Quality and Safety Series

Voice of the Customer

Critical to Quality
OBJECTIVES

• Define the term voice of the customer (VOC).
• Identify the components of a critical to quality (CTQ) tree.
• Discuss the uses and benefits of a CTQ tree.
What Is VOC?

• Term used to capture and describe customer expectations.
• Discover customer opinions from sources, such as:
  – Interviews
  – Focus groups
  – Surveys
  – Patient and family advisory committees
  – Hospital Consumer Assessment of Health Providers and Systems (HCAHPS®) data
Who Are Your Customers?

- Internal and external customers
  - Use stakeholder mapping to identify customers

### Internal
- Pharmacy
- Central Supply
- Registration
- Security
- Environmental Services
- Triage
- ED Nurses
- Radiology
- Lab
- ED Providers
- Social Services
- Peer Coaches
- Management
- Infection Prevention

### External
- Patients
- OR
- Behavioral Health
- Families/Caregivers
- Unit Nurses
- Nursing Homes
- Visitors
- Providers
- Home Health
- Payors
- OP Services
- Community
- Police
- Community-Based Svs.
- Local and State Govt.
- EMS
- Coroner
CTQ Tree

- The CTQ tree was developed as a Six Sigma tool.
- It can be used for the define phase of the DMAIC\textsuperscript{1} process, or the plan phase of the PDSA\textsuperscript{2} process.
- A CTQ tree translates customer requirements into metrics.
- Metrics provide a means to measure the quality of services based on the VOC.
- CTQ tree components move from general to very specific.

1. DMAIC = define, measure, analyze, improve, control
2. PDSA = plan, do, study, act

Components of the CTQ Tree

• **Critical need**
  – VOC
  – Customer’s expectation
  – General

• **Quality driver**
  – Factor to meet customer’s expectation or need

• **Performance requirement**
  – Metric to measure the quality driver
CTQ Tree: Example 1

- Critical Need: Good coffee
- Quality Drivers:
  - Hot
  - Tastes good
- Performance Requirements:
  - 140 degrees
  - Insulated cups
  - Strong
  - Nutty

General to Specific
## CTQ Tree: Example 2

<table>
<thead>
<tr>
<th>Critical Need</th>
<th>Quality Drivers</th>
<th>Performance Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Service</td>
<td>Staff availability and skill set</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bed availability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emergency department throughput</td>
</tr>
<tr>
<td>Good Care</td>
<td>Cost</td>
<td>Maximize fast-track care/efficiencies</td>
</tr>
<tr>
<td>(VOC)</td>
<td></td>
<td>Appropriateness of care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consolidate/centralize services</td>
</tr>
<tr>
<td>Customer</td>
<td></td>
<td>Timely</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td>Transparent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attentive staff</td>
</tr>
<tr>
<td>Clinical</td>
<td></td>
<td>Accurate diagnosis</td>
</tr>
<tr>
<td>Excellence</td>
<td></td>
<td>Appropriate treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Timely care</td>
</tr>
</tbody>
</table>
HSAG CTQ Tree Worksheet

Critical Need

Quality Drivers

Performance Requirements

Template available at: www.hsag.com/hqic-quality-series
Why Use a CTQ Tree?

• To assist in developing a data collection plan.
• To identify key metrics.
• To ensure you are meeting the needs of your customers.

“If you can’t measure it, you can’t change it.”

– Peter Drucker
Key Take-Aways

• It’s important to identify your customers.
  – Internal and external
• The VOC assists in identifying what is important to your customers.
• The CTQ tree assists in translating the VOC into metrics.
• Key components of the CTQ tree are:
  – Critical need
  – Quality driver
  – Performance requirement

• A CTQ tree is useful in creating a data management plan.
  – DMAIC: *define*
  – PDSA: *plan*
Thank you!

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