Quality Management Approaches

• Quality Assurance
• Quality Improvement
Quality Assurance

• Uses structure, process or outcomes
• Typically retrospective
• Inspection-based
• Targets special cause of variation
  – Who did not perform up to standards?
• Has a punitive component
• Limited use of statistical thinking
Quality Improvement

• Focuses on system improvement
  – De-emphasizes individual blame
  – Cross-disciplinary team focus

• Applies statistical thinking
  – Data driven

• Considers all causes of variation
QI USES

• Lab turnaround times
• Medication errors by nurses
• Mortality rates following open heart surgery
• Survival from out-of-hospital cardiac arrest
How We Do It:
QUALITY IMPROVEMENT

• Patient and customer focused
• Need to have ownership of processes
  – Need empowerment
  – Until ownership happens, quality will not improve
VISIBLE AND HIDDEN COSTS OF POOR QUALITY

VISIBLE COSTS

HIDDEN COSTS
VISIBLE COSTS

- Customer Complaints
- Insurance Billing Errors
- Excessive Overtime
- Inaccurate or Lost Tests
- Quality Department Expenses
HIDDEN COSTS

• Upset & Frustrated Staff
• Ineffective Communication Among Professionals & Patients
• Bad Reputation
• Patient Dissatisfaction
DEMING’S 14 POINTS FOR QUALITY IMPROVEMENT

Edwards Deming – American industrial engineer who used statistical methods to raise performance in post WW II Japan

14 Points:

1. Create consistency of purpose toward improvement

2. Adopt the new philosophy
DEMING’S POINTS

3. Cease dependence on inspection to achieve quality

4. End the practice of awarding business on the basis of price tag

5. Constantly improve the system of production and service and thus constantly decrease costs
DEMING’S POINTS

6. Institute training on the job
7. Institute leadership
8. Drive out fear
9. Break down barriers between departments
DEMING’S POINTS

10. Eliminate slogans, exhortations, and targets for the workforce

11. Eliminate work standards (quotas)

12. Remove barriers that rob the hourly worker of the right to provide of workmanship

13. Institute a vigorous program of education and self-improvement

14. Put everyone in the company to work to accomplish the transformation
Continuous Quality Improvement

Find a Process to Improve

Organize a team that knows the process

Clarify current knowledge of the process

Understand causes of process variation

Select the process improvement
## Six Sigma Seven-Step Improvement Method

### Steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Primary Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 0</td>
<td>Form the Team</td>
<td>Team Roster, Ground Rules</td>
</tr>
<tr>
<td>Step 1</td>
<td>Establish the Focus</td>
<td>Problem Statement, Project Objective Progress Measure (s)</td>
</tr>
<tr>
<td>Step 2</td>
<td>Examine Current Situation</td>
<td>Knowledge from Different Perspectives, Strategies, Strategy Measures</td>
</tr>
<tr>
<td>Step 3</td>
<td>Analyze the Causes</td>
<td>Root Cause Hypotheses</td>
</tr>
<tr>
<td>Step 4</td>
<td>Act on the Causes</td>
<td>Action Plans, Actions Taken, Results of Actions</td>
</tr>
<tr>
<td>Step 5</td>
<td>Study the Results</td>
<td>Improvement Results, Action Plan Changes</td>
</tr>
<tr>
<td>Step 6</td>
<td>Analyze Changes</td>
<td>Process Standards, Process Control Plan</td>
</tr>
<tr>
<td>Step 7</td>
<td>Draw Conclusions</td>
<td>Benefits &amp; Difficulties, Lessons Learned, Future Plans, Presentation</td>
</tr>
</tbody>
</table>

Source: Center for the Study of Healthcare Management
Other Methods

- Root cause analysis
- LEAN
- PDSA – Plan, Do, Study Act
Cause & Effect Diagram
Failure to Enroll in Cancer Trail Protocol

Distrust Institution
- Reputation
- Paranoia
- Misinformation
- Unresolved complaints

Perceived Risk
- Information gap
- Patient is risk averse
- Protocol not better than standard

Manner
- Reputation
- Paranoia

Distrust MD

Low Income
- Institutional Rates
- Health Insurance coverage
- Restrictions

Too Costly
Pareto Diagram

NUMBER

Surg
Med
Peds
Psych
Ob/Gyn
Other

UNPLANNED READMISSIONS
Benchmarking

*Compare internal performance and practices with external measures to improve existing processes*

- Understand internal conditions and procedures
- Identify benchmarking partners and “best practices”
Report Cards & Scorecards

• Like a school report card or golf scorecard, organizational report cards or scorecards are used to document prior period or past performance
• In contrast, dashboards provide real-time performance
Other QI Tools

- Physician Profiling
- Provider Report Cards or Scorecards
- Dashboards
Physician Profiling

• Collection of data used to analyze physician:
  – practice patterns
  – utilization of services
  – outcomes of care

• Goals
  – improve physician performance through feedback
  – decrease practice variation through adherence to evidence based standards
## FIGURE 8.3
### Physician C Profile

### Pay for Performance Results thru 3rd Quarter-2006

<table>
<thead>
<tr>
<th>Quality Measures</th>
<th>Weights</th>
<th>Target Local Peer Group Performance</th>
<th>Target HEDIS 90th Percentile Benchmark Performance</th>
<th>Dr. C Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence of Beta-Blocker Treatment after a Heart Attack</td>
<td>11.2%</td>
<td>51.5%</td>
<td>81.0%</td>
<td>57.1%</td>
</tr>
<tr>
<td>Comprehensive Diabetes Care: LDL-C Screening Performed</td>
<td>11.2%</td>
<td>95.4%</td>
<td>96.0%</td>
<td>83.3%</td>
</tr>
<tr>
<td>Colorectal Cancer Screening</td>
<td>11.2%</td>
<td>56.8%</td>
<td>63.5%</td>
<td>57.9%</td>
</tr>
<tr>
<td>Use of Appropriate Medications for People with Asthma</td>
<td>11.2%</td>
<td>91.8%</td>
<td>94.1%</td>
<td>89.5%</td>
</tr>
<tr>
<td>Breast Cancer Screening</td>
<td>11.2%</td>
<td>70.6%</td>
<td>80.1%</td>
<td>73.0%</td>
</tr>
<tr>
<td>Comprehensive Diabetes Care: HbA1c Control (&lt; 9.0%)</td>
<td>6.0%</td>
<td>70.0%</td>
<td>86.1%</td>
<td>82.0%</td>
</tr>
<tr>
<td>Comprehensive Diabetes Care: Eye Exam (Retinal) Performed</td>
<td>6.0%</td>
<td>62.7%</td>
<td>69.3%</td>
<td>43.6%</td>
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<tr>
<td>Osteoporosis Management in Women who had a Fracture</td>
<td>6.0%</td>
<td>29.0%</td>
<td>30.4%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Cholesterol Management for Patients with Cardiovascular Conditions</td>
<td>6.0%</td>
<td>54.4%</td>
<td>56.5%</td>
<td>46.5%</td>
</tr>
</tbody>
</table>

### Resource Management Measures

| Pharmacy management                                               | 10.0%   | 53.18%                              | 55.20%                                        | 52.8%        |
| Relative cost of care index (ETGs)                                | 10.0%   |                                     |                                               |              |

Calculated at year end
Provider Report Cards

• Can be used as marketing tool
• Provide information on quality of care
• Aid the consumers in choosing high quality providers
• Assist third party payers in negotiating contracts with hospitals
HealthGrades

- www.healthgrades.com
- Provides report card information on hospitals by clinical service
- Also, provides information on doctors for a fee
# HealthGrades

## 2010 Hospital Quality Ratings: Cholecystectomy

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Location</th>
<th>Rated Hospitals</th>
<th>Major Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Community Hospital at Carrithwood</td>
<td>Tampa, FL</td>
<td>🌟🌟🌟</td>
<td></td>
</tr>
<tr>
<td>Town &amp; Country Hospital</td>
<td>Tampa, FL</td>
<td>🌟🌟🌟</td>
<td></td>
</tr>
<tr>
<td>Tampa General Hospital</td>
<td>Tampa, FL</td>
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<td>University Community Hospital</td>
<td>Tampa, FL</td>
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</tr>
<tr>
<td>James Heart Hospital</td>
<td>Tampa, FL</td>
<td>🌟🌟🌟</td>
<td></td>
</tr>
<tr>
<td>Memorial Hospital of Tampa</td>
<td>Tampa, FL</td>
<td>🌟🌟🌟</td>
<td></td>
</tr>
<tr>
<td>St. Joseph's Hospital</td>
<td>Tampa, FL</td>
<td>🌟🌟🌟</td>
<td></td>
</tr>
<tr>
<td>St. Joseph's Women's Hospital</td>
<td>Tampa, FL</td>
<td>🌟🌟🌟</td>
<td></td>
</tr>
</tbody>
</table>
Dashboards

• Like the indicator panel on an automobile that provides key performance metrics, such as speed and fuel level while the vehicle is in motion.

• An organizational dashboard is a tool that monitors and reports the ongoing, real-time performance of the critical processes that lead to organizational success.
Dashboard Metrics

• Clinical
  – patient falls, mortality, Joint Commission indicators
• Financial
  – operating cost, days of cash on hand
• Human Resources
  – employee turnover, employee vacancy
• Satisfaction
  – Inpatient, outpatient, employee, medical staff
Physician Profiling, Report Cards & Dashboards

• Most healthcare organizations use these tools at the senior leadership level

• The key issue in success is how leadership uses the measures and measurement sets to align priorities and achieve desired results
BARRIERS & LIMITATIONS TO QUALITY IMPROVEMENT

• Lack of top management support
• Used as cost management
• Disinterest among stakeholders
• CQI stakeholder team is incomplete or wrong
• Panacea for all problems
• Means to promote pre-determined solutions