

					clinical staff.		
21	Issue from Warehouse after the warehouse is closed	In the current scenario, the pharmacy warehouse operates from 8:30 a.m. to 4:30 p.m. Once the warehouse is closed, no stock can be moved out even in case of emergencies. No provision has been made in case the warehouse needs to be opened in case of exingencies.	1). Non-availability of essential drugs during emergencies after the warehouse is closed	NA	A formal process document needs to be prepared and implemented for issues from pharmacy warehouse after the warehouse is closed. The process should cover all important aspects aroud the process. For e.g. 1). Authorities 2). Documentation and recording 3). Impact on Inpatient billing in case the patient is dispatched	L	Process

Procurement – Opex

Sr. No	Heading	Detailed Observation	Risk	NABH Clause applicable, if any	Recommendation	Risk Classification	Category
1	Need to initiate the process of Budget monitoring	Annual budgets are devised to control expenditure department wise. However, actual spends are not monitored against budgeted expenditure. Further, no guidelines are available for carry forward of budgets, unbudgeted expenditure and approval mechanism where budget gets exceeded.	1). Unbudgeted Expenditure may take place 2). Non-availability of meaningful data for decision making	NA	Budget vs Actual should be monitored on a monthly basis and reported to management. Monitoring of actual spends vis-à-vis budget needs to be done a periodic basis for the following: 1). Tracking savings / excess expenditure over budgeted costs 2). Identifying root causes for major deviations from budgeted expenditure. 3). Identifying unbudgeted expenditure	M	Reporting

2	Lack of formal process for requesting quotes for Non-tender Items	As per current process, quotes for non- tender items are taken from vendors informally over telecon. There is no formal process for requesting quotes from vendors. No documentation exists to substantiate the request for quotes	1). Lack of documentation to support QCS	NA	A request for quote form should be in place to support the request of quotes which contains the standard terms and conditions. The quotes shall be communicated by all vendors only in the standard form.	H	Process
3	Need to strengthen the access rights pertaining to Vendor master	Access rights to create vendors in the system are given to the Pharmacy team whp performs functions of vendor selection and PO creation. It is to be noted that a periodic vendor master review does not take place to ensuret that duplicate, fictitious, dummy vendors do not exist.	1). Duplicate vendors 2) Fictitious vendors 3). Unauthorized changes to vendor master	NA	Rights to create / amend vendors should be given to person other than perosn who approves or perform vendor selection or Po creation. Such rights sould be entrusted to IT team for better seggregation of work.	H	I.T
4	Need to implement segregation of duties in the system for procurement process	All activities in the system like creation of Indent, PO and GRN are carried out by the same person i.e. Pharmacist In-charge.	1). Unauthorized GRN creation/ amendment	NA	In the current scenario, we suggest that Indent and GRN may be created by the Warehouse pharmacist instead of pharmacy in-charge	H	Process
5	Inadequate system controls over Item and Vendor code creation	Item and Vendor are filled by the Pharmacist In-charge at the time of creating the Vendor/Item master and are not auto-generated. The sequence of the code has been decided internally by the company	1). Duplicte Item/Vendor codes	NA	System changes may be explored to ensure Item and Vendor code can be system generated based on class of items.	L	I.T

6	Need to formulate an approved vendor list for requesting quotes for non-tendering items	There is no approved vendor list for non-tendering items which gives out the list of vendors that are eligible(i.e. have the capacity and meet compliance requirements of the organisation) and from whom the quotes shall be requested.	1). Transactions with ineligible vendors	NA	An approved Vendor list should be formulated based on which quotes shall be requested from empanelled vendors.	L	Process
7	Need to initiate process for tracking of emergency procurement	Emergency procurement is not being monitored on a periodic basis to aid decision making	1). Excess cost due to frequent emergency procurement 2). Lack of root cause analysis of frequent emergency procurement to aid decision-making	NA	Emergency procurement should be monitored on a quarterly basis and report submitted to CEO/ Medical Director. For frequent emergency purchases, hospital to consider entering into contracts	M	Reporting
8	Lack of a periodic Vendor master review process	A periodic review of vendor master does not take place to ensure removal of inactive, duplicate, fictitious and dummy vendor codes.	1). Duplicte Vendor codes 2). Fictitious / Dummy vendor codes	NA	Purchase team to block all inactive / duplicate / defaulting vendors post approval from the concerned head	M	Reporting
9	Lack of a periodic Item master review process	A periodic review of item master does not take place to ensure removal of duplicate, fictitious and dummy item codes.	1). Duplicte Item codes	NA	Purchase team to review Item Master on a periodic basis to check for duplicate/ inactive / inaccurate rates	L	Reporting
10	Need to initiate a periodic process of Open PO monitoring	Open PO's are not monitored on a periodic basis. No guidelines are in place for short closing of PO's that lay down the responsibilities, timelines, approval matrix for short closing open PO's.	1). Excess cost of procuring drugs where the rates of drugs have decreased	NA	List of all open PO's should be generated on monthly basis through the system. Any open POs should be closed along with coordination with concerned team if the PO is open for more than prescribed limit (45 days)	M	Reporting

11	Need to define re-order levels for inventory	Pharmacy In-charge checks stocks on a daily basis and determines the requirement of pharmacy drugs to be ordered. The entire process is dependent upon the judgement and experience of the pharmacy In-charge. No minimum stock levels, re-order levels have been defined for pharmacy drugs based on their consumption pattern, lead time, availability etc.	1). Stock out of essential drugs	NA	Pharmacy team should define re-order levels for pharmacy drugs based on consumption pattern, lead time, availability and document the same. Opportunities for inclusion of the same in the HMIS system should be explored	M	Process
12	Lack of a formal Vendor Evaluation process	In the current process, theres is lack of a formal vendor evaluation process wherein vendors are periodically evaluated and rated based on defined parameters such as timeliness of delivery, adherence to quality parameters, market reputation etc) For service vendors, KPI and service level monitoring is also done informally. No KPI monitoring sheets are in place that tracks the agreed service delivery against actual service delivery on a periodic basis.	1). Non-compliance with the terms of the contract	NA	A formal vendor evaluation process should be put in place to evaluate vendors periodically based on pre-defined parameters. A standard vendor evaluation form may be devised which shall cover all the parameters and shall be used for the process.	M	Process

13	Manual processes in place for procurement of Kitchen, Repairs & Maintainence & Bio-medical revenue procurement	The Organization has an HMIS system in place for various functions and is being actively used for procurement and inventory management of Pharmacy drugs, medical and general goods. However, for Kitchen & Repairs Maintenance department, all activities right from preparation of Indent to preparation of GRN are being done manually. Further the formats are not standard across different departments.	1). Manual processes are more prone to manipulation 2). Devising reports becomes a tedious task	NA	The ERP system should be implemented for these departments and all activities should be carried out thorugh the system like creation of Indent, PO creation, GRN creation & Vendor / Item creation.	M	I.T
14	Need to initiate monitoring over AMC's / CMC's of Bio-medical equipments	For Bio-medical equipments, repairs & maintainence work, calibration etc. has been outsourced. However, no tracker is available to ensure that all equipments are covered, contracts are renewed on time.	1). Equipments may not be serviced 2). Contracts not renewed on a timely basis	NA	A tracker should be in place for all AMC's/CMC's pertaining to Bio-medical equipment to ensure the following: 1). All equipments are covered 2). The due dates of service as well as the expiry dates of contracts are tracked.	M	Process

Procurement – Capex

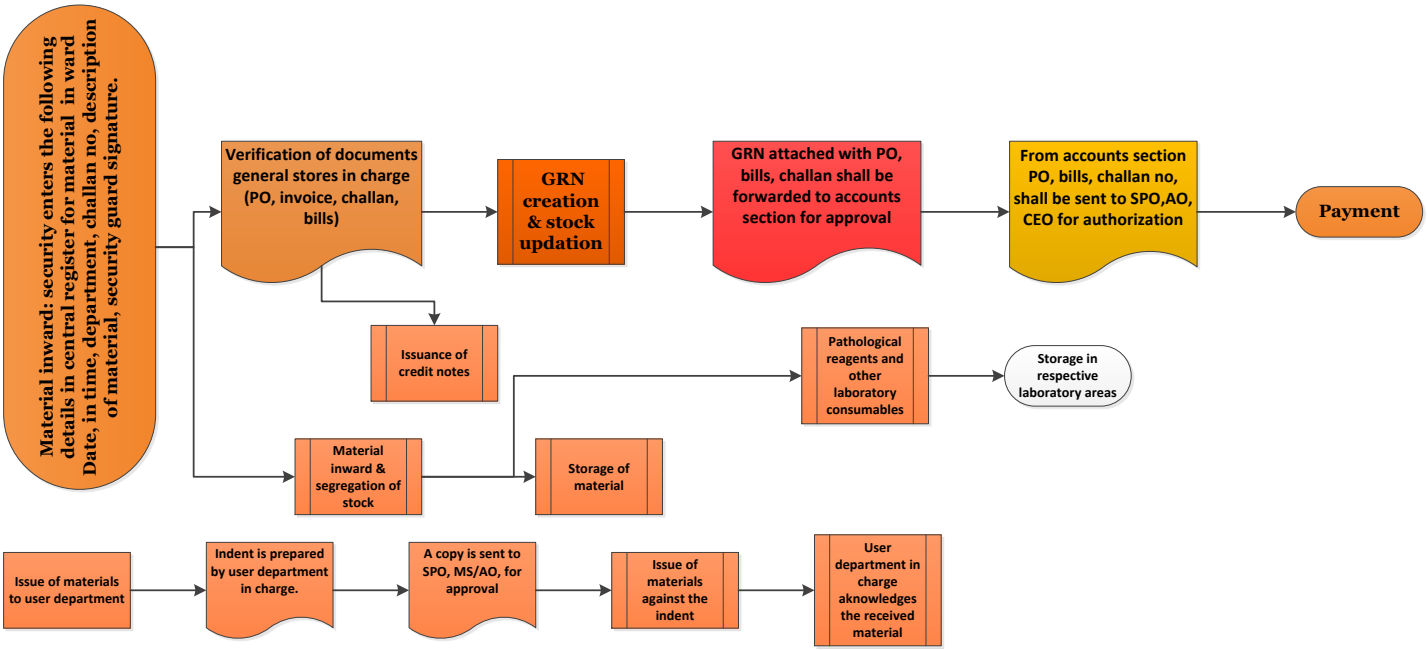
Sr. No	Heading	Detailed Observation	Risk	NABH Clause applicable, if any	Recommendation	Risk Classification	Category
1	Need to include financial justification in indents for Capital expenditure	In the current process, for Items purchased under hospital donation fund, an indent is received from all users. The indent contains the detail of assets along with the justification. However no financial justification is provided for new equipments like ROI, expected revenue, savings in cost Etc.	1). Unnecessary Capital expenditure	NA	For all new equipments other than replacement equipments, the Indent form should be revised to Capex approval form and should clearly include the financial justification for the spend like ROI, growth in revenue, cost savings etc. This justification should also be used for post commercialisation review and actual benefits should be compared and analysed against the expected figures.	H	Process
2	Need to initiate the process of Budget monitoring	Annual budgets are devised to control capital expenditure. However, actual spends are not monitored against budgeted expenditure. Further, no guidelines are available for carry forward of budgets, unbudgeted expenditure and approval mechanism where budget gets exceeded.	1). Unbudgeted Expenditure may take place 2). Non-availability of meaningful data for decision making	NA	Budget vs Actual should be monitored on a monthly basis and reported to management. Monitoring of actual spends vis-à-vis budget needs to be done a periodic basis for the following: 1). Tracking savings / excess expenditure over budgeted costs 2). Identifying root causes for major deviations from budgeted expenditure. 3). Identifying unbudgeted expenditure	M	Reporting

3	Manual processes in place for Capital procurement	The Organization has an HMIS system in place for various functions and is being actively used for procurement and inventory management of Pharmacy drugs, medical and general goods. However, for Capital expenditure, all activities right from preparation of Indent to preparation of GRN are being done manually. Further the formats are not standard across different departments. Also it is to be noted there is no FAR mantained either by the Bio-medical team or by the Repairs & Mantainence team.	1). Manual processes are more prone to manipulation 2). Devising reports becomes a tedious task	NA	The ERP system should be implemented for these departments and all activities should be carried out thorugh the system like creation of Indent, PO creation, GRN creation & Vendor / Item creation. Provision for FAR should also be included in the system and it should be ensured that all Fixed assets are recorded and updated in the system	H	I.T
4	Lack of formal process for requesting quotes for Non-tender Items	As per current process, quotes for non- tender items are taken from vendors informally over telecon. There is no formal process for requesting quotes from vendors. No documentation exists to substantiate the request for quotes	1). Lack of documentation to support QCS	NA	A request for quote form should be in place to support the request of quotes which contains the standard terms and conditions. The quotes shall be communicated by all vendors only in the standard form.	H	Process
5	Need to implement segregation of duties in the capex procurement process	Creation of PO and GRN are carried out by the same person. (Bio-medical engineer for Bio-medical department and Building supervisor for Civil department)	1). Unauthorized GRN creation/ amendment	NA	As a best practice, Indent and GRN should be prepared by a different person.	H	Process
6	Need to formulate an approved vendor list for requesting quotes for	There is no approved vendor list for non-tendering items which gives out the list of vendors that are eligible(i.e. have the capacity and meet	1). Transactions with ineligible vendors	NA	An approved Vendor list should be formulated based on which quotes shall be requested from empanelled vendors.	L	Process

	non-tendering items	**compliance requirements of the organisation) and from whom the quotes shall be requested.**					
7	**Need to initiate process for tracking of emergency procurement**	**Emergency procurement is not being monitored on a periodic basis to aid decision making**	**1). Excess cost due to frequent emergency procurement 2). Lack of root cause analysis of frequent emergency procurement to aid decision-making**	**NA**	**Emergency procurement should be monitored on a quarterly basis and report submitted to CEO/ Medical Director. For frequent emergency purchases, hospital to consider entering into contracts**	**M**	**Reporting**
8	**Need to initiate a periodic process of Open PO monitoring**	**Open PO's are not monitored on a periodic basis. No guidelines are in place for short closing of PO's that lay down the responsibilities, timelines, approval matrix for short closing open PO's.**	**1). Excess cost of procuring drugs where the rates of equipments have decreased**	**NA**	**List of all open PO's should be generated on monthly basis through the system. Any open POs should be closed along with coordination with concerned team if the PO is open for more than prescribed limit (45 days)**	**M**	**Reporting**
9	**Lack of a formal Vendor Evaluation process**	**In the current process, theres is lack of a formal vendor evaluation process wherein vendors are periodically evaluated and rated based on defined parameters such as timeliness of delivery, adherence to quality parameters, market reputation etc)**	**1). Non-compliance with the terms of the contract**	**NA**	**A formal vendor evaluation process should be put in place to evaluate vendors periodically based on pre-defined parameters. A standard vendor evaluation form may be devised which shall cover all the parameters and shall be used for the process.**	**M**	**Process**

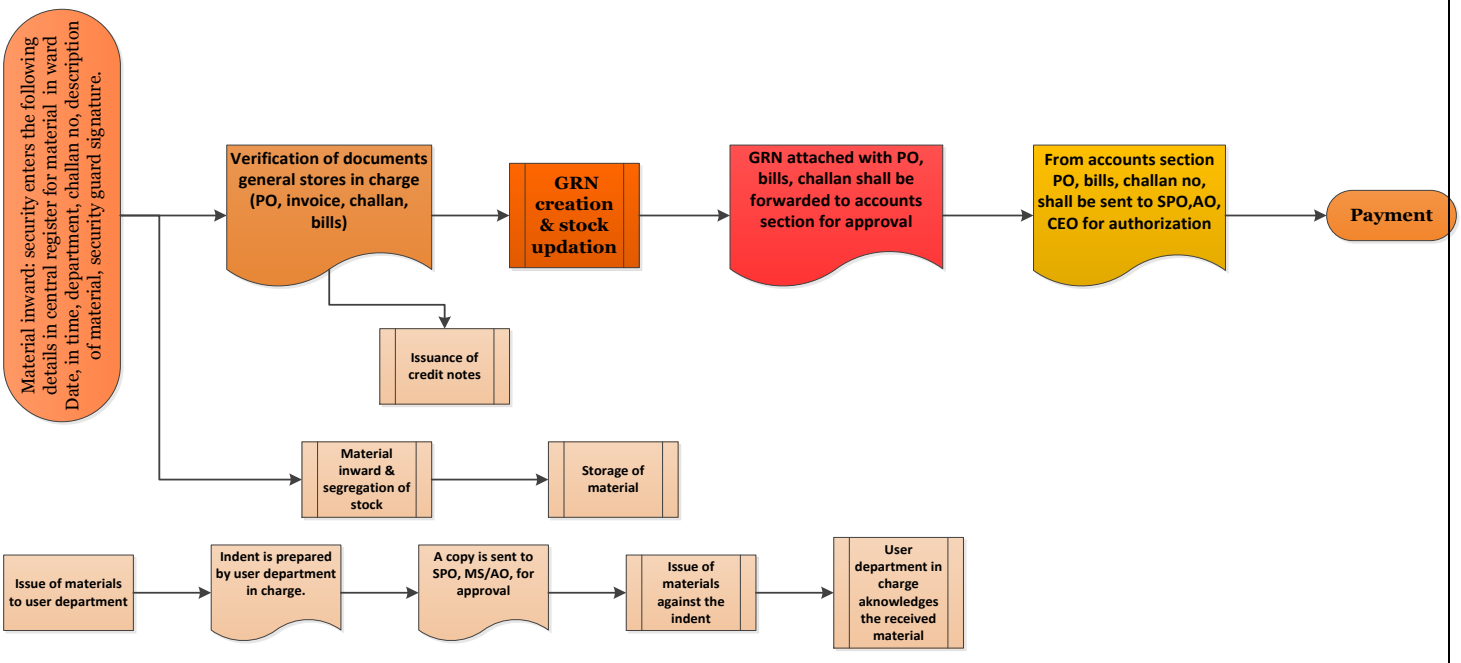
Medical stores

a. Process Flow



General Stores

a. Process Flow



b. Gap Analysis

Stores

Sr. No	Heading	Detailed Observation	Recommendation	NABH Clause applicable, if any	Risk	Risk Classification	Category
1	Need to practice use of personal protective equipment in handling materials	usage of Personel Protective Equipment is not practised	personel protective equipment shall be maintained for the safety and hygenic purposes			M	
2	Lack of a standard form for issue of credit notes for return of kitchen materials	There is no standard format for credit note for returning kitchen material. Kitchen In-charge prepares the same on blank paper and forwards for approval.	A standard format should be deisgned to issue credit note for kitchen stores. The format should cover the following particulars: 1). Product Name 2). Manufacturer 3). Batch 4). Expiry date 5). Quantity 6). Rate 7). Total Amount			L	
3	Need to implement Inventory Control Storage best practices	Sound inventory control practises should guide storage of materials in all areas throughout the organisation. However in the current scenario, storage of medical & general stores, kitchen stores are dependent on storage space available.	Pharmacy team should follow inventory control practises based on ABC classification.		1). Inadequate control over storage of inventory	H	Process
4	Need to strengthen physical controls to avoid Pliferage and theft across all stores	no detailed policy on theft and pliferage, no CC TVcameras inside the stores department	policy on pliferage and theft, installation of camers			H	Process
5	Good house keeping (all store)	good house keeping practises in stores and warehouses	neat and orderly maintainance of warehouse is not only morale booster but also an important element in accident prevention			L	Process
6	Maintenance of registers (kitchen store	No ideal methodology of maintaining same format of registers for both hospitals	maintenance of unique registers for both the hospitals			M	Process

Conclusion:

- Though this trust based hospital has been upto the mark and is efficiently operating its function for providing Services to the most important section of Age and Sex pyramid i.e. Mother and Children and other supporting departments, this trust based (heritage hospital) with the change in time and technology felt need for the renovation for its infrastructure and a renewed Process structure for their major revenue generating clinical and non- clinical department.
- Process flow structuring and Gap Analysis were prepared and discussed with the staff and Management through review meetings to ensure the correct and effective understanding of how the errors in the process can be minimized.
- Major Gaps analyzed in these departments which needed a quick and prompt upgradation according to NABH or MIS compliance and even for the usual routine process check are as under:

  - After OPD consultation, Patients are asked to carry the blood samples to investigation room in separate building by themselves.
  - Length of stay of Patient in the hospital instead of system is entered manually by the cashier while preparing the bill, which increases the chances of error. Interim bills are also not generated for the long stayed patient.
  - For Maternity patient, Initial Assessment forms do not have pain assessment in the smiley signage which is a need considering patient's strata and education level.
  - Change in their unique Identification number as per hospital policy creates a gap for tracking the Patient's previous admission and other details including diagnosis and history
  - No documented procedure and policy pertaining to self-administration of pharmacy drugs like patients who are on chronic therapy (e.g. Conditions like Hypertension, Diabetes mellitus, Cancer, TB)
  - Lack of budget monitoring, actual spends are not monitored against budgeted expenditure.

- Recommendations are suggested for each Gap statement and SOP's are designed accordingly.
- This would further assist them for NABH accreditation and even the Operational execution, productivity of staff and service delivered would increase remarkably.
- Patient satisfaction increases ten-folds no doubt if the same line of approach is maintained and for this hospital its important as its mission and vision only states to serve the community beyond the socio economic status.
- For the staff this helps a lot when dealing with repetitive or an unusual situation challenged
- Practically focusing, the Indian Scenario of health Care needs more SOPs formulation and its Implementation in Government and trust sector then over Private one.
- Progress and success to achieve their Mission, Vision and be cost effective model so that Government can help an aid to other such model.
- Obviously other aspects apart from SOPs should be considered but the documented Policies and Procedure under Quality guideline like NABH and MIS. There is a suggestion for the Hospital to avoid for strict adherence to SOPs as and when necessary, and staff should be trained, experienced and logical enough for decision making at times of Emergency or if at all required.

Recommendation: Training of the staff should be done regularly so as to keep in line with the newly designed SOPs and their feedback should be taken for the same.

Limitation of Study:

- Process mapping of the department could also be done through observational analysis for all the departments along with the Interview sessions but due to Patient Care Area it could not be done for Children Vaccination Department, Pharmacy adverse Drug reaction management in IPD patient.
- Improvement through Training given to the respective staffs reflected in the functional improvement and better delivery of Quality Care could not be mapped due to time constraint.

ANNEXURES

- **Interview schedule:**

  - Man Power and its Organogram
  - Work Flow and the processes of the departments
  - Time schedule of the department and staff
  - Suggestions and requirement of staffs
  - Documentation
  - HMIS integration

- **Check list:**

S. No.	Department
A	**Infrastructure**
1	Availability of adequate space for department and storage
2	Availability of Room with enough number of racks and cupboards to ease file retrieval
B	**Operation**
1	Posting of Medical Recorders or appropriate person & supervision by RMO (Clinical)
2	Regular submission of the morbidity, mortality reports to appropriate authorities (check the report of the last quarter to assess the correctness)
3	Standard formats
C	**Quality**
1	Adequate staff
2	All the MOs trained in writing accurate cause of death as per WHO guidelines
3	All the hospital deaths including Medico Legal deaths are covered under Medical Certification of Cause of Death are maintained as per WHO Classification of diseases (ICD - X) and regular reviews are taken

- **Standard Operating Procedure Template**

	QualityManual – 2016 **Reference: NABH Standard**
Version No. 1 Date Of Issue:	
Name of Service	
Name of Policy **Policy No.**	**/AAC/02/A**
Purpose	
Scope	
Responsibility	
Prepared by	**Designation:** **Signature:**
Approved by	**Designation:** **Signature:**
Issued by	**Designation:** **Signature:**
Responsibilityforupdating	**Designation: Medical Superintendent, BJWHC** **Signature:**

- **Header and Footer**

	NABH Policy	**Policy for IPD Registration & Billing**
	NABH Standard Reference:	**AAC 02, COP2 f**
	Policy /Version No/ Issue Date:	**/AAC/02/A** **Version 1/07/04/2010**
	Page No:	**Page 83 of 86**

Prepared By: Medical Superintendent	**Approved By: Medical Director / CEO**

- **Responsibility for Implementation:**
- **Parameters for Quality Assurance:**

Sl #	QualityObjectives	Performance Indicators	Measurement Criteria	
			Criteria	Frequency

- **Amendment Sheet**
- **Policy on Registration and Admission**
- **Departmental Processes**
- **Annexures**

➢ **PDCA cycle (Quality Check Cycle)**

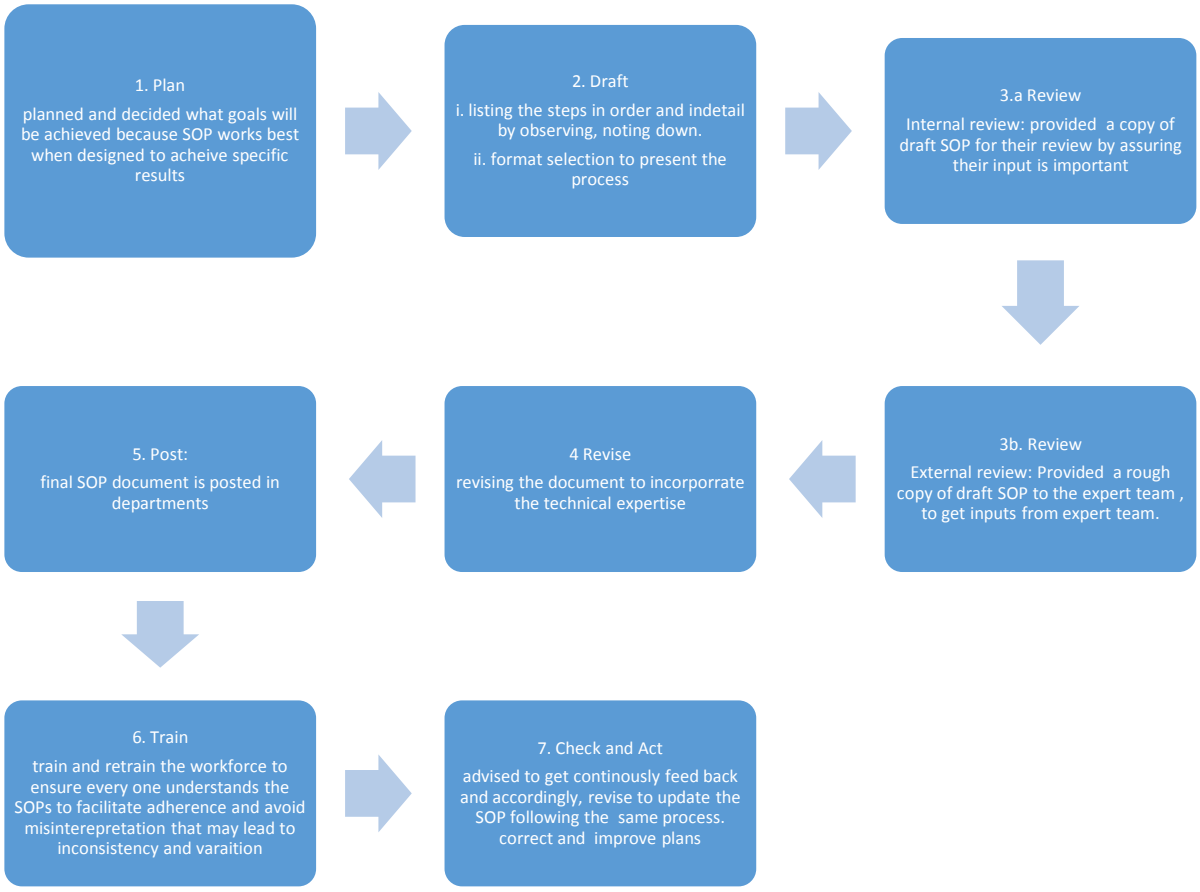
One of the earliest known models for managing SOP development is **"Plan-Do-Check-Act (PDCA) cycle"**

Step 1: Plan –

Step 2: Do –

Step 3: Check

Step 4: Act i.e. first, you plan; next do what you planned; then check what and how you did and how things went; and finally, act on what you learned. The chart below summarizes the steps followed in developing SOP.



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