Wright State University Quality Improvement Presentation

November 2001
Quality Improvement Program

- Strategic Goals
- Quality Monitoring
- Quality Methodology
- Process Improvement Projects
- Great Outcomes
Quality Improvement Program

Corporate Goals (Key Result Areas) Drives Annual QI Direction

- Financial Performance
- Customer Satisfaction
- Clinical/Process Outcomes
- Market Share
Quality Improvement Program

KRA: Financial Performance

Quality Indicator: Operational Efficiency
Measurement: Cost/Adjusted Discharge
Monitoring Tool: Premier External Benchmarking
Quality Improvement Program

KRA: Customer Satisfaction

Quality Indicator: Patient Satisfaction
Measurement: Score/Percentile Ranking
Monitoring Tool: Press Ganey External Benchmarking
KRA: Quality of Care

Quality Measures: Outcomes & Processes of Care, Clinical & Operational Efficiency, Risk-adjusted Cost per case.

Monitoring Tools: Tri-Hi, Anthem, HCIA, ACC Guidelines, PRO Quality Projects External Benchmarking
Cardiac Services Quality Program

- Annual quality plan coordinates activities
  - Clearly defined reporting:
    - KRA (strategic goals)
    - Quality monitors from dept plans
    - PI activities
  - Defines committee & medical staff responsibility
Cardiac Services Quality Program

- Board quarterly report summarizes:
  - Individual dept quality activity
  - Process improvement project goals & outcomes
  - Strategic corporate activities
Cardiac Services Quality Program

- QI program integrates all cardiac activities; quality activities focused on targets
  - Program: coordinated, multi-disciplinary
  - Identifies, assesses, monitors patient care problems & initiates action
Cardiac Services Quality Program

- Proactive program design & findings disseminated
  - Physicians on process improvement teams
  - Findings & recommendations shared with affected departments
Cardiac Services Quality Program

- Continuous quality improvement
  - Methodology: PDCA with standard template
  - Multi-disciplinary teams
  - Measure, assess & improve outcomes
The PDCA cycle - standardize process; build improvement into everyday operations

- PLAN improvement
- DO a trial run
- CHECK effects/results of actions
- ACT accordingly
Cardiac Services Quality Program

- PDCA cycle built into QI template
- “Hits the target”
  - Requires quantifiable baseline measurements
  - Encourages planning BEFORE action
    - Re-measurement
    - Standardize/communicate changes
Cardiac Services Quality Program

PI STRATEGY - how do we do it?

- Systematically identify opportunities
- Conduct monitoring
- Establish routine reporting and follow-up
Congestive Heart Failure

QI process improvement project
1999
CHF team

- Case management
- Home health
- Medical library
- Medical staff services: family practice, emergency med., Cardiology & internal medicine
- Nuclear medicine
- Nursing pt care
- Nutrition services
- Pharmacy
- Respiratory care
- Quality improvement
- Staff development
Problem statement:

- CHF gvh/svh #1 product line
- Alos/charges exceeded local and natl. Norms (adjusted for severity)
- Pt education needs improvement
- ACEI usage low
Baseline measurements before process improvement (pi):

- Alos: 6.97
- Documented pt educ: 40%
- ACEI on discharge: 47
CHF PROCESS IMPROVEMENT PROJECT

CHF interventions:

- Revised care guidelines/standing orders
- Variance tracking On care path
- Case mgmt & home health instruction
- Booklet
- Home health F/U visit re-emphasizes pt Education
- O2 weaning protocol initiated
### CHF Process Improvement Project

#### Measurements before/after process improvement (PI):

<table>
<thead>
<tr>
<th>Measures</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALOS:</td>
<td>6.97</td>
<td>5.45</td>
</tr>
<tr>
<td>Documented PT Education:</td>
<td>40%</td>
<td>79%</td>
</tr>
</tbody>
</table>
CHF PROCESS IMPROVEMENT PROJECT

Improvements to date:

- Alos: ↓ 22%
- Avg. Chg.: ↓ 7%
- Document pt. Educ.: ↑ 97.5%
CONGESTIVE HEART FAILURE
QUALITY/PROCESS IMPROVEMENT PROJECT

TRI HIGH OUTCOMES REPORT CARD - DEC 2000 REPORT

GV Mortality & LOS within expected range (Confidence Interval) after risk adjustment.
<table>
<thead>
<tr>
<th>Process</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ace prescribed at discharge</td>
<td>96%</td>
</tr>
<tr>
<td>Discharge instruction F/U</td>
<td>100%</td>
</tr>
<tr>
<td>Discharge instruction meds</td>
<td>97%</td>
</tr>
<tr>
<td>Disch instruct in med record</td>
<td>100%</td>
</tr>
<tr>
<td>CHF pts w/standing orders</td>
<td>77%</td>
</tr>
</tbody>
</table>

*Of eligible patients
MARCH 6, 2001
A CLINICAL MULTIDISCIPLINARY PROCESS IMPROVEMENT PROJECT
## AMI MORTALITY RATES

<table>
<thead>
<tr>
<th>AMI MORTALITY</th>
<th>1999 RATE:</th>
<th>2000 RATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthem Criteria</td>
<td>&lt;11%</td>
<td>&lt;11%</td>
</tr>
<tr>
<td>Anthem Points</td>
<td>4 (possible 4)</td>
<td>4 (possible 4)*</td>
</tr>
<tr>
<td>GV Actual Rate</td>
<td>6.9%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Question not scored in 2001
Example of Comparative Outcomes

AMI Risk-Adjusted Mortality Rates 1999-2000 Dayton Area

- GV: Predicted 9.81, Observed 9.38
- Aggregate: Predicted 7.72, Observed 9.33
PTCA
Team Members

- Charles McIntosh, D.O.
- Thomas Ruff, D.O.
- James Laws, D.O.
- Troy Tyner, D.O.
- Douglas Stahura, D.O.
- Diane Setty, QI
- Lisa Seitz, QI
- Susan Alfano, QI
- Diane Sanquenetti, CM
- Heather Demetriades, CM
- Jeff Clendenin, CM
- Mark Ferrell, Cath Lab
- Matt Kauflin, Pharmacy
PTCA
Performance Indicators

- ALOS
- Avg. Cost
- Mortality In hosp.
- Use of Care Path

- Care Path Variances
- Indications
- Door to Data
- Data to Dilation
- Door to Dilation
PTCA
Goals/Benchmarks

- Length of Stay: 3 days
- Expected Costs: HCIA benchmark
- Mortality Outcome: As Expected
- PTCA - Door to Dilation: < 90 min.
- Use of Care Path: 100%
- PTCA Indications: 100%
Example of PI Projects

PTCA
Currently in Progress

Enabling Solutions Proposed

- Squads initiate call-in of EKG results enroute
- Initiate ED AMI notification via alpha-numeric pager
- Implement 5 min ED return call policy
- Reevaluate chest pain protocol
- Identify PTCA Indications from ACC guidelines
- Develop tool for data to balloon intervals
- Create care path w/standing orders
- ID high cost revenue ctrs
- Maintain std. Heart Cath tray for evening hours
- Evaluate Cath Lab tech on site/on call for evening hrs.
Cardiac Services Quality Program

- Patient education - every step of the way!
  - P.A.T
  - Pre-operative
  - Post-operative
  - At discharge
  - Post discharge

Minimize Risk Factors!

Stop Smoking
Know Signs & Symptoms
Modify Diet: Reduce Fat & Cholesterol
Start exercise program
Cardiac Services Quality Program

Education provided

- Nutritional guidance
- Smoking cessation
- Causes & symptoms
- Exercise
- Importance of medicines
Quality Improvement Program

- Strategic Goals
- Quality Monitoring
- Quality Methodology
- Process Improvement Projects
- Great Outcomes