

‘Process mapping of the preventive health check-ups in a hospital – Time and motion study’

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Introduction

- The health check-up program
 - ✓ Preserves good health
 - ✓ Facilitates early diagnosis and treatment of illness
- Identifies and minimize risk factors detecting illnesses at an early stage
- Chances for treatment and cure are better.

Process Mapping

- Process mapping is 'a pictorial representation of the sequence of actions that comprise a process.'
- Represents "who does what" within a workplace
- Helps to define the start and end points of a process
- Helps to identify the smartest performance measures and the greatest opportunity for improvement

Research questions

- What are the managerial issues related to preventive health checks?
- What improvements need to be done to improve the process of preventive health checks?

Objectives

- To map the complete process of preventive health check-up.
- To identify managerial issues in the whole process of preventive health checks.
- To provide possible solutions to overcome issues.

Research Methodology

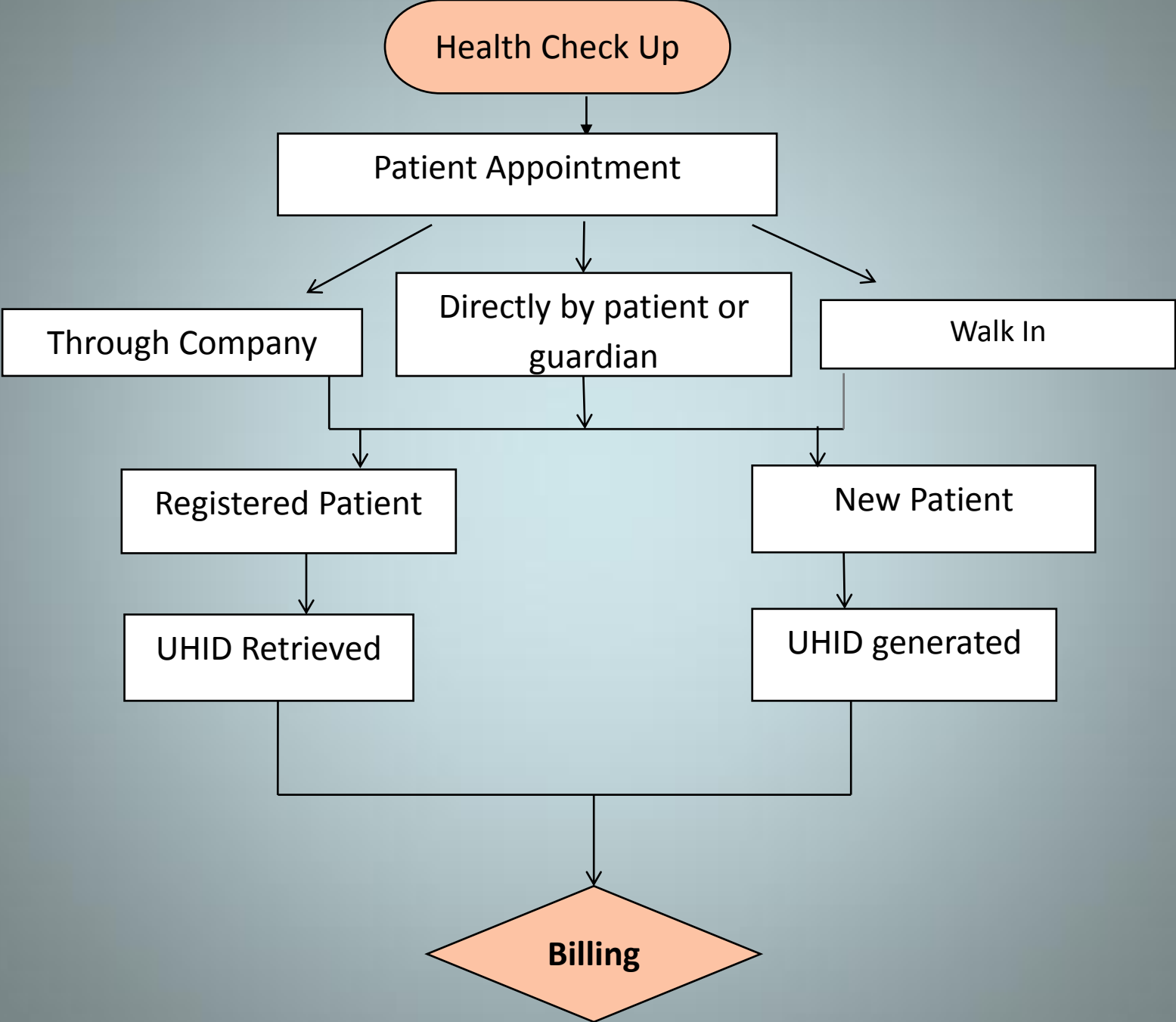
- Type of study - Cross sectional study
- Area covered - Preventive health check-up department in OPD building
- Sample size - 60 Patients
- Duration of study – 34 days

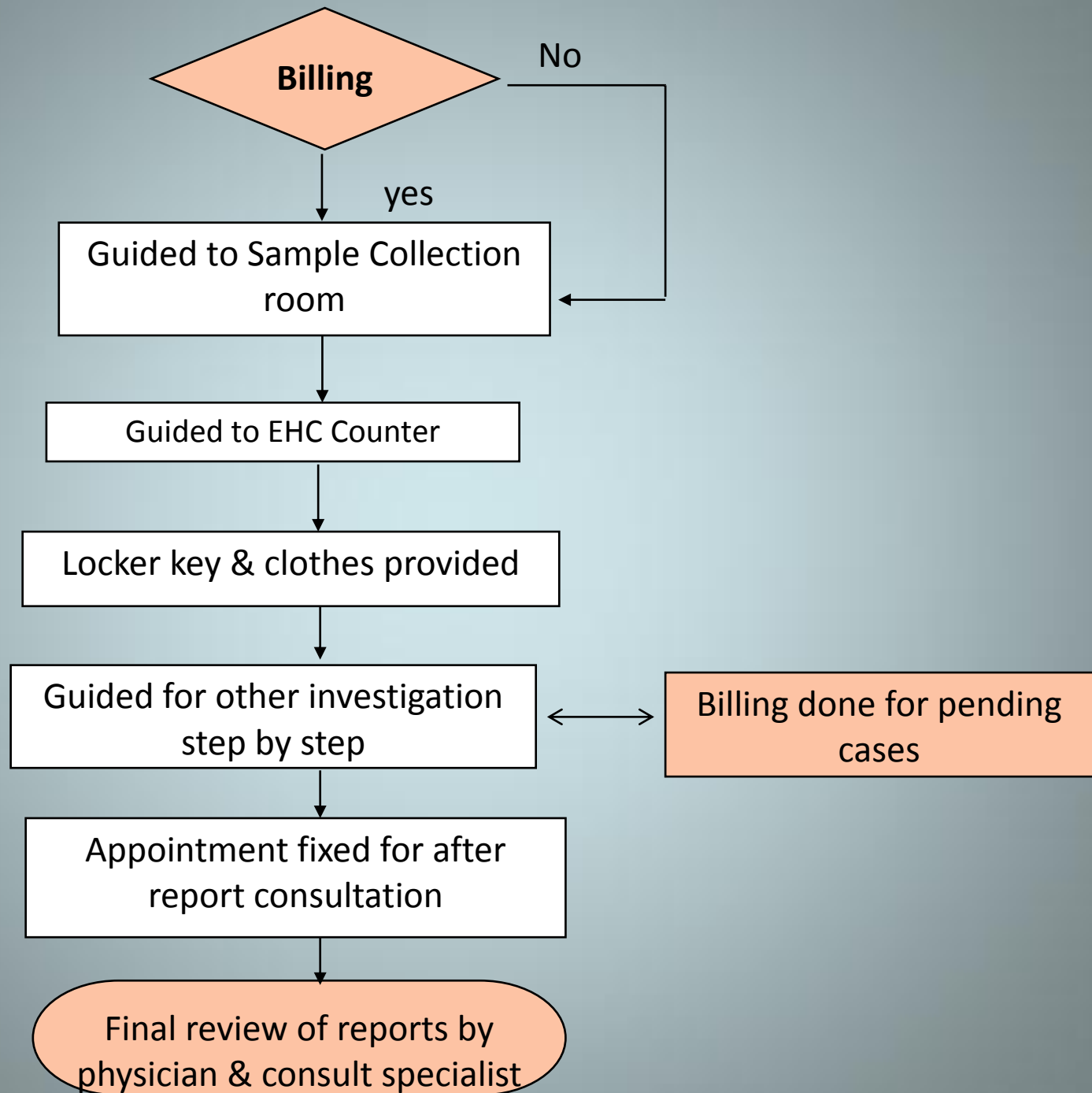
* Process mapping of the current process of preventive health-check in the hospital was done.

Methods of data collection

- Process mapping
- Observation
- Informal interviews (Nurses, customer care in charge, Duty doctors and technician)

Process map/work flow diagram:





Observation

- Patients were observed during the process of health check is as follows:
- No of days of observation - 34
- Total no of patients observed - 60
- Data was collected from 09th March to 11th April.
- In and out time was noted down
- Turnaround time for all health check packages with consultation is four and half hours.
- **26.6%** of patients from the whole sample have completed their check-up within TAT

Informal interviews

- Informal interviews were carried out with nurses, customer care in charge, Duty doctors and technician.

Managerial issues

- Less number of staff at billing
- so patient has to go for billing in between the process of health check.
- Printers not working many times.
- Packages were not updated in system
- Only one staff in sample collection room
- staffs were using lockers for their personal purpose.
- Long waiting for ultrasound

- unavailability of technician for ultrasound
- Visiting staff coming for very short duration of time

Suggested Solutions

- More number of staff is required at billing counter
- Final billing should be done at the time of registration only
- Logistics should be maintained timely
- Any change in packages need to be updated regularly.
- Staff immunization should be done at particular intervals to avoid infection to the staff
- Staff should be strictly instructed not to use lockers for their personal use

- Technician is required on urgent basis as ultrasound is a big bottleneck in the whole process
- Visiting staff should be available for a fix dedicated time
- Personality development program and other training programs for hospital staff should be encouraged

PROPOSAL FOR EXPRESS HEALTH CHECK

- A Client may not have enough time during a weekday to plan for and come to a hospital for a health check
- A weekend is the only time that the client has to go for a health check

- An express health check-up could be proposed
- This would be a no-waiting-time offering
- Sample collection- 10 min.
- Internal Medicine OPD consultation = 10min
- Miscellaneous activities = 10min.
- So this path takes 30 minutes.

* Therefore only a ‘**very quick health screening**’ is offered to the patient.

- Will be offered only on the weekend.
- Appointment will be booked 1 week in advance required documents will be sent for registration through email
- Payments by online portal or make the payment on the required day
- Basic blood tests like, for example, CBC, LFT and RFT could be done for and one for an internal medicine express health check.

Human Resources Required

- 'X' number of doctors
- 2'X' number of OP Nurse for collecting the sample of the patient
- 'X' number of OP nurse to handle the patient file and help the doctor
- 2'X' number of front office executives for the purpose of billing
- 2'X' number of porters
- General Duty Assistants for miscellaneous duties
- **X=3**

Flow Estimation

- basic screening from the physician
- Average consultation time - 10 minutes.
- Assuming a gap of 3min between 2 consultations-
 - ✓ 1 doctor can see 4 patients in an hour
 - ✓ 16 patients between 9am to 1pm and thus, 3 doctors can see 48 patients in a day.
 - ✓ Doctors will write prescriptions on the basis of the blood investigations from 2pm to 5pm

Thank
You

