Simple Rules

Primum non nocere

“Use the Nutrition Facts Label…”

Know your fats and reduce sodium for your health.

- To help reduce your risk of heart disease, use the label to select foods that are low in saturated fat, trans fat, and cholesterol.
- Trans fat doesn’t have a % Daily Value so always be vigilant for it. It is not a healthy fat.
- The %Daily Value for total fat includes all forms of fats: saturated, unsaturated, and polyunsaturated fats.
- Look for foods that are high in polyunsaturated fats.
- Landmark study found low-fat, high-carb diets increased risk for heart disease.
- Monounsaturated fats like avocados, olives, and olive oil may help lower your cholesterol.
- The % Daily Value on the label lists the recommended daily intake for adults and children ages 9 and older.

Check the serving size and number of servings.

- The Nutrition Facts Label information is based on One Serving and the number of Servings Per Package. If a serving size is not stated, the calories and nutrients in the entire package are stated. The % Daily Value also reflects the serving size and number of Servings Per Package.

- If you compare calories and nutrients between foods, check to see if the serving size is the same.

Calories count as energy in the amount.

- This means that the number of calories per serving and the calorie from one serving from one meal.
- In other words, the number of calories in one serving of food.
- The total fat that one serving equals 5 calories and 3.5g of fat from one serving of food.

Look for foods that are low in these nutrients.

- Use the chart not only to limit fat and sodium, but also to increase nutrients that promote good health and may protect you from disease.
- Avoid foods with added sugars, solid fats, sodium, and saturated and trans fats, and choose foods that are low in these nutrients.
- Get the most nutrition for your dollars when you consider the nutrients you would be getting to make a healthier choice.

Nutrition Facts

% Daily Value

- Total Fat 0.0g
- Saturated Fat 0.0g
- Trans Fat 0.0g
- Cholesterol 0mg
- Sodium 0mg
- Total Carbohydrate 0g
- Dietary Fiber 0g
- Sugars 0g
- Protein 0g

Knowledgeable nutrition information in this section is based on the % Daily Value within a daily diet of 2000 calories for adults and children ages 9 and older. The % Daily Value is based on a 2000-calorie diet. Your daily needs may be higher or lower depending on your individual needs.

Reach for healthy, low-calorie carbohydrates.

- Whole and brown rice, beans, vegetables, and whole grains can reduce the risk of heart disease and improve blood cholesterol.
- Whole grain foods will always be listed by their name such as whole wheat, whole rye, whole oats, or whole spelt.
- There are a % Daily Value for sugars but you can compare the sugar content in grams among products.
- Landmark study found low-fat, high-carb diets increased risk for heart disease.
- Choose foods with added sugars and low sodium, but not other nutrients, such as vitamins and minerals.
- Make sure that added sugars are not seen at the top two lines of the ingredients list.

For persons choosing low-calorie diets, lower % Daily Value

Read labels carefully to plan snacks, but not always from the environmental sciences.

- High levels of protein can be harmful, but not always from the environmental sciences.
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“In a complex adaptive system [such as a health care organization], agents respond to their environment using internalized rule sets that drive action. In a biochemical system, the ‘rules’ are a series of chemical reactions. At a human level, the rules can be expressed as instincts, constructs and mental models. ‘First, do no harm’ is an example of an internalized rule that might be behind an individual’s reluctance to embrace the risk of an innovative change. These mental models need not be shared, explicit, or even logical when viewed by others, but they nonetheless contribute to the patterns in the complex system. Importantly, as a recent Institute of Medicine report on the need for fundamental change in the US health care system has noted, deliberating surfacing and changing underlying simple rules leads directly to innovative ideas.”

**IHI’s Simple Rules for Decision-Making**

- **For Staff:**
  - Demand clear charters and senior sponsor engagement
  - Make decisions using standard criteria and processes
  - When in doubt, decide and take responsibility

- **For Leaders:**
  - Make expectations clear
  - No swooping, meddling or second-guessing
  - Inquire, don’t instruct

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**Some Rules are not very simple!**
Simple Rules for 60 Minutes Reporters

1. Do your homework!
2. Don’t be shy!
3. Take your time!

Other rules, however, are rather simple!

Source: 60 Minutes 50th Anniversary Show, Sunday 3 December 2017

“If you don’t try, you’ll never know!”

Simple Rules of Life!

Life is precious - Living matters
So, what are YOUR simple, or not so simple, rules for patient safety, service excellence and measurement?

In this Session we will...

- Use Joseph Juan’s ‘Trilogy’ framework to help you structure your quality measurement journey.
- Provide a set of simple rules that capture essential concepts for designing useful quality measures.
- Provide guidelines that will help you create your own quality measurement plan.
Managing ‘Quality’

**Juran’s Trilogy:**
- Quality Improvement
- Quality Control
- Quality Planning

**Joseph Juran (1904 – 2008)**

- Born Brăila, Romania; family immigrated to U.S. 1912.
- B.S. Engineering, U. Minnesota 1924.
- Worked with Walter Shewhart and Edwards Deming at Western Electric’s Hawthorne Plant, 1920s.
- Served in Lend-Lease Administration and Foreign Economic Administration in WWII.
- Consulted in Japan beginning in 1954.
- Taught at New York University.
- Founded the Juran Institute in 1979.
Three Tasks for Managers: Juran’s ‘Trilogy’

- Manage the work — “Quality Control”
  - Oversee everyday operations
  - Monitor performance
  - Spot deficiencies and errors
  - Investigate exceptions (Root Cause Analysis)
  - Coach, encourage, provide feedback
  - Pitch in when needed
  - Plan for improvement

- Improve the work — “Quality Improvement”
  - Commission improvement: aim, measures, team
  - Monitor progress, resolve problems, provide resources (‘sponsor’)
  - Celebrate success to patients, staff, community

- Mobilize, plan and manage improvement — “Quality Planning”

Source: Juran Institute

Quality Management Functions

- Manage the work — Quality Control
  - Oversee everyday operations
  - Monitor performance
  - Spot deficiencies and errors
  - Investigate exceptions (Root Cause Analysis)
  - Coach, encourage, provide feedback
  - Pitch in when needed
  - Plan for improvement

- Improve the work — Quality Improvement
  - Commission improvement: aim, measures, team
  - Monitor progress, resolve problems, provide resources (‘sponsor’)
  - Celebrate success to patients, staff, community
Quality Management Functions

Plan the work – Quality Planning
- Define ‘quality’ in products and services
- Identify gaps in performance
- Establish strategic goals
- Commission improvement initiatives; establish aims, key measures
- Resource & support QI initiatives
- Provide accountability for improvers

Quality Assurance vs Quality Improvement

Old Way (Quality Assurance)
- No action taken here
- Reject defectives

New Way (Quality Improvement)
- Action taken on all occurrences

Source: Robert Lloyd, Ph.D.
Quality Control & Improvement

Source: Juran Institute

![Diagram of Quality Control & Improvement process]

Quality Improvement

Act | Plan
---|---
Study | Do

Improved Design

Change Ideas

Process Analysis

Yes

Escalate Problem?

Quality Control

Adjust | Standard Work
---|---
Monitor | Do
Quality Responsibilities

How Do Leading Organizations Control Quality?

- Interviews with 10 leading North American healthcare organizations.
- Three in-depth case studies
- Literature review

"By focusing first on implementing standard work with frontline clinical units and managers, such as a charge nurse or team lead, organizations can build a solid 'bottom-up' foundation for Quality Control and Quality Improvement that then supports more robust high-performance management at the system level."

http://www.ihi.org/resources/Pages/IHIWhitePapers/Sustaining-Improvement.aspx
A Management System Architecture

Quality Control (Operations)

Key Tasks
- Define core values
- Audit core principles
- Define and deploy resources
- Monitor “Big Data”
- Frequent frontline observation

Data for Control
- Big data systems, processes and metrics
- Reports and external stakeholders
- Real-time data

Guidance
- Coaching 1:1 on standard work
- Monitoring and feedback

Aims
- Improvement

A Management System Architecture

Quality Improvement (System Change)

Key Tasks
- Monitor environment, anticipate change
- Quality planning
- Set strategic directions
- Commission and drive system-wide initiatives
- Communicate
- Collaborate

Data for Improvement
- High-level goals and initiatives
- System improvements

Aims
- Alignment

Simple Rules for Measurement: Quality Planning

- What behavior are we trying to encourage?
- Measurement for improvement and control are different from measurement for assurance or judgement
- Who needs to know what? And when?

“What Behavior Are We Trying to Encourage?”

- Every measure carries with it a statement about what is good or desirable.
- Measures focus the organization’s attention on specific processes or outcomes, in order to shape the behavior of those who work within it.
- How do measures of quality (by which performance is evaluated) match with the publically stated purpose of the organization?
- Are the measures intended to stimulate intrinsic or extrinsic motivation?
Quality Control is a process by which procedures and methods are established to review and standardize the reliability and quality of all factors involved in the production of products or services.

Quality Assurance is any systematic process of checking or auditing periodically to see if a product or service being developed is meeting specified requirements, targets or goals.

Quality Improvement is the combined and unceasing efforts of everyone (e.g., healthcare professionals, patients and their families, researchers, payers, planners and educators) to make the changes that will lead to better patient outcomes (e.g., health), better system performance (e.g., care) and better professional development.

“Who Needs to Know What?”

Senior Leaders, Boards, Executive Sponsors (Macro-system)

- Percent of target sites engaged in key improvement initiatives
- Percent of target population exposed to interventions
- Phase of intervention by site or project: Plan? Pilot? Implementation? Spread?
- Time-series family of key ‘current care’ and ‘population’ measures by site, with goals
- Comparison to ‘best practice,’ national/regional datasets, comparative benchmarks
- Comparison to control sites

Source: Keith Mandel MD
“Who Needs to Know What?”

**Improvement Initiative Leaders, Department Heads, etc. (Meso-system)**
- Time-series dashboard of all ‘current care’ and ‘population’ measures by site, with goals.
- Key current care measures segmented by unit, patient sub-population, risk groups. Measures matched to domain of improvement work.
- Current QI capability of site leaders and teams, other ‘foundational’ requirements (e.g. registry, EMR)
- Degree of involvement/effort of QI teams
- Data quality

Source: Keith Mandel MD

“Who Needs to Know What?”

**Front-Line (Micro-system) Teams**
- Time-series dashboard of all ‘current care’ and ‘population’ measures by site, with goals.
- Key current care measures segmented by unit, patient sub-population, risk groups. Measures matched to domain of improvement work.
- PDSA measures for current process change testing.
- Data quality

Source: Keith Mandel MD
Simple Rules for Measurement: Quality Improvement

- Improvement is temporal. Mind the variation!
- Measure with change in mind.
- Know the work.
- Know how not to fatten a cow.
- Match the tempo of measurement to the tempo of work

A framework for Learning and Change

When you combine the 3 questions with the...

PDSA cycle, you get...

...the Model for Improvement.

"Improvement is Temporal. Mind the Variation!"

- "Improvement is temporal!" – Lloyd Provost
- Displaying data over time using run charts allows us to:
  - Assess (and predict) process performance
  - Assess the impact of changes
  - Determine if gains are sustained

### Why Use a Run Chart?

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![Run Chart Example](image_url)
ALL of these charts are consistent with the before-after display shown above!

Which one(s) make the case for improvement?

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**Chart Annotations**

- Center line labeled
- Tests of change noted at X-axis
- Goal line
Which Measure is Best?

- Specification = 30 min or less
- Which measure is most useful to an improvement team?
  - % of cases with Abx within 30 min
  - Average time to Abx admin

*Simulated data

“Measure with Change in Mind”

“Without theory, there are no questions; without questions, there is no learning.”

W. Edwards Deming

The New Economics

For Industry, Government, Educator

Second Edition
A Theory for Weight Loss

- Identify effective changes

Measuring Improvement

Measures let us
- Monitor progress in improving the system
- Identify effective changes
Theory for CAUTI Reduction

Outcomes

Reduce catheter associated urinary tract infections by 50% in one year

Primary Drivers

P1 Leadership and aligned policy for catheter use

P2 Eliminate unnecessary catheter insertions

P3 Reliable compliance with catheter insertion protocol

P4 Reliable compliance with catheter maintenance protocol

Secondary Drivers

S1 Clear policies for infection control

S2 Transparent reporting of process failures

S3 Staff training, with feedback on observed protocol compliance

S4 Insert catheters only for appropriate indications

S5 Consider alternative methods

S6 Minimize use of catheters for patients at risk for infections

S7 Remove when no longer required

S8 Insertion only by trained staff

S9 Standard insertion procedure

S10 Daily assessment of need, removal at earliest opportunity

S11 Standard cleaning and maintenance procedure

Changes / Interventions

Insertion Bundle:
A Hand Hygiene
B Sterile gloves, materials
C Aseptic insertion
D Unobstructed flow

Maintenance Bundle:
A Tamper seal intact
B Secured in place
C Hand hygiene
D Meatal hygiene
E Disposal & clean container
F Maintain unobstructed flow

Measures for CAUTI Reduction

Outcomes

Reduce catheter associated urinary tract infections by 50% in one year

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S6 Minimize use of catheters for patients at risk for infections

S7 Remove when no longer required

S8 Insertion only by trained staff

S9 Standard insertion procedure

S10 Daily assessment of need, removal at earliest opportunity

S11 Standard cleaning and maintenance procedure

Secondary Drivers (alternate)

S12 M4 CAUTIs per 1000 patient days

S14 M4 (alternate) Catheter days between CAUTI events

Changes / Interventions

M1 Percent of patients with appropriate catheter placements

M2 Average catheter duration

M3 Percent of catheter insertions with all insertion bundle elements in compliance

M4 (alternate) Percent of catheter insertions with all maintenance bundle elements in compliance

M5 Percent of catheter insertions with all maintenance bundle elements in compliance

M6 Decrease in catheter-related infections

Maintenance Bundle:
A Tamper seal intact
B Secured in place
C Hand hygiene
D Meatal hygiene
E Disposal & clean container
F Maintain unobstructed flow

Insertion Bundle:
A Hand Hygiene
B Sterile gloves, materials
C Aseptic insertion
D Unobstructed flow
“You Can’t Fatten a Cow By Weighing it....”
-An Iowa Farmer

Measurement Drives Action!

- Data can help us focus attention on the performance of the process: “How are we doing?”
- Data can motivate staff to improve: “What is the cost of poor quality?”
- But, measurement is never a substitute for understanding the system and testing changes.
"Know the Work"

- What do these data tell us? How should staff respond?
- Measures alone are insufficient.

The average percentage of patients on 8W with a positive SQID = 30%

*SQID = ‘Single Question in Delirium’, an assessment tool.

"Match the Tempo of Measurement to the Tempo of Work"

- **Single events (1 patient, 1 encounter, 1 test, etc.)**
  - Data gathered in real time
  - Qualitative and quantitative
  - Use for small-scale PDSA testing, problem diagnosis (e.g. Pareto analysis)

- **Daily – weekly data**
  - Use when events are frequent
  - Supports PDSAs (with observation)
  - Captures short-term variation, changes, trends, etc.
  - Data gathered in real time or from IT systems

- **Monthly data**
  - Summarizes improvement over time
  - Captures long-term changes, trends, shifts, etc.

- **Quarterly data**
  - Generally not useful for QI.
### Create a Balanced Set of Measures

<table>
<thead>
<tr>
<th>Type of Measure</th>
<th>Description</th>
<th>The Surgical Sight Infection FOM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td>The voice of the customer or patient. How is the system performing? What is the result?</td>
<td>Surgical Sight Infection Rate</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>The voice of the workings of the process. Are the parts or steps in the system performing as planned.</td>
<td>Percentage of appropriate prophylactic antibiotic selection. Percentage of on time administration of prophylactic antibiotics. Percentage of a safety climate score great than 4.</td>
</tr>
<tr>
<td><strong>Balancing</strong></td>
<td>Looking at a system from different directions or dimensions. What happened to the system as we improved the outcome and improvement measures?</td>
<td>Patient satisfaction Cost per case</td>
</tr>
</tbody>
</table>


### Measuring Infrequent Events

- Is this team improving its infection rate? What is the problem? How could you fix it?

- If a Shewhart chart has more than 25% zeros, switch to a time- or cases-between measure.
Measuring Infrequent Events

When events are infrequent, it’s hard to see whether our work is having the intended result.

<table>
<thead>
<tr>
<th>Month</th>
<th>Infections</th>
<th>Cases</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept</td>
<td>3</td>
<td>1323</td>
<td>2.27</td>
</tr>
<tr>
<td>Oct</td>
<td>1</td>
<td>1292</td>
<td>0.77</td>
</tr>
<tr>
<td>Nov</td>
<td>2</td>
<td>1301</td>
<td>1.54</td>
</tr>
<tr>
<td>Dec</td>
<td>2</td>
<td>1122</td>
<td>1.76</td>
</tr>
<tr>
<td>Jan</td>
<td>1</td>
<td>1410</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Plotting the number of days since the prior event shows that infections are becoming steadily less frequent.

Note – frequency of cases should be relatively constant!
Not Just Tempo – Measure Where the Work is Done

Improvement in a pilot population (1 practice, 1 unit, etc.) will not be evident in measures based on the total population (city, hospital system).

Not Just Tempo – Measure Where the Work is Done

To track improvement, we must measure in the same target population where we are working to improve.
Simple Rules for Measurement: Quality Control

- It is OUR data! We own the results!
- The right thing for every patient, every time.
- Pay consistent attention.
- Special causes demand special attention.
- Avoid blame: Ask “why?”, not “who?”

“It’s Our Data; We Own the Results”

- Front-Line team selects own process measures that align with organization’s strategic goals
- Data are updated by front-line staff daily
- Measures form backdrop for daily team huddles.

Greater Baltimore Medical Center ‘Lean Daily Management’ board
How do I read a LDM Board?

Metric: Goal VS Actual
Achieve Goal?
Red = Missed goal
Green = Achieved goal
Blue = Not open/No instances

Monthly Graph of Daily Score

Living Pareto...If Goal is missed, Why?

Actions to resolve issue. WHO does WHAT by WHEN?

“The Right Thing for Every Patient. Every Time”

**Process Reliability**

- The capability of a process, procedure or health service to perform its intended function in the required time under existing conditions.*

- The system's ability to do what it is supposed to do, for every patient, every time.

*Process Reliability =
Two Types of Variations in Care

- **Unintended variation**: Due to differences in
  - Personal skill, knowledge, training and belief
  - Equipment type or calibration
  - Workload, day of the week, shift, site
  - Personal fitness: mood, fatigue, etc.
  - Errors due to forgetfulness, substitutions, distractions, disorder…
  - Lack of information about patient indications, needs & wishes

- **Intended variation** is based solely on the needs and wishes of patients

- **Unintended variation** leads to ambiguity, confusion, and mistakes.

- **Removing unintended variation** creates reliable, coherent care environment in which skilled practitioners can tailor care to the needs of their patients

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Reliable Systems

- **Reliable, predictable care systems are the platform on which clinicians can practice their skills and knowledge:**
  - With skills based on the best available evidence
  - With the proper equipment functioning properly
  - With equipment and supplies engineered to prevent casual mistakes
  - With necessary materials, tools, and instruments available at the right place and time
  - In an orderly environment free of ambiguities and distractions
  - With accurate, timely clinical information that supports accurate diagnosis, treatment and support
  - Free of frustration from dealing with a chaotic system
Reliability = \[
\frac{\text{Number of Actions That Achieve The Intended Result}}{\text{Total Number of Opportunities for Action}} = \text{‘Percent Conforming’}
\]

Many standard healthcare process measures are percent conforming. Process goals are ‘baked into’ the measures.

Examples of % Conforming Measures

- Percent of diabetic patients with foot exams at previous visit
- Percent of surgeries with checklist completed
- Percent of sepsis patients with antibiotics administered within 1 hour of recognition of sepsis.
- Percent of bundle CLBSI bundle elements completed for lines inserted last week
- Percent of patients who received all VAP bundle elements
- Percent of service users seen within 28 days of referral
“Pay Consistent Attention”

Daily Huddles

Visual Management
- Metrics viewed & remarked
- Team updates data daily

Accountability
- Supervisors monitor huddles, feed back huddle compliance to teams

Escalation
- Team escalates issues beyond its immediate control.

Problem Solving
- Team reviews / disposes current issues in huddle.

Integration
- Strategy & Aims
- Key Metrics

- Team selects local metrics that align with strategic goals.
Standard Agenda for a Daily 5m Huddle

1. Concerns, problems observed in past day:
   - Patients
   - Staff
   - Process, equipment, etc.
2. Anticipated issues for today
3. Review of tracked problems
4. Input from staff
5. Announcements

“Special Causes Demand Special Attention”

When does a measured event (problem), require a response by management?

- “Knee-jerk” policies are usually counter-productive.
- Arbitrary goals can be demoralizing and mask important variation.
- Shewhart charts can help distinguish random fluctuations from signals of change. (Common and Special cause variation)
**Shewhart Charts**

- Data displayed over time, with center line (usually the average), and statistically determined limits.
- A “Special cause detector”

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**Common versus Special Cause**

**Common Cause**

- Inherent in the process
- Over time affect everyone working in the process, and affect all outcomes of the process
- Process stable, predictable

**Special cause**

- Not part of the process all the time, or do not affect everyone; arise because of special circumstances
- Process unstable, not predictable
- *May be evidence of improvement* (change we tested working) or evidence of degradation of process/outcome

Action: go learn from special cause and take appropriate action: prevent (if bad) or exploit (if good).
Shewhart Charts

Decision rules help us identify non-random signals in the data (special causes)

- A single point outside the control limits
- Six consecutive points increasing (trend up) or decreasing (trend down)
- Eight or more consecutive points above or below the centerline (a shift down or up)
- Two out of three consecutive points near a control limit (outer one-third)

A Common Type of Dashboard

FY 2009 Hospital System-Level Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>FY 98</th>
<th>FY 99</th>
<th>FY 00</th>
<th>FY 01</th>
<th>FY 02</th>
<th>FY 03</th>
</tr>
</thead>
</table>
| Patient Perspective
|         |       |       |       |       |       |
| 1. Readmission Rate | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| 2. Percent Unscheduled Admissions | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| 3. Percent Inpatients with Perfect Care—Evidence-Based Care, Inpatient Care, and ED | 55.0% | 55.0% | 55.0% | 55.0% | 55.0% | 55.0% |
| 4. Percent Qualified by Staff | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| 5. Patient Satisfaction | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |

Operational Performance

<table>
<thead>
<tr>
<th>Measure</th>
<th>FY 98</th>
<th>FY 99</th>
<th>FY 00</th>
<th>FY 01</th>
<th>FY 02</th>
<th>FY 03</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Percent Occupancy</td>
<td>80.0%</td>
<td>80.0%</td>
<td>80.0%</td>
<td>80.0%</td>
<td>80.0%</td>
<td>80.0%</td>
</tr>
<tr>
<td>11. Average Length of Stay</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>12. Payment Satisfaction: Average Rating Using a 5-Step Scale of Best Possible</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Community Perspective

<table>
<thead>
<tr>
<th>Measure</th>
<th>FY 98</th>
<th>FY 99</th>
<th>FY 00</th>
<th>FY 01</th>
<th>FY 02</th>
<th>FY 03</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Percent of Budget Allocated to Non-reimbursed Care</td>
<td>7.00%</td>
<td>7.00%</td>
<td>7.00%</td>
<td>7.00%</td>
<td>7.00%</td>
<td>7.00%</td>
</tr>
<tr>
<td>14. Percent of Budget Spent on Community Health Promotion Programs</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Financial Perspective

<table>
<thead>
<tr>
<th>Measure</th>
<th>FY 98</th>
<th>FY 99</th>
<th>FY 00</th>
<th>FY 01</th>
<th>FY 02</th>
<th>FY 03</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Operating Margin Percent</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>16. Monthly Revenue ($Million) - Change to Previous Year</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Source: Provost, Murray & Britto (IHI Forum 2010)
How is Time to 3rd Next Available Doing?

Source: Provost, Murray & Britto (IHI Forum 2010)

How Is Error Rate Doing?

Source: Provost, Murray & Britto (IHI Forum 2010)
How is Perfect Care Doing?

Source: Provost, Murray & Britto (IHI Forum 2010)

Small Multiples

One measure, all sites

Source: Dentaquest Institute
Small Multiples: One site, all measures

“Avoid Blame”

Distribution of waiting times for patients admitted to Stafford Hospital A&E, April-December 2007.

“Avoid Blame: Ask ‘Why?’, not ‘Who?’”

- Address defensiveness through non-judgmental process analysis in regular huddles

- Ask ‘how did this happen?’ not ‘who did this?’

- Own the process: Promote ‘one at a time,’ front-line PDSA data collection to focus on process & generate ideas for change.

- Align measures with improvement focus

- Use risk adjustment to ‘level the field’ for outcomes.
Discussion Questions

1. Do you think of work in terms of quality improvement, control and planning? If not how do you envision and organize the work you do?

2. Do you know your data better than anyone else?

3. Can you identify Outcome, Process and Balancing measures for your improvement work?

4. What are the Primary and Secondary Drivers you need to address?

5. What is driving your measurement efforts? Improvement & Control, Accountability & Assurance, or Research?

6. How reliable are the systems and processes you have in place?

7. Next week, what new conversations will you have about your measurement journey?

Summary of Simple Rules for Measurement

Quality Planning
- What behavior are we trying to encourage?
- Measurement for improvement and control are different from measurement for assurance or judgement
- Who needs to know what? And when?

Quality Improvement
- Improvement is temporal. Mind the variation!
- Measure with change in mind.
- Know the work.
- Know how not to fatten a cow.
- Match the tempo of measurement to the tempo of work

Quality Control
- The are OUR data! We own the results!
- The right thing for every patient, every time.
- Pay consistent attention.
- Special causes demand special attention.
- Avoid blame: Ask “why?” not “who?”
Thank you for joining us today! Good Luck with your Quality Measurement Journey!

Contact us at:
Dr. Richard Scoville richard@rscoville.net

Dr. Robert Lloyd rlloyd@ihi.org
@rlloyd66