PRE-ACCREDITATION ENTRY LEVEL STANDARDS FOR HCO & SHCO

SESSION #2

BASIC PROGRAM TO TRAIN CPQIH

VERSION 2.1 BASIC TRAINING

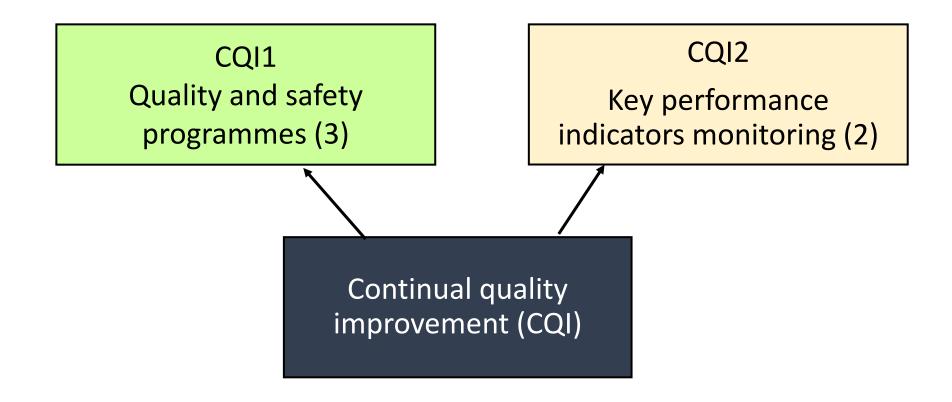


CONSORTIUM OF ACCREDITED HEALTHCARE ORGANIZATIONS

CONTINUAL QUALITY IMPROVEMENT (CQI)



Summary of Standards



Intent of CQI

The NABH Continual Quality Improvement (CQI) chapter aims at:

- Encourage an environment of continuous quality improvement.
- Should involve all areas of organisation and all staff members.
- Improvements should be sustained.



CQI 1 - There is a structured quality improvement, patient safety and continuous monitoring programme in the organisation.

- CQI 1a: There is a designated individual for coordinating and implementing the quality improvement and patient safety programme.
- CQI 1b: The quality improvement and patient safety programme is a continuous process and updated at least once in a year.
- CQI 1c: Hospital management makes available adequate resources required for quality improvement and patient safety programme.



How to implement CQI1?

Quality/safety manager

- Implement and improve quality standards along with current responsibilities.
- Knowledge about functioning of the hospital and statutory requirements.
- Good communication, PR and soft skills.
- Familiar with NABH standards.
- Implement improvement model.
- Prepare training modules, calendar, checklist and audit reports.
- Report findings to top management.
- Ensure periodic meetings, maintain minutes and undertake follow up.

Quality and safety committee

- Oversee both quality and safety programmes.
- Monitor KPIs.
- Incident review.
- Review patient complaints and feedback.
- Monitor facility rounds discussion.
- Monitor sentinel and other events.
- CPR and safety monitoring.



Points to Remember: Hospital

- Devise quality and safety budget.
- Provide adequate material resources, PPEs and patient safety devices.
- Train staff on quality improvement and patient safety.
- Ensure availability of adequate security personnel.
- Designate/ Assign a quality manager (doctor, nurse or administrator).
- Determine the need for full time quality/safety manager.
- Give protected time to manage quality and safety programme.

Note: The size and complexity of hospital determines number of quality/safety managers and periodicity and composition of quality and safety committees.



Revisions and Updation

Protocols should be continuously revised based on the:

- Annual plan on quality improvement and safety.
- Areas of concern.
- Audit schedules.
- Plan for internal audit.
- Key performance indicators with the formulae.
- Method of data collection, person responsible and presenting it to the committees.
- Scope of committees.
- Training calendar.

Note: Both the quality/safety manager and the quality and safety committee should ensure proper document control.



What should be documented in the apex manual?

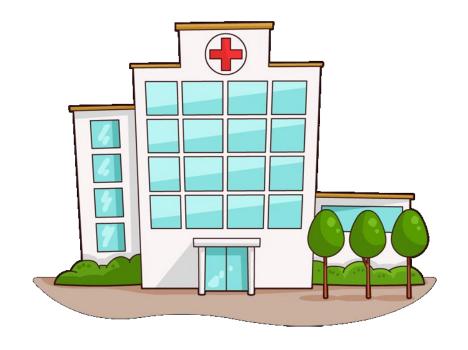
- History of the hospital.
- Ownership details.
- Mission, vision and quality policy.
- Relevant aspects of quality and safety programme.
- Revised protocols.



Note: The updated apex manual should be circulated to the stakeholders.

CQI 2 - The organisation identifies key indicators to monitor the structures, processes and outcomes which are used as tools for continual improvement.

- CQI 2a: Organisation shall identify the appropriate key performance indicators in both clinical and managerial areas.
- CQI 2b: These indicators shall be monitored.



Key Performance Indicators (KPI)

KPI is a type of performance measurement that helps you understand how your organisation or department is performing.



Donabedian Model

What is it?

It is a model that provides framework for evaluating the quality of health care.

What to measure?

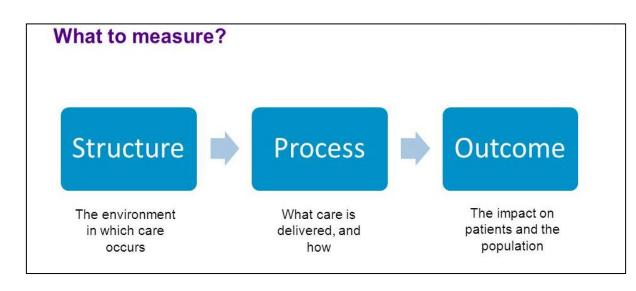
According to this model, the quality of health care can be measured using three

categories:

Structure: Platform and people.

Process: The way things are done.

Outcome: Expected, unexpected.



Structure (Platform and People)

Resources required

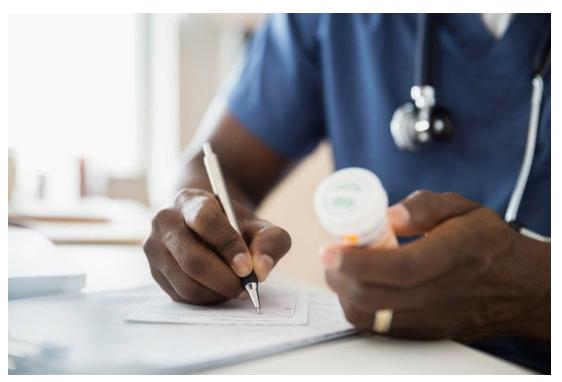
- Numbers of staff and skill mix.
- Organisational arrangements.
- Provision of equipment.
- Physical space.



Process (The Way Things Are Done)

Actions and decisions taken by practitioners together with users

- Communication.
- Assessment.
- Education.
- Investigations.
- Prescribing.
- Surgical and other therapeutic interventions.
- Evaluation.
- Documentation.



Outcome(Expected, Unexpected)

Measures of the physical or behavioural response

- Intervention.
- Reported health status.
- Level of knowledge.
- Satisfaction.



Pre-requisites for Selecting an Indicator

- Is the indicator important for the organisation?
- By measuring the indicator, are we going to improve quality?
- Who is the end-user of the indicator?
- Who should collect the data?
- How often it should be collected?
- In what format it should be collected?
- What is the formula to be used?

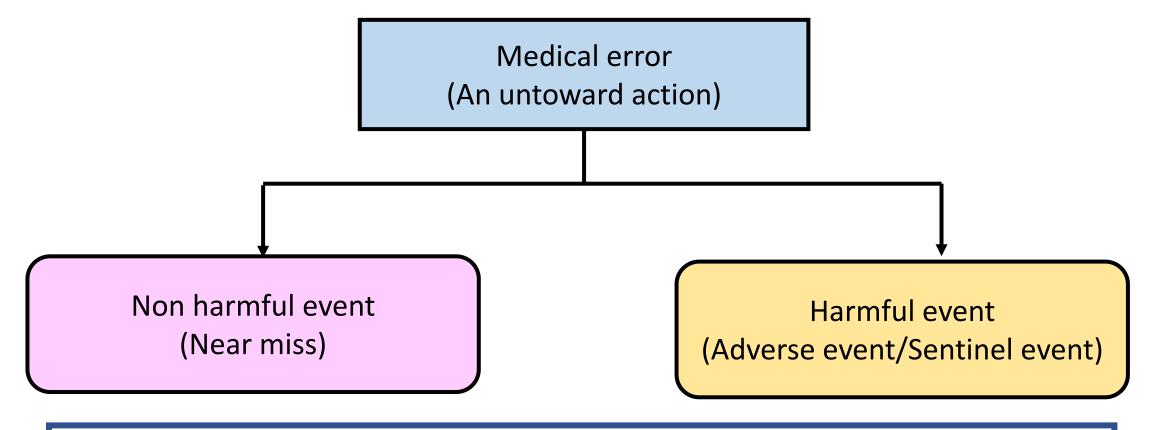


Data Collection

- How to ensure that the data is clean?
- Who should present the data?
- To whom should the data be presented?



Medical Error



Note: Any medical error is an incident and it should be reported to the quality team.



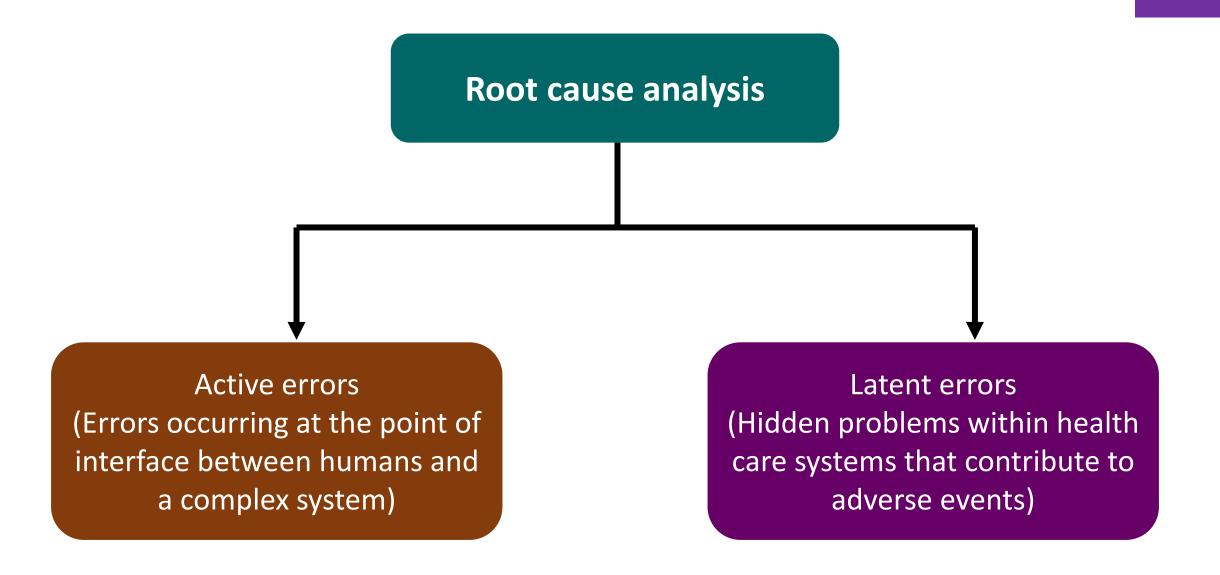
Preventive Action

It is the action to eliminate the cause of a potential non-conformity or other undesirable potential situation.

Corrective Action

It is the action to eliminate the cause of a detected non-conformity or other undesirable situation.

Note: There can be more than one cause for a potential non-conformity. And, preventive action is taken to prevent occurrence whereas corrective action is taken to prevent recurrence.





Example

After bath, a baby develops a scald. Medical error Before giving the bath, the temperature of the water **Preventive action** should be checked with a bath thermometer. The incident should be reported to the quality team. **Root cause analysis** And, the quality team should analyse what went wrong. **Corrective action** The baby should be taken to the doctor.

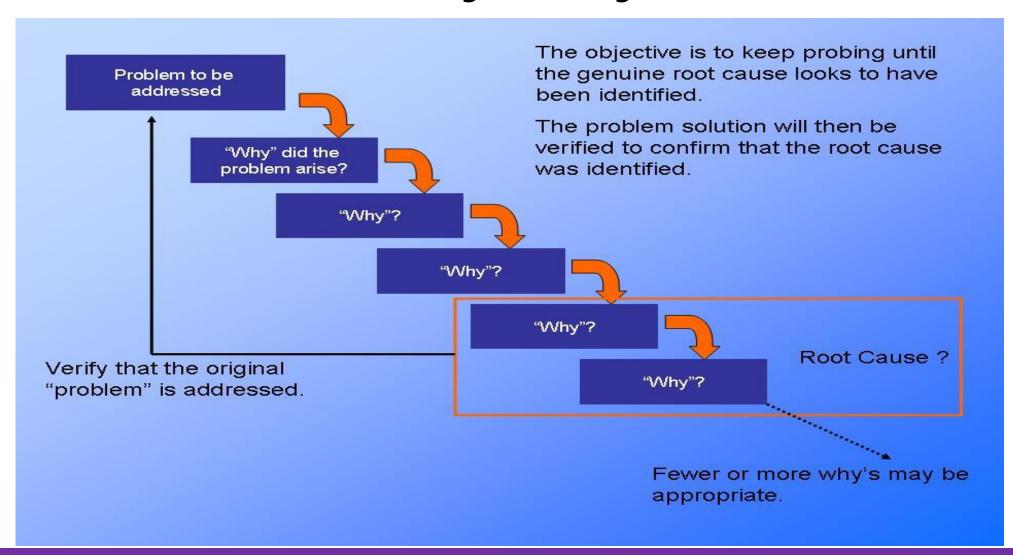


Types of Root Cause Analysis

- 5 Whys analysis
- Fish-bone analysis
- Pareto analysis



5 Whys Analysis





Example of 5 Whys Analysis

Incident: Caught speeding

Why? Late for work.

Why? Got up late.

Why? Alarm clock didn't work.

Why? Dead batteries.

Why? Forgot to replace them.

Preventive action

- Ask a friend or relative to wake you up.
- Replace the batteries before they expire.

Corrective action

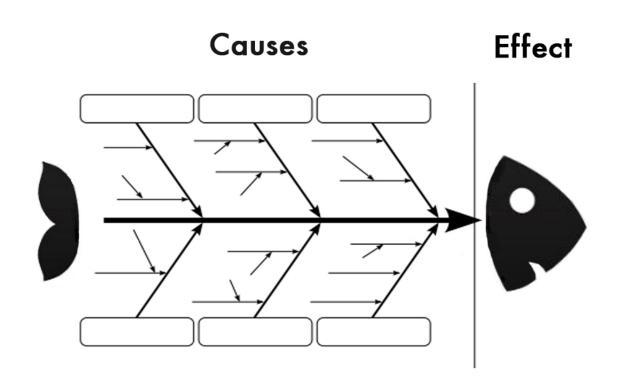
Drive safely and never speed even if you are late.



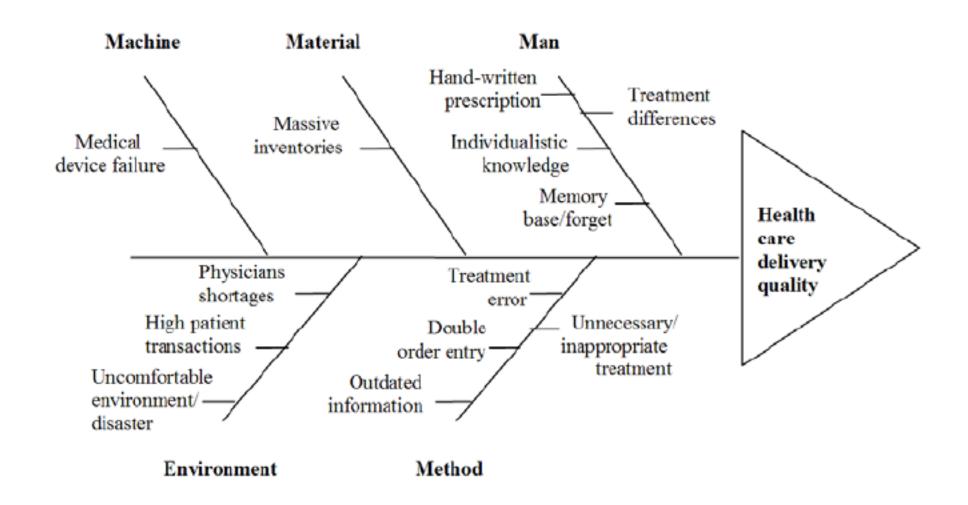
Fish-bone or Ishikawa Diagram

It is used to break down the root causes of an incident.

In this technique, the causes of an incident are written on the either side of fish bone (diagonal lines) and the defect is written on the fish's head (right side).



Example of Fish-bone or Ishikawa diagram





Pareto Analysis

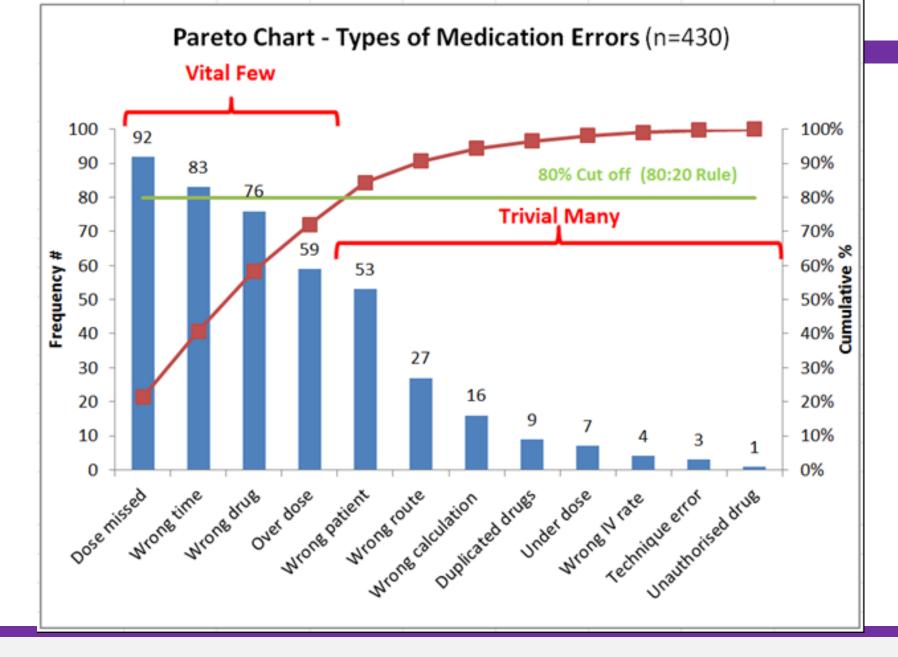
It is used to measure the incidence of medication errors as a graph.

This helps in targeting corrective and preventive actions. CAPA should be first done for the cases(incidents) that lead to more than 80% of medication errors.

Pareto rule: 80% of errors is due to 20% of the causes.



Example of Pareto Analysis





How to implement CQI2?

- Identify relevant KPIs
- 5 clinical indicators.
- 5 managerial indicators.
- Formulae to calculate.

Plan

Do

- Monitor KPIs.
- Validate data.
- Collect feedback.

Act

Study

- Recommend changes.
- Implement follow up.

- Analyse data.
- Perform CAPA.



Examples of Clinical Indicators	
Mortality rate.	Return to ICU within 48 hours.
Catheter associated urinary tract infection (CAUTI).	Percentage of lower segment Caesarean section (LSCS) versus normal vaginal delivery.
Surgical site infections (SSIs).	Adverse anaesthesia events, medication errors.
Errors in reporting lab investigations/ radiology reports.	Medication errors.
Re-do in labs/ radiology.	Transfusion reactions.
Surgical re-exploration.	Wastage of blood.
Return to emergency within 72 hours with similar complaints.	Blood component usage.
Re-intubations.	



Examples of Managerial Indicators	
OPD waiting time.	Average length of stay.
Waiting time for procedures.	OT and IT utilisation.
Patient satisfaction IP/ OP.	Critical equipment down time.
Staff attrition.	Time for discharge.
Errors in billing.	Employee satisfaction index.
Stock out of drugs.	Percentage of missing records.
Number of new patients registering vs repeat patients.	Percentage of records without discharge summary.
Patient falls.	Needle stick injuries.
Bed occupancy rate.	

Note: Clinical and managerial indicators will be covered in a separate presentation.



Clinical indicators



Incidence of Falls

Definition

Patient safety defines fall as "Loss of upright position that results in landing on the floor, ground or an object or furniture or a sudden, uncontrolled, unintentional, non-purposeful, downward displacement of the body to the floor/ground or hitting another object like a chair or stair".

Frequency: Monthly.

Number of falls

Formula: X 100

Number of discharges and deaths

Mortality Rate

Frequency: Monthly.

Number of deaths

Formula:

X 100

Number of discharges and deaths



Return to Emergency within 72 hours with Similar Presenting Complaints

Frequency: Monthly.

Number of returns to emergency within 72 hours with similar presenting complaints

Formula:

X 100

Number of patients who have come to the ER



Percentage of Unplanned Returns to OT

Definition: All returns to the operation theatres.

Frequency: Monthly.

Number of unplanned return to OT

Formula:

Number of patients opera

Number of patients operated



X 100

Percentage of Transfusion Reactions

Definition: All returns to the operation theatres.

Frequency: Monthly.

Formula:

Number of transfusion reactions

Number of transfusions

X 100



Managerial indicators



Outpatient Satisfaction Index

Definition: Patient satisfaction is defined in terms of the degree to which the patient's expectations are fulfilled. It is an expression of the gap between the expected and perceived characteristics of a service.

Frequency: Monthly

Score achieved

Formula: X 100

Maximum possible score



Inpatient Satisfaction Index

Definition: Patient satisfaction is defined in terms of the degree to which the patient's expectations are fulfilled. It is an expression of the gap between the expected and perceived characteristics of a service.

Frequency: Monthly

Score achieved

Formula: X 100

Maximum possible score



Average Length of Stay (ALOS)

Definition: Length of stay (LOS) is term used to measure the duration of a single episode of hospitalisation. Inpatient days are calculated by subtracting days of admission from day of discharge. However, person entering and leaving a hospital on the same day have a length to stay of one.

Frequency: Monthly

Number of discharge in that month



OT Utilisation Rate

Definition: OT utilisation is defined as the quotients of hours of OT time actually used during elective resource hours and total number of elective resource hours available for use.

Frequency: Monthly

OT utilisation time on hours

Formula: X 100

Resource hours



Percentage of Medical Record not Having Discharge Summary

Frequency: Monthly

Number of medical records not having discharge summary

Formula:

Number of discharge and deaths

X 100



What should be documented in the apex manual?

- List of quality indicators.
- Methodology of capturing the data.
- Formulae for calculation of KPIs.
- Details of the person who captures, analyses and presents the data.
- Details of the person who monitors changes.



Any Questions







THANK YOU!

Data Collection

- How to ensure that the data is clean?
- Who should present the data?
- To whom should the data be presented?



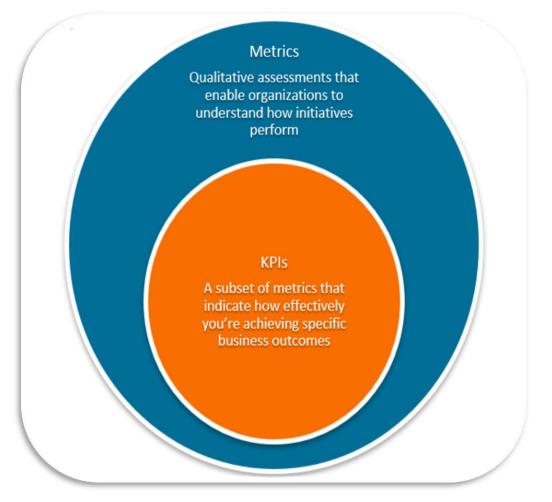
Why is measuring important?



- "You can't manage what you can't measure"
- Olear communication in an understandable way is key to reach target audiences.
- Targets can only be defined based on clear measurement systems and robust indicators.
- Policy makers demand solid information to design appropriate policy responses.
- (Self-) evaluation and (cyclical) re-design of policies



A Key (important) **Performance Indicator** is a measurable value that demonstrates how effectively is an organization is achieving a key objective



What are KPIs?





KPIs represent a set of measures - most critical for the current and future success of the organization.



KPIs measure performance by showing **trends**

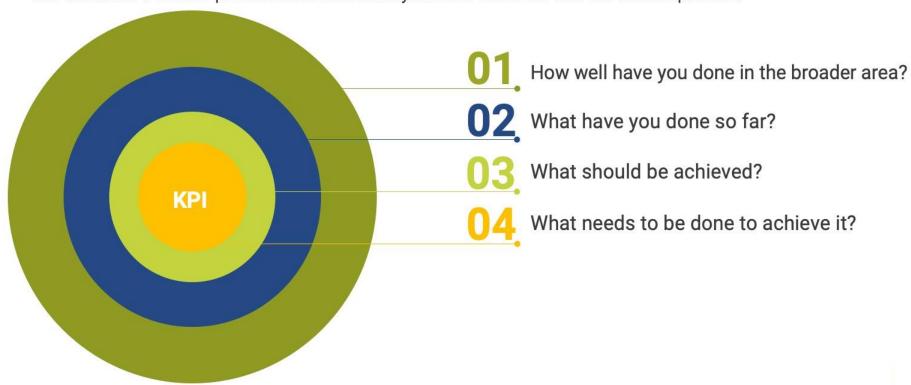


KPIs also measure performance by comparing results against standards

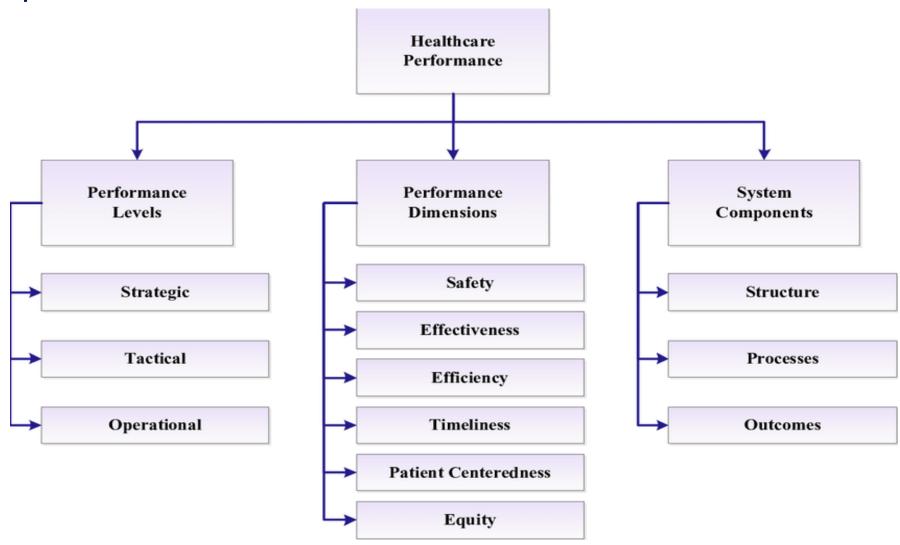
Four components of Key Performance Indicators (KPIs)

Coming up with a KPI can be made easier by asking concrete questions about context, past objectives, ideal scenarios and the steps needed to achieve them.

This should be a holistic process and involve everyone who has to do with the area in question.



KPIs help to assess all aspects of performance



4. KPI Categories

S/N	KPIs Categories	Value
A	Patient Access Indicators	Reflect healthcare services accessibility
В	Inpatient Utilization Indicators	Reflect inpatient performance
C	Outpatient Utilization Indicators	Reflect outpatient performance
D	OR Utilization Indicators	Reflect operating room utilization and performance
E	ER Utilization Indicators	Reflect emergency department performance
F	Generic Utilization Indicators	Reflect the performance of some major services
G	Patient Safety Indicators	Reflect the safety of diagnosis, treatment and procedures
Н	Infection Control Indicators	Reflects quality of care
I	Documentation Compliance Indicators	Reflects compliance with documentation policies
J	Patient Satisfaction Indicators	Reflects patient centeredness



a. Pre-requisites for before selecting an Indicator

Is the indicator important for the organization?

By measuring the indicator, are we going to improve quality?

Who is the enduser of the indicator?

Who should collect the data?

How often it should be collected?

In what format it should be collected? What formula to use?

b. Characteristics of good KPIs



C.Standardize Data Reporting Formats for KPIs

Appendix 1

This form is to be filled by the doctor who makes a clinical diagnosis of post- operative infectious endophthalmitis occurring with of intraocular surgery.

2. Patients with a recent penetrating eye injury/those with an intraocular foreign body should be excluded.

Incident Report Of Patients With Post-Operative Infectious Endophthalmitis

- 3. The completed form is to be submitted to the department NED coordinator for notification to the CSR, if cataract surgery and M Service Census. ONLY OCCURRENCE OF THE EVENT WILL BE RECORDED in the CSR and Monthly Service Census database purposes of calculating Key Performance Indicators in your center.
- 4. The subsequent information in this form is for the purposes of internal audit in YOUR OWN CENTER. You may opt to modify the it is only a suggested format.

,93				
A. COMPULSORY NOTIFICATION DATA	Hypopyon			
Date of diagnosis:	Vitreous haze			
Patient Name:	Vitreous opacity			
MRN:	Dull Red reflex			
	Absent red reflex			
Reporting Doctor:	Others			
B. FORMAT FOR DEPARTMENT AUDIT	Predisposing factors:			
Intraocular surgery details :	Patient factor:			
1. Operation type: LA / GA:				
2. Surgeon / assistant names :	2. Operative factor:			
3. Duration of surgery (minutes) :	Environmental factor:			
4. Operation room No :				
5. Operative events of significance:	Prophylactic measures taken:			
Symptoms:	Pre-op:			
Decreased vision				
Ocular pain	Post on :			
Eyelid swelling	Post- op :			
Photophobia	Investigation Outcome			
Tearing	Investigation Outcomes Vitreous Tap Results:			
Eye discharge	Macroscopic appearance			
Others	Gram stain Culture and sensitivity			
Signs:	Culture and sensitivity			
Visual acuity at presentation: RE LE	Aqueous Tap Results:			
Conjunctival injection	Macroscopic appearance Gram stain			
Corneal haziness	Culture and sensitivity			
Corneal infiltrate	B scan findings:			
AC fibrin				
AC flare	Management Details:			

KPI Reporting Formats

Key Performance Medical Program			KPI 1 DEPARTMENT: Monthly Return & Monthly Trending					
Hospital:								
Year:	Performance Measure	ement for	DEPART	MENTS:				
Scope :	MONTHLY RETURN	and MOI	NTHLY TR	ENDING				
	This form is for Departments (Medical, Surgical etc.) to report and maintain a record of their performance in: DISCIPLINE-SPECIFIC Indicators (e.g. Med., Surg., O&G etc.)							
Departments are to make <u>at least 2 copies</u> of this form: one for a record of their department trending and another, to send to the Hospital QA Coordinator (Monthly Return) for recording monthly Hospital performance for the particular Department in the KPI 2 form								
Department:								
Indicator:								
Standard								
Numerator (N)								
Denominator (D)								
	rator values must be LE ENTINEL EVENTS, FIL							
Month	Numerator (N)	Denomin		RATE (N / D)				
January								
February								
March								
April								
May								
June								
Sub-total (Jan. – June)								
July								
August								
September								
October								
November								
December								
Sub-total (July – Dec)								
GRAND TOTAL January-December)							

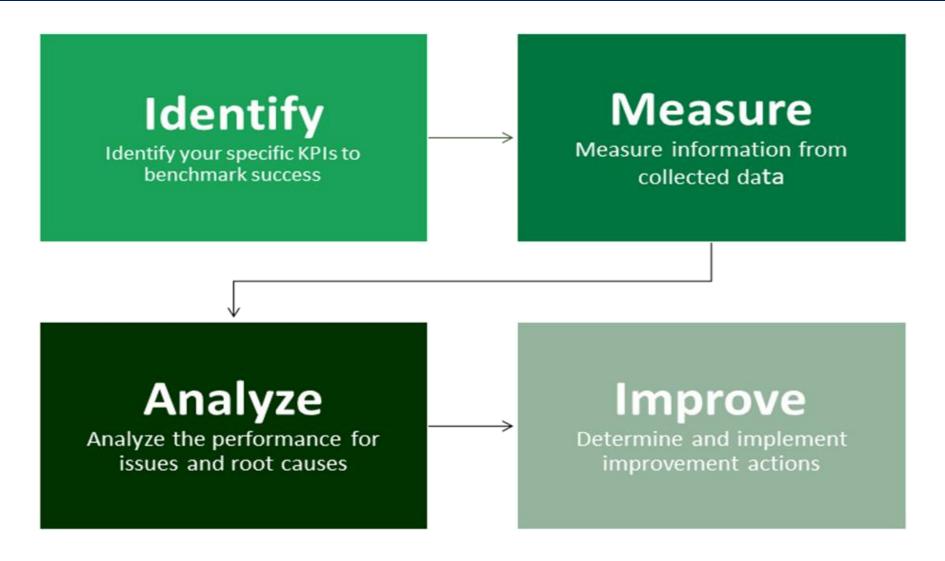
D. PRESENTING KPIs DURING ASSESSMENT

NO	INDICATOR	DIMENSION	STANDARD	HOSPITAL REPORTING FREQUENCY
1	Percentage of patients with waiting time of ≤90 minutes to see doctor at Ophthalmology Clinic	Customer Centeredness	≥ 90%	3 Monthly
2	Percentage of patients without ocular co-morbidity obtained visual acuity of 6/12 or better within (≤) 3 months following cataract surgery	Clinical Effectiveness	≥ 90%	3 Monthly
3	Percentage of patients developed Infectious Endophthalmitis following cataract surgery	Safety	≤ 0.2%	Yearly

SAMPLE DOCUMENTATION OF A KPI

Indicator 1	1	Departmental			
Discipline		Ophthalmology			
Name of indicator	-3	Percentage of patients with waiting time of ≤90 minutes to see doctor at			
		Ophthalmology Clinic			
Dimension of Quality		Customer centeredness			
Rationale		 Patient-centred services must give priority to prompt attention to patier needs by reducing waiting times for consultation. It is the aim of the MOH to reduce the waiting times to a minimum in line wit the Circular of the Director-General of Health Malaysia No. 6/2004 – Steps to Reduce the Waiting Time in MOH Facilities. 			
Definition of Terms		In the process of care at the Ophthalmology clinic, the patient is first attended by an Allied Health Personnel for vision check before being seen by a doctor and some may require procedures such as refraction, visual field, Hess chart, Optical Coherent Tomography and pupillary dilatation. Waiting time: The time taken for a patient to be attended by the doctor after any procedures needed by the patients and not from the time of registration			
Criteria		Inclusion: 1. All patients attending the Ophthalmology clinic with appointment Exclusion: 1. Eye casualty clinic 2. Patients who request to see a specific doctor. 3. Pre-operative (pre-clerking) clinic 4. Laser procedures and minor surgery			
Type of indicator		Rate-based process indicator			
Numerator		Number of patients seen within ≤90 minutes in a month			
Denominator		Number of patients attending Ophthalmology Clinic in the corresponding months			
Formula		Numerator x 100% Denominator			
Standard		≥ 90%			
Data Collection		 Where: Data will be collected from Ophthalmology clinic. Who: Data will be collected by Officer/ Paramedic/ Nurse in-charge (indicator co-ordinator) of the department/ unit. How frequent: 3 monthly data collection. Who should verify: Data will be verified by Head of Department or any assigned KPI coordinator How to collect: 1 clinic day in a week; 4 clinic days in a month. (25% sampling) 			
Remarks	:				

E. KPI PROCESS – IDENTIFY, MEASURE, ANALYSE, IMPROVE



F. Shortfall in Quality - reporting format

**Note:

For hospitals designated as "SIQ" for an indicator for either of the two 6-monthly reporting periods, A QUALITY IMPROVEMENT STUDY is undertaken whereby **an analysis of the reasons for the SIQ are determined**i.e. whether it was a true quality problem or was it due to other factors that were NOT related to quality of care, e.g. whether case-mix or case severity affected the performance etc.

The findings of the SIQ investigation are summarized in this form.

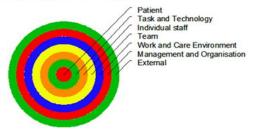
Period: (JANUARY to JUNE OR JULY to DEC.) (circle whichever is appropriate)			
Year :			
HOSPITAL :			
Department:			
Indicator:			
Standard :			
Performance A	chieved:		
Is this a TRUE S	SIQ?	Yes / I	No

Annex A

SIQ contributing factors

The factors that contribute to the SIQ (the 'contributing factors') should be identified.

- Patient factors patients themselves can contribute to an incident by virtue of their clinical condition, personal characteristics or circumstances, and inter-personal relationships.
- Task and technology factors the care tasks (e.g. as defined in care pathways or
 protocols) and technology involved, including medicines, can contribute to an incident.
- Individual staff factors staff can contribute to an incident.
- Team factors team aspects such as communication, supervision and leadership can contribute to an incident.
- Work and care environment factors the working or care environment might contain deficiencies that can contribute to an incident.
- Management and organisational factors shortcomings in the management and organisation of a hospital or department can contribute to an incident.
- External factors finally, factors external to the organisation can contribute to the incident, such as regulatory or economic issues.



Structural factors:

e.g. insufficient staffing, facilities, environment of care, equipment, training, credentialing etc.

Process factors:

e.g. skill of staff concerned, non-adherence to CPG / care plan, No or inadequate SOP, clinical pathways, etc.

Any ACTIONS recommended improving the situation?

If yes, what are they? Examples include:

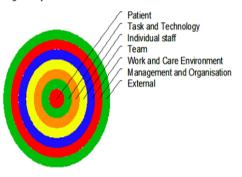
- Policy changes
- Procedural changes
- 3. Equipment (e.g. Changes in type of equipment used, installation of additional facilities)
- 4. Staffing Training, education, numbers, redeployment, credentialing etc.
- Developing new systems of care
- 6. Development of organization-specific clinical indicators
- 7. Re-organisation of appointment systems
- Review of treatment protocols e.g. for prevention of DVT, wound infection etc.
- Introduction of clinical pathways
- Increased liaison with community services
- Developing specific patient information packages
- 12. Initiation of awareness programmes
- 13. Discharge planning
- 14. Others (Please state)

G. Shortfall in Quality – Root cause analysis - Contributing factors

SIQ contributing factors

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Contributory factors framework and codes

			Code
Patient	Clinical	Known risks associated with treatment	
Factors		Pre-existing co-morbidity	102
		Complexity of condition	103
		Seriousness of condition	104
		Treatability of condition	105
		Difficulty in diagnosis	106
		Clinical/health history	107
		Inexplicable/Unknown factors	108
		Other	109
	Personal	Personality	110
		Physical state (e.g. malnourished, poor sleep pattern, etc.)	111
		Cultural background	112
		Religious beliefs	113
		Language and communication	114
		Social and family circumstances	115
		External support	116
		Stress	117
		Disclosure of health history	118
		Other	119
	Inter-	Patient-staff relationship	120
	personal	Patient-patient relationship	121

H. Visualisation and presentation

Set Red-Yellow-Green success criteria for each KPI.

Green is your goal. Create a plan to achieve your Green goal.

Red is an unacceptable result. It is the definition of failure.

Yellow is the warning zone between Green and Red.

the right Leading
Indicators will help
guide your day-to-day
operations, inform
your decision making
and allow you to make
adjustments mid-stream
to positively impact your



OPERATIONS

- · Patient Wait Time
- Average Number of Patient Rooms in Use at One Time
- · Staff-to-Patient Ratio
- · Bed or Room Turnover
- Communication between Primary Care Physician, Proceduralist, & Patient

FINANCE

- Average Insurance Claim Processing Time & Cost
- Claims Denial Rate
- Average Treatment Charge
- Permanent Employee Wages

KPIs in Ophthalmology Practice

INTERNAL

- Trainings Per Department
- Number of Mistake Events
- Patient Confidentiality
- Number of Partnerships with Advocacy Groups

PUBLIC HEALTH

- Childhood Immunizations
- Number of Educational Programs
- Number of Preterm Births

EMERGENCY

- Patient Wait Times by Process Step
- Time Between Symptom Onset & Hospitalization
- Number of Visitors (Patients)
 Who Leave Without Being See

CARE

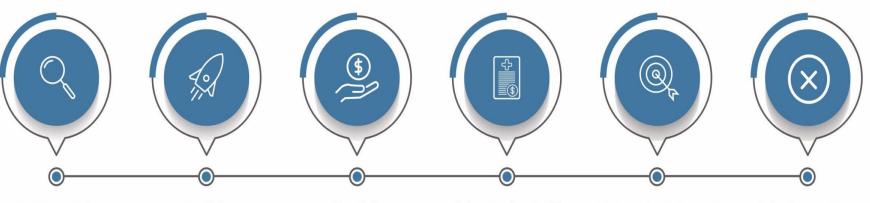
- Medication Errors
- · Patient Vs Staff Ratio
- Patient Follow-Up

COMMUNICATIONS

- Number of Media Mentions
- Overall Patient Satisfaction
- Percentage of Patients Who Found Paperwork to Be "Clearly Written Straightforward"

Healthcare & Insurance

KEY PERFORMANCE INDICATOR OF CASHLESS INSURANCE PROCESS



First Time Right Submission

Data entered into the forms at first instance is correct.

Footfalls

This report allows hospitals to estimate the expected business volume every month.

Shortfalls

The shortfall between the claim amount and the settled amount, when the settle amount is lesser.

Claims Ageing Profile

Calculation of average settlement turnaround time per case.

Claim Submission TAT

The total time taken in each case, after the discharge is approved.

Rejection and Not Utilized Case Rate

Allows healthcare provider to know the volume of business lost with real-time reports.

