Dr. Zohair Alaseri, MD
FRCPc, Emergency Medicine
FRCPc, Critical Care Medicine
Chairman, Department of Emergency Medicine
Intensivst and Emergency Medicine Consultant
King Saud University Hospitals, Riyadh, KSA

- an organizational process
- measures outcomes and needs of customers and forms a continuous cycle.

HISTORICAL POINTS

The concept of CQI originated in the industrial world and was then "imported" into hospital management practices then into bedside care practices.

Main attributes are

- system-oriented
- empowerment of the work force
- "scientific" data gathering
- analysis and on-going evaluation of change.

- Quality Assurance
- a process of outcome measurement.
- Utilization Management
- a measure of efficiency
- Risk Management
- a process of minimization of risk of adverse events.

The process is customer-driven (Patient Centered)



"universal breakthroughs"

breakthrough in attitude (the organization must challenge itself)

breakthrough in organization (unifying process with a sense of purpose)

breakthrough in knowledge and in cultural patterns

breakthrough in results.



The "Juran trilogy":

- Quality planning
- Quality control
- Quality improvement.



Rate measurements. (for example, we now consider that a mortality rate of "X" is acceptable for a specific procedure etc.)



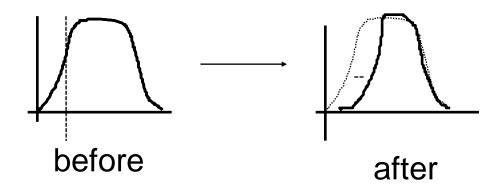
Global and continuous improvement and no longer a question of eliminating bad outcome



PUTTING IT TOGETHER

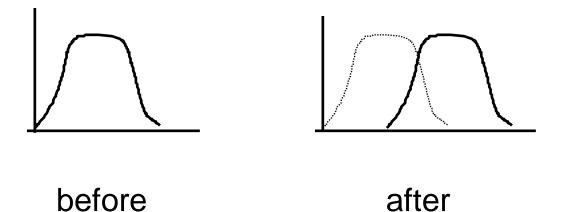
- "Tell me and I will forget
- show me and I may remember
- Involve me and I will understand





Traditional methods of quality control: (Eliminate the "bad apples")

CQI philosophy (Improve the mean)



M&M

- a tool to improve outcome and standardize procedures
- a peer-review process
- a rate based
- identifies only "outlyers" (the "bad apples") and helped focus efforts mainly at that level Only.

M&M

Concepts

Outcomes depended not on specific individuals but on the system.

The differences between traditional quality assurance and CQI:

Traditional Q.A.

- C.Q.I.
- emphasizes outlyers and individuals
- process and system focused
- motivation is management goals
- motivation is serving the customer

top down approach

bottom up

enforcement mentality(fear)

empowerment (pride)

- •intuitive problem solving
- scientific method

standard-driven (inspection) continuous improvement

- reactive (looks at cause)
- •pro-active (looks at source)

The process

Four essential phases

Definition and organization:

in this phase, a problem is identified through a number of processes based on a clinical indicator.

Finally, a team is formed



The process

Four essential phases

Diagnostic Journey :

The initial task of the team is to analyze the symptoms and formulate theories as to the causes.



The process

Four essential phases

 Understand variation. This is done in brainstorming sessions and includes usually the use of flow charts and of fishbone diagrams. Define the standard (benchmarking) Once hypotheses have been generated, appropriate data (usually through flow sheets) is gathered and collated to allow the second part of the team's work to be done.

The process

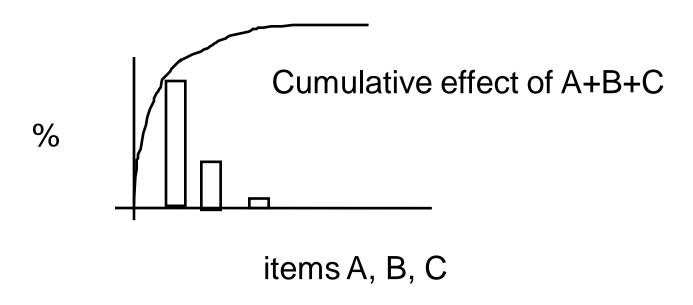
Four essential phases

 The data can be presented in the form of pie charts, scatter graphs but is best put into a Pareto diagram. The Pareto principle states that in nay group of items that contribute to an effect, a relative few of the contributors will account for the majority of the effect.

The process

Four essential phases

Pareto diagram:



The process

Four essential phases

Remedial Journey:

Involves developing alternative solutions, design controls and implementation of solutions.



The process

Four essential phases

Holding gains:

re-check performance, monitor control system, address resistance



PRINCIPLES OF QUALITY MANAGEMENT:

FOCUS PDCA

The process to achieve the goal of the QM:

- Find a process improvement opportunity
- Organize a team who understands the process
- Clarify the current knowledge of the process
- Uncover the root cause of variation and poor quality
- Start the PDCA cycle.
- Plan the process of improvement
- Do the improvement, data collection and analysis
- Check the results and lessons learned
- Act by adopting or abandoning the change

similarities between TQM and clinica science:

test theories with facts no role for blame understand variation encourage experimentation rely on sound measurement

The Quality Management Committee will achieve this goal through:

- Education
- IPP development
- Formulation of minimum standards
- Communication of quality issues within the Institute
- Support for benchmarking processes
- Liaison with other bodies (including Institute QM & Academic and Training Affairs)
- Integration of quality management into ED training curriculum
- Inclusion of quality management in Emergency Board Meeting agenda
- Support for development of standardized national tools for use in quality management in emergency medicine
- Encouragement for the development of quality culture
- Encouragement for the inclusion of health care providers, patients and/or their family members in service provision review and planning

 a relatively new to achieve dramatic and continuous improvement in the way they do things.

 Just as there is no "one right way" to order supplies, register students, or conduct a classroom session, there is no one right way to benchmark

- Benchmarking involves adapting and implementing "the best of the best," wherever that best is.
- usually conducted by teams, for identifying and adapting best-in-class practices.



It is hard work.
 it is not extra work
 it becomes the way an organization does its work.



because of it focuses on

- 1. excellence transforms an organization's culture
- 2. and stimulates creativity

 The purpose of benchmarking is to expose managers to new ways of doing things in order to spark creativity, not to create efficient copy cats

 In fact, benchmarking does not necessarily provide a best system to copy and adopt.



It reveals and suggests an amalgam of different approaches and ideas to improve a process.

- A benchmarking partner is never going to have the exact same problem or resources.
- You look at their system, see what works and why it works, and apply pieces of it to your own situation

The benchmarking team took six steps:

- Representatives of the same department from different hospitals formed a team
- Each team chose an administrative or financial function that could be improved
- Each team member analyzed the specific function at his or her own hospital

- Each team member compared his hospital's performance with the other hospitals on the team
- Each team compared its collective performance with that of comparable external organizations, including but not limited to, other hospitals
- Team members then adapted and implemented the best observed practices in their own institutions

In ED

Six key steps in the patient's movement through the department:

- Patient arrives
- First contact with staff
- Triage (initial determination of patient's need)
- Registration
- Patient enters treatment room
- Physician begins treatment

In ED

 After measuring the average amount of time it took for patients to proceed from one step to another, the benchmarking team focused on performance differences and analyzed what caused the differences.

Strong triage systems

 Standardized nursing protocols in triage that allow nurses to order certain diagnostic tests before the physician sees the patient

 The presence of ancillary services near or within the emergency department, including dedicated x-ray technicians and equipment

 Patient tracking systems that allow staff to pinpoint the status of a patient and his or her chart at any time

 A mobile registration system that allows patients to register wherever they are in the emergency department

Indicators are red flags which may prompt the initiation of a project.

They are either

- Incident-based (in the same way M+M are conducted)
- Rate-based (which requires chart reviews).



Our Members Deliver Quality Health Care to Patients in the Emergency Department Day and Night

- Thresholds and action points for performance levels of each indicators are required.
- Specific definition of each indicator and its components is requires.

- Access
- Safety
- Acceptability
- Effectiveness
- Efficiency
- Continuity

Safety:

A system property with the goal of being as safe in health care as in our homes.

• Effectiveness:

Avoiding overuse of ineffective care and underuse of effective care.

• Patient-centeredness:

Honoring the patient and respecting choice

• <u>Timeliness</u>:

Less waiting for both patients and those who give care.



Timeliness:



In an emergency, seconds matter, and access to experienced healthcare professionals and the latest medical technology can literally mean the difference between life and death.

Timeliness:

CTAS CATEGORY	TREATMENT ACUITY (Maximum waiting time)	PERFORMANCE INDICATOR THRESHOLD
1	Immediate	100%
2	10 minutes	80%
3	30 minutes	75%
4	60 minutes	70%
5	120 minutes	70%

• Efficiency:

Reducing waste get the best value of the money spent.

Clinical indicators		
Quality Dimension	Indicator	
Access	Waiting Time Access Block	
Safety	Lost time to work related injury Body fluid exposures Patient falls Violent patient	
Acceptability	Patient satisfaction survey ratings Written complaint rate	
Effectiveness	Admission rate by triage category Time to Thrombolysis and PCI in STEMI Time to Thrombolysis in Stroke Unplanned representation within 48 hours	
Efficiency	Waiting time by CTAS	
Continuity	Provision of written health information for sentinel conditions: Asthma Wound Care Head trauma Gastroenteritis	

Documentation

Thank You

Risk Management

Activities to include:

- Risk avoidance
- Sentinel event monitoring
- Adverse event management

ED should actively address risk exposure and management of adverse events through systems of monitoring and analysis, to inform improvement strategies.

Consumer participation

- Effective community and consumer feedback and participation in health care and health systems is a right of community members
- have significant impacts on improving the safety and quality of healthcare
- improving health outcomes
- ensuring more equitable health service provision
- enhancing management practices.

Complaint analysis and resolution

 Responsive and rapid systems for complaint analysis and resolution contribute to improvement strategies and patient satisfaction with emergency services.

Clinical audit and review (i.e. M&M Rounds)

- Review of clinical cases a collaborative, constructive peer environment fosters teamwork, communication and group problem solving and education.
- A focus on no-blame approaches, and optimizing systems will achieve the best results.

Occupational Health and Safety

 The ED should participate in internal occupational health and safety systems.



To optimize the environmental health for staff and patients and other users of the department.

Evidence-Based Medicine Education

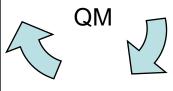
Medical Staff

Defining the standard of care (CMS)

Resident/Fellows

Didactic sessions, field experience & projects





Nursing

Changing Practice and enhancing competency (mangent designation)

Quality management Directors

Communicating data driven information

Clinical Task Forces

Developing guidelines Identifying best practices