Basic Concepts of Quality Management

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What is Management?
Management may be defined as the achievement of organizational goals in an effective and efficient manner through:

► planning,
► organizing,
► Leading, and
► Controlling organizational resources.
Definition of Management.

1. **Planning:**
   - Defining the **goals** of the organization
   - Distribution the **tasks**
   - Use the **resources** needed to attain them.
Definition of Management.

2. **Organizing:**

- Assignment of tasks,
- Grouping of tasks into departments,
- Allocation of resources to department.
3. **Leading:**

- **Motivate** Staff to achieve the organizational goals.

- Create shared **cultures & values** between staff.

- **Communicating** goals to staff & employees,

- Creating the **environment** of the employees to perform high level.
Definition of Management.

4. **Controlling:**
   - Monitoring employees’ activities
   - Determine whether the organization is on **target** goals/ making appropriate **corrections** if necessary
   - **Empowerment and trust of employees...**
     - less emphasis on top-down control &
     - more on training employees to monitor and correct themselves
Management.

The manager’s responsibility is to coordinate resources:

- Human,
- Financial,
- Raw materials...etc

in an effective and efficient manner to accomplish the Institution goals.
Management Skills.

- Manager’s skills require a combination of conceptual, human and technical skills.

- Application of these skills changes as managers move up in organization.

- The degree of each skill needed will be depending on the nature of the Organization/Institute.
Why Thinking Thinking Thinking Quality?
Due to the high competition, Higher Education Institutions/health are challenged to provide high-quality (cost effective) and to document continuously improvement for education.

Economic constraints for Higher education/health support
What is Quality?

- There are many short definitions of quality:
  - Fitness for use.
  - Meeting customer expectations.
  - Doing the right things right.
  - Two dimensions.
    - Product features.
    - Freedom from deficiencies.
TQM represents a shift from traditional approaches to quality

VI. TOTAL QUALITY MANAGEMENT
- Involvement of All: employees, customers, suppliers;
- Empowered of employees;
- Teamwork;
- Quality strategy based on a common MISSION and VISION
- Process oriented.

III. QUALITY ASSURANCE
- Quality systems (ISO)
- Quality policy
- Quality planning
- Quality costing
- Problem solving

II. QUALITY CONTROL
- Quality standards SPC
- Process performance
- Treating quality problems

I. INSPECTION
- Error detection
- Rectification
Quality

The degree for fulfilling the requirements expected by the customer.

- **Quality Control:** product-oriented strategy
- **Quality Assurance:** process-oriented strategy
- **Quality enhancement (CQI):** Never ending process
- **Total quality management:** Deals with all components: product – process – human resources.
“Degree of which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge”
Do we need any improvements/Quality Management Approaches?
Errors in Health

- Administrative error in admission
- Incorrect or untimely diagnosis
- Error or Untimely in medication/ therapy/ other treatment
- Administrative error in the patient record
- Deviation from nursing standard
- Departure from any other professional standard
- Delayed or administrative error in discharge
- Error in any financial statement
- Error in take-home instructions or medication
What can Quality Do?

► Work to be redesigned,

► A problem to be solved,

► A change to be instituted,

► A set of processes to be monitored so that any problem can be detected and resolved.
There is a systematic method for improving the output of the organization → improving the quality of the system.

The Four features of Quality management:

1. Preventing error
2. Detecting problems
3. Solving problems
4. Managening changes (long-term performance in quantitative terms).
The results of Quality Management

Quality is not only the best way to attract and retain customers, but it is the key to:

- Delighted customers
- Empowering employees
- Enhancing revenue, and
- Reducing costs
The Three Processes of Quality Management

► **Quality Planning**
- Used when designing a new service to insure that the right set of service features are delivered to the appropriate customers.

► **Quality Improvement**
- Used to reduce the deficiencies in existing services or processes and reaching a new level of performance.

► **Quality Control**
- Used to ensure that the results of any process is sustained over time.
The Three Processes of Quality Management

- Quality Planning
- Quality Control (During Operations)
- Quality Improvement

Cost of Poor Quality

Original Zone of Quality Control

Sporadic Spike

Chronic Waste

Lessons Learned
Identify a Project

Establish the Project

Diagnose the Cause

Remedy the Cause

Hold the Gains

Replicate Results & Nominate New Projects

Quality Improvement
Nominate projects

A project
“problem scheduled for solution!”

Who identifies projects?

1- Senior management
2- Departments’ management
3- A work group

What are the sources of information?

1- Customers
2- Employees
3- Reviews’ audits
4- Other projects
5- Business plans
Selection of Project

Criteria for selection:

1. Chronicity
2. Significant & Sizable
3. Measure of potential impact
4. Urgency
5. Risk
6. Potential resistance to change
The project !!

► To reduce the expenses of SCU Lab by 15%
<table>
<thead>
<tr>
<th>Item of expenses</th>
<th>Amount in LE</th>
<th>Percent of Total</th>
<th>Cumulative-% of total</th>
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<tbody>
<tr>
<td>Kits and Reagents</td>
<td>233 012</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>Salaries</td>
<td>107 280</td>
<td>21.2</td>
<td>67.2</td>
</tr>
<tr>
<td>Lab-to-lab</td>
<td>50 628</td>
<td>10</td>
<td>77.2</td>
</tr>
<tr>
<td>Replacement of equipment</td>
<td>39 840</td>
<td>7.9</td>
<td>85.1</td>
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<tr>
<td>Communications</td>
<td>24 391</td>
<td>4.8</td>
<td>89.9</td>
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<tr>
<td>Bonus</td>
<td>21 518</td>
<td>4.2</td>
<td>94.1</td>
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<tr>
<td>Printing Materials</td>
<td>13 965</td>
<td>2.8</td>
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<tr>
<td>Electricity</td>
<td>9 600</td>
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<tr>
<td>Maintenance</td>
<td>5 461</td>
<td>1.1</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>505 695</strong></td>
<td><strong>100 %</strong></td>
<td></td>
</tr>
</tbody>
</table>
Pareto Diagram for Lab Expenses:
Management Support for Quality Improvement

Key quality leadership tasks:

- Setting quality goals
- Identifying projects
- Selecting teams
- Supporting project teams:
  - Providing education and training
  - Providing a trained facilitator
  - Approving revision of the project mission
  - Helping with any problems
  - Helping with logistics, such as a meeting site
  - Providing expertise in data analysis and/or survey design
  - Furnishing resources
  - Communicating project results

Monitoring progress:
► Quality is never improved in a general way. It is always improved **project by project**, beginning with the **most significant problems**.

► The deficiency to be attacked must be **clearly specified** & the **expected improvement** can be defined in **measurable terms**.

► The team uncovers the **root cause** (s) of the deficiency.

► Correction of the situation should not simply remove the cause. It should **produce optimal results**.

► A quality improvement team’s work is not finished until there is a procedure in place **to hold the gain**.

► **Replicate the results** by helping others in the Institute with similar problems.
1. Choose Control Subjects
   - Identify objective of the process
   - Select control subject

2. Establish Measurement
   - Develop unit of measure
   - Develop sensor

3. Establish Standards of performance
   - Set targets
   - Develop control methods
   - Set checking criteria

Specific Method
To implement
Quality control at the working level
4. Measure Actual Performance
- Chart indicators
- Develop detailed work instructions

5. Compare to standards
- Check results
- Select appropriate action

Not OK?

6. Take action on the Difference
- Analyze process
- Make contingency plans
- Troubleshoot

Specific Method
To implement
Quality control at
the working level

FEEDBACKLOOP
Thank You