




Critical Concepts of Data and Measurement
March 12, 2009

Virginia Flintoft, RN MSc
SHN! Central Measurement Team




Objectives

- Why Measure?
- What have we learned from measurement
- Data Entry and Submission to CMT
- SSI Measures
 - **Your turn - Tips for Collecting SSI Data**



Why Measure at all?

The benefits of measurement...



Why Measure?

“If you can’t measure it, you can’t manage, improve, or control it...”

Patient management, practice management, and improvement research all require valid measurement.”

E.C.Nelson, et al.

Joint Commission Journal on Quality Improvement, 2000

safer healthcare
now!

Measurement - The Bottom Line

- Trying to improve without measurement is like going on a *road-trip* without a map
- Although you may think you know where you are...
 - You may be wrong
 - As a result you may head in the wrong direction and take the wrong path to get where you want to go



safer healthcare
now!

The Contributions of Measurement

- Measurement allows you to assess current performance
 - Helps to identify priority issues
 - Builds tension for change
 - Helps to overcome resistance
- Measurement is critical for assessing the impact of your tests of change
 - Guides improvement
 - Builds momentum to support change
- Measurement creates more detailed knowledge of the care process
 - What works, what doesn't
 - Which strategies can be used in different areas - spread
 - Creates a culture supporting safer patient care

safer healthcare
now!

Benefit of Submitting Data to SHN

- Allows assessment of current performance relative to other teams
 - National, Nodal or Implementation Stage aggregate
- Shows improvement over time!
- Provides evidence for feedback to teams and Senior leaders
- Supports momentum and overcoming barriers
- Evidence for Accreditation Canada &/or MoH-LTC *Requirements of Practice*

safer healthcare
now!

Alignment w/ Other Indicators

Accreditation Canada

- No corresponding ROPs for SSI...yet

MoH-LTC

- *The percentage of patients who received prophylactic antibiotics within appropriate time prior to skin incision for all primary total, partial and hemi hip and knee joint replacements (not revisions) .*
- Measured as start of abx infusion 0 - 60 mins. (0-120 minutes for Fluoroquinolones and vancomycin) before incision. Antibiotic infusion must be completed before incision
 - *SHN-SSI 1.0 Timely Administration of Prophylactic Antibiotic Administration*

safer healthcare
now!

What have we learned?

It's easier said than done...

safer healthcare
now!

Why Is Measurement (and Reporting) Difficult for Teams?

- ...there's not enough time
-it's not my job
- ...it's difficult to collect all the data
- ...how much data to should we collect
- ...can we trust SHN with our data



safer healthcare
now!

Why Is Measurement Difficult for Senior Leaders?



- Can we afford the additional resources required for monitoring improvement?
- Do we want to risk revealing our level of performance?
- Is measurement really necessary for improvement?
- Is improvement a priority for us?

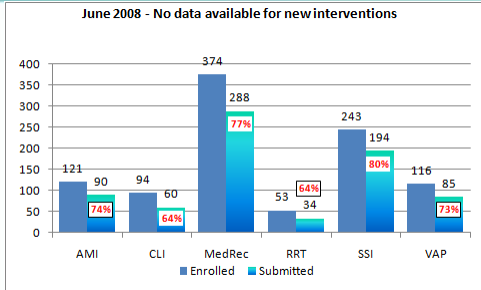
safer healthcare
now!

What we have learned...

- Goal is improvement, not the development of a measurement system
- Measurement should speed up improvement. Develop a useful rather than a perfect process.

safer healthcare
now!

Data Submission to CMT by Intervention



safer healthcare
now!

Getting Started



safer healthcare
now!


How to Encourage Teams to Measure

- Demonstrate the value of measurement to teams
- Make it easy to collect and submit data
- Provide tips and examples of how to integrate measures into improvement and daily work
- Demonstrate the value of measurement by providing information on performance
 - *Post your Run Charts*
 - *Don't reinvent the wheel*
 - *CoP, SIAs, Mentor teams*

safer healthcare
now!


Demonstrate the Value

- Measure baseline performance
 - Timely prophylactic Abx administration
- Conduct a PDSA e.g.
 - *Try new process for delivering Abx*
- Measure again
 - Early implementation (Pre-goal) phase performance
- Report the results to your team
- Repeat



What About Sample Size?

- Acute Care
 - Baseline: up to 3 months of data
 - Large Centres do 3 months of baseline data collection
 - Collect while setting up team and establishing team charter
 - Prior to implementing any changes
 - Can be collected retrospectively
 - Monthly: 10 - 20 patients per month
 - Avoid over-burdening staff with measurement



Data Entry and Submission

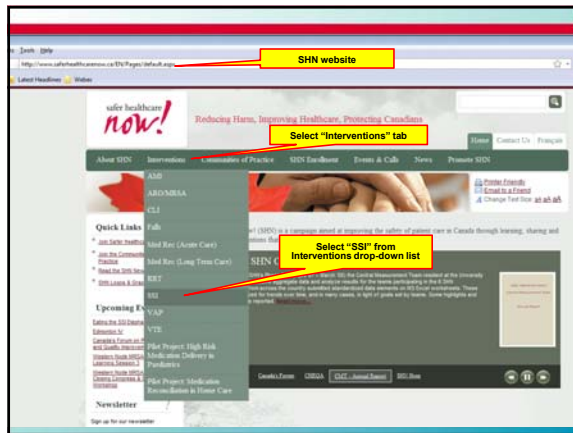


Data Entry and Submission

Selecting the correct worksheet

1. SHN website Home Page, select “Interventions” tab and the “Intervention” from the drop-down list.
2. Select “Measurement Worksheets” from menu bar on left.
3. Select the “Measure(s)” for which you have data to report.

safer healthcare
now!



Data Entry and Submission

Selecting the correct worksheet

1. SHN website Home Page, select “Interventions” tab and the “Intervention” from the drop-down list.
2. Select “Measurement Worksheets” from menu bar on left.
3. Select the “Measure(s)” for which you have data to report.

safer healthcare
now!

Using Run Charts

- Annotate
- Share with the Team
- Cut and Paste into Monthly Reports for Senior Leaders
- Post in public area on unit

Share your Success

A Picture is worth 1000 words!!!
safer healthcare
now!

Submitting Data from a COP

QIM Quality Improvement and Measurement

safer healthcare
now!

Submitting Data from a COP

Data Submission <https://shn.med.utoronto.ca>

Submission de données

Team members participating in the Safer Healthcare Now! campaign may use this site to electronically submit their measurement worksheets.

Les équipes participant à la campagne Soins de santé plus sécuritaires maintenant peuvent soumettre par voie électronique leurs feuilles de travail de mesure.

- The data submission and measurement processes have been reviewed by an independent external ethics consultant. The external review concluded that the submission process should proceed as planned.
- Le processus de soumission et de mesure des données ont été examinés par un consultant indépendant en éthique externe. Le consultant externe a conclu que le processus de soumission des données devrait poursuivre comme prévu.
- Le site utilise 128-bit SSL encryption from Comodo Limited.
- Les données sont soumises en vertu d'un protocole indépendant en éthique externe. Le système externe a conclu que le processus de soumission des données devrait poursuivre comme prévu.
- Le site utilise le chiffrement SSL à 128 bits de Comodo Limited.

1. Select the file to upload from your computer. Sélectionnez le fichier à télécharger à partir de votre ordinateur (PDF should not be more than 10MB).

2. Add notes (optional, but please comment if you have any questions or concerns).

3. Upload / Télécharger

QUESTIONS? You can contact your Nurse.

safer healthcare
now!

SSI Measures

Review of Measures and
Share your tips for collecting data

safer healthcare
now!

SSI-1.0

Measure:

- Percent Surgical Patients with Timely Prophylactic Antibiotic Administration
 - Goal: 95%
 - Abx infusion often responsibility of anaesthetist
 - Proxy for outcome measure
 - Ontario required for public reporting

YOUR Tips for process improvement
or data collection

safer healthcare
now!

SSI-2.0

Measure:

- Percent Surgical Patients with Appropriate Prophylactic Antibiotic Discontinuation
 - Goal: 95%
 - Discussion that post-op Abx not required or max 1 dose

YOUR Tips for process improvement
or data collection

safer healthcare
now!

SSI- 3.0

Measure:

- Percent Clean Surgical Patients with Surgical Infection
 - Goal: set by team – reduce baseline by 50%
- Challenging to collect this data
 - Suggested processes available on CoP
 - 30-day post-op SSI rate

YOUR Tips for process improvement or data collection



SSI- 4.0

Measure:

- Percent Surgical Patients with Appropriate Hair Removal
 - Goal: 95%
 - Suggested processes available on CoP

YOUR Tips for process improvement or data collection



SSI- 5.0

Measure:

- Percent Major Cardiac Surgical Patients with Controlled Post-op Serum Glucose
 - Goal: 95%
 - Limited number of sites eligible to participate

YOUR Tips for process improvement or data collection



SSI- 6.0

Measure:

- Percent Colorectal and Open Abdominal Surgical Patients with Normothermia in PACU
 - Goal: 95%
 - Expanding beyond Colorectal surgery
 - Suggested process improvement strategies available on CoP

YOUR Tips for process improvement
or data collection

safer healthcare
now!

SSI- 7.0

Measure:

- Percent Surgical Patients with Appropriate Selection of Prophylactic Antibiotics
 - Goal: 95%
 - Local P&T committees defines "appropriate"

YOUR Tips for process improvement
or data collection

safer healthcare
now!

SHN Performance Reports

What

Central Measurement Team

Does with your results

safer healthcare
now!

What Happens Next - CMT's Job

- Data arrives on CMT server
- CMT (Alex Titeu) checks each worksheet for accuracy and completeness
 - Makes corrections
 - Returns revised worksheets to team
- Saves on CMT drive
- Runs quarterly reports and semi annual CEO Reports

safer healthcare
now!

SHN Quarterly Reports

What to make of your results -
Interpreting the Quarterly Reports

Coming to a Presentation Near you!

safer healthcare
now!

How to Get Answers to your Measurement Questions

- Safety Improvement Advisors (SIAs)
- Community of Practice
- Central Measurement Team
- Faculty members
 - Clinical advisors
 - Improvement advisors
- Collaborative Conference calls

safer healthcare
now!

Questions or More Information

Virginia Flintoft

416.946.8350

virginia.flintoft@utoronto.ca

G. Ross Baker

416.978.7804

ross.baker@utoronto.ca

Alexandru Titeu

416.946.3103

shn.ea@utoronto.ca

safer healthcare
now!
