

STROKE INDICATORS AND DATA SUBMISSION

Minnesota
Statewide
Quality
Reporting and
Measurement
System

January 4, 2012

OVERVIEW

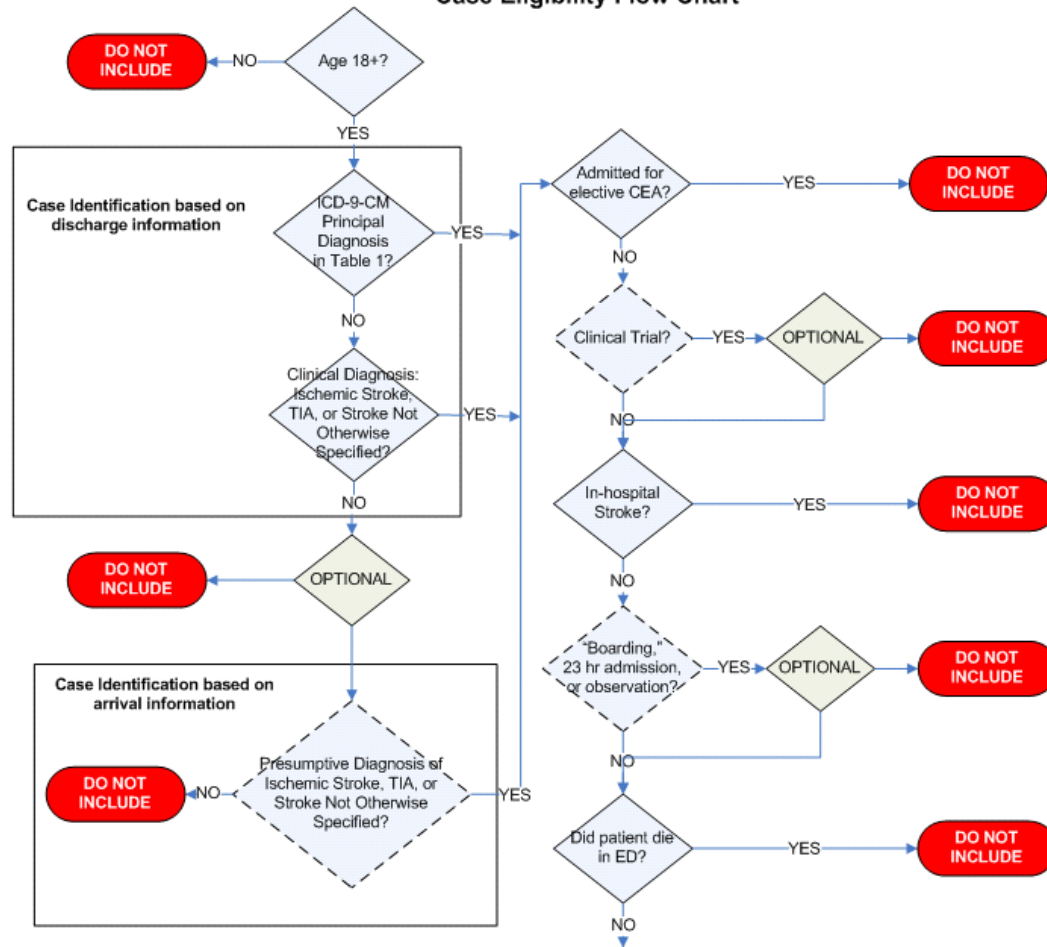
- Stroke Indicators
- Case Eligibility
- Data Submission Requirements
- Data Submission Options
- Setting up MSRT Account

STROKE INDICATORS

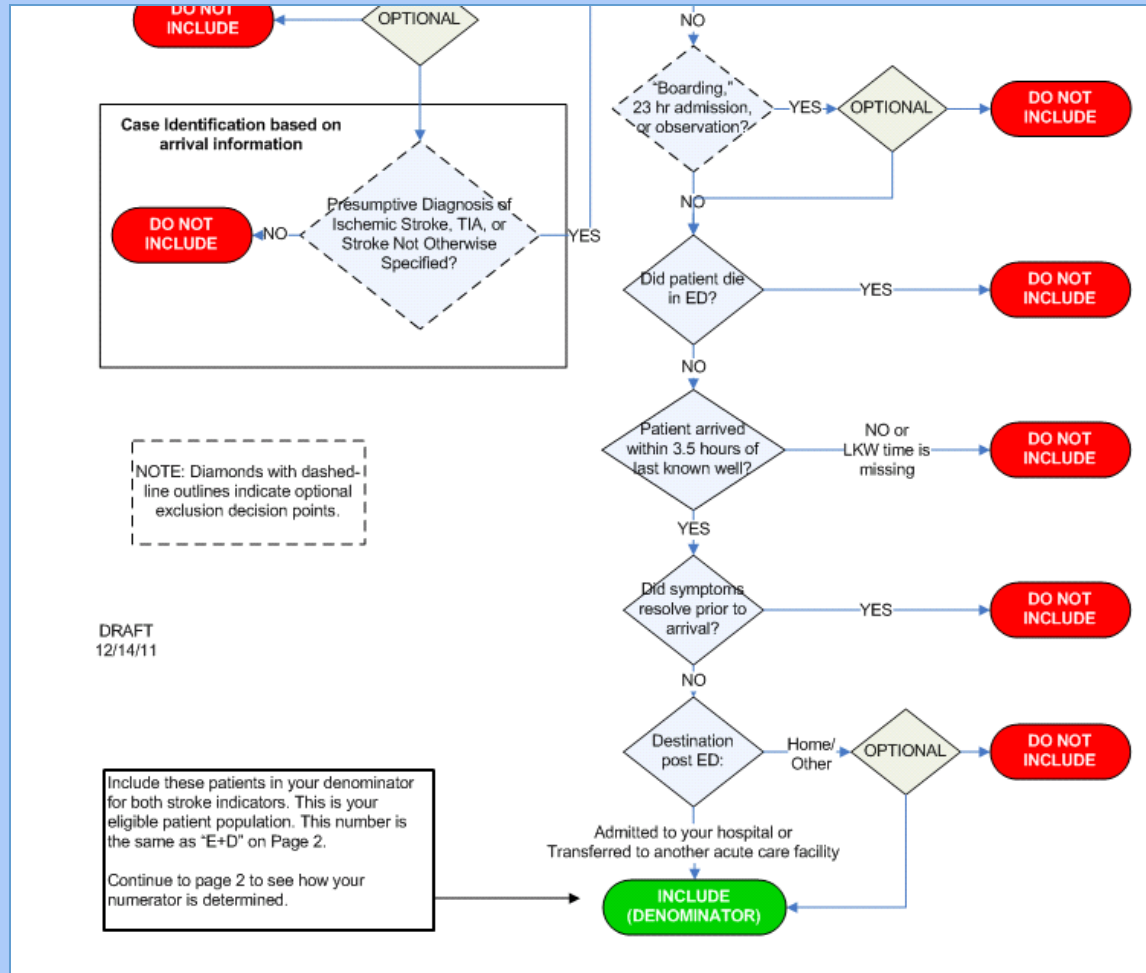
- NIHSS on initial evaluation documented
- Door-to-Imaging Completed < 25 minutes
- Stroke and TIA patients arriving in emergency department for whom rapid and appropriate evaluation is needed and indicated

CASE ELIGIBILITY

Emergency Department Stroke Registry Process of Care Indicators
Case Eligibility Flow Chart



CASE ELIGIBILITY



CASE ELIGIBILITY

- Age 18+
- Ischemic stroke, TIA, or Stroke not otherwise specified
- Patient did NOT come for elective carotid intervention
- Stroke did NOT occur in hospital (as an inpatient or in ED)
- Patient did NOT die in the emergency department
- Patient arrived within 3.5 hours of last known well (normal)
- Patient's symptoms had not yet resolved prior to arrival
- Patient was either admitted to your hospital or transferred to another acute care facility

- Please see indicator specifications:

<http://www.health.state.mn.us/healthreform/measurement/adoptedrule/index.html>

STROKE INDICATORS

- NIHSS on initial evaluation documented
 - Documentation should indicate that NIH Stroke Scale was conducted
 - NOTE: Documentation of the actual NIHSS score is NOT required
- Door-to-Imaging Completed < 25 minutes
 - Imaging done within 25 minutes of arrival
 - Only patients for whom imaging is indicated are included in the measure
 - Imaging date and time must be documented

DATA SUBMISSION REQUIREMENTS

- All hospitals must follow case eligibility guidelines to select cases for abstraction
- All hospitals must submit data through the Minnesota Stroke Registry Tool (MSRT)
- Three options are available:
 1. MSR (Minnesota Stroke Registry)
 2. MSRT Quality
 3. MSRT Summary



The screenshot shows the login interface for the Minnesota Stroke Registry Tool. At the top left is the logo for the Minnesota Stroke Registry, which includes the text 'MINNESOTA STROKE REGISTRY' and a map of Minnesota. To the right of the logo are two input fields: 'User ID:' and 'Password:'. Below the 'Password:' field is a 'Log In' button. In the center of the page, there is a white box with a black border containing the following text: 'Welcome to the Minnesota Stroke Registry Tool', 'Forgot username or Password? Contact Jacob Zdon jacob.zdon@state.mn.us', and 'Program contact: Albert Tsai, PhD, MPH albert.tsai@state.mn.us, (651) 201-5413'.

OPTION 1: JOIN THE MINNESOTA STROKE REGISTRY PROGRAM

- Case-level data
- All types of stroke (including hemorrhagic) and TIA
- Comprehensive set of quality of care data submitted to MDH through:
 - Minnesota Stroke Registry Tool (MSRT) OR
 - American Heart Association Get With The Guidelines-Stroke (GWTG-S) Patient Management Tool (PMT)
- MN SQRMS Stroke Indicators are automatically calculated
- Live reports on stroke indicators are available
 - Benchmarking
 - Full customization

OPTION 1: JOIN THE MINNESOTA STROKE REGISTRY PROGRAM

- Additional quality of care data reports available to hospitals
- Various QI services, technical assistance, resources, and programs available

- Contact Albert Tsai: albert.tsai@state.mn.us
- More info: www.mnstrokeregistry.org

OPTION 2: MSRT QUALITY

- Case-level data
- 10 data elements submitted to MDH:
 1. Patient ID
 2. Age
 3. Gender
 4. Arrival date and time
 5. Last known well date and time
 6. Imaging date and time
 7. Discharge date
 8. NIHSS conducted and documented
 9. Principal diagnosis (ICD-9)
 10. Final clinical diagnosis
- Data are abstracted on individual cases on continuous basis

The screenshot shows a web-based data entry form for the Minnesota Stroke Registry. The form is organized into several sections:

- Facility:** A dropdown menu.
- Reports:** A dropdown menu.
- Resources:** A dropdown menu.
- Case History:** A dropdown menu.
- Add Case:** A button.
- Facility Staff:** A dropdown menu.
- Comment:** A text area.
- Patient Identifier:** A text input field.
- Arrival Date/Time:** Fields for Date and Time.
- Discharge / Transfer Date:** A Date field.
- Principal ICD-9:** A text input field.
- Clinical diagnosis:** Radio button options for Intracerebral hemorrhage, Subarachnoid hemorrhage, Ischemic stroke, Transient ischemic attack, Stroke not otherwise specified, and No stroke related diagnosis.
- Age/Gender:** Fields for Age and Gender (Male, Female, Unknown).
- Last known well:** Fields for Date and Time, with checkboxes for Unknown / ND /UTD.
- Brain imaging performed:** Radio button options for Yes, No/ND, and Yes, score not documented, with fields for Imaging Date and Time.
- NIHSS:** Radio button options for Yes, Yes, score not documented, and No / ND.
- Buttons:** Save, Reset, and Close Record.
- Footer:** Minnesota Department of Health, 85 East 7th Place, St. Paul, MN 55101.

OPTION 2: MSRT QUALITY (CONTINUED)

- Deadlines for completing abstraction:

Data Submission Deadline	Discharges
February 15, 2012	Q3 2011
May 15, 2012	Q4 2011
August 15, 2012	Q1 2012
November 15, 2012	Q2 2012

- Indicators are automatically calculated
- Live data reports on the two indicators
 - Benchmarking
 - Limited customization

OPTION 3: MSRT SUMMARY

- Aggregated (“summary”) data submission
- Numerator (pass) and denominator (eligible) submitted for each indicator
- Quarterly submission deadlines:
 - February 15, 2012 (Q3 2011 discharges)
 - May 15, 2012 (Q4 2011)
 - August 15, 2012 (Q1 2012)
 - November 15, 2012 (Q2 2012)
- Live data reports on indicators
 - Benchmarking
 - No customization

The screenshot shows a web application interface for the Minnesota Stroke Registry. The top navigation bar includes 'Facility', 'Reports', and 'Resources'. The left sidebar has 'Summary History', 'Add Summary', and 'Facility Staff'. The main content area is titled 'Summary Period' and shows a dropdown menu set to '2011 Q3 (July 1 - Sept 30)'. Below this, there are two sections for data entry: 'NIHSS Performed in Initial Evaluation' and 'Door-to-Imaging Performed Time (% imaged in 25 minutes or less)'. Each section has a table with columns for 'Discharge Dates', 'Numerator', 'Denominator', '%', and 'Submission Deadline'. The 'Discharge Dates' for both sections is 'Quarter 3, 2011: 7/1-9/30'. The 'Submission Deadline' for both is 'February 15, 2012'. The percentage column contains 'n/a'. There are input boxes for the numerator and denominator. At the bottom of the form are 'Save' and 'Reset' buttons. The footer of the page reads 'Minnesota Department of Health, 85 East 7th Place, St. Paul, MN 55101'.

OPTIONS: SIDE-BY-SIDE COMPARISON

Feature	MSR participants	MSRT Quality	MSRT Summary
Level of data	Case	Case	Numerator/ Denominator
Patient Identifiers?	NO	NO	NO
Frequency	Continuous	Continuous	Quarterly
Secure data submission	Yes	Yes	Yes
Indicator calculation	Automatic	Automatic	Manual
Reports	SQRMS Indicators, Core measures, Other	SQRMS Indicators only	SQRMS Indicators only
Live benchmarking	Yes	Yes	Yes
Report filters	Yes	Yes	No
Meets CMS core measure standards	Yes	No	No
Access to QI resources	Yes	Limited	Limited
Abstraction time	30-45 min	5-10 min	5-10 min

MSRT LOGIN



User ID:
Password:

Welcome to the Minnesota Stroke Registry Tool

Forgot username or Password? Contact Jacob Zdon jacob.zdon@state.mn.us

Program contact: Albert Tsai, PhD, MPH albert.tsai@state.mn.us, (651) 201-5413

<https://www.health.state.mn.us/divs/hpcd/mnstrokeregistry/login.cfm>

MSRT SUMMARY: ADD SUMMARY

Facility	Reports	Resources													
Summary History	Summary Period 2011 Q3 (July 1 - Sept 30) <input type="button" value="v"/>														
Add Summary	NIHSS Performed in initial Evaluation														
Facility Staff	<table border="1"><thead><tr><th>Discharge Dates</th><th>Numerator</th><th>Denominator</th><th>%</th><th>Submission Deadline</th></tr></thead><tbody><tr><td>Quarter 3, 2011: 7/1-9/30</td><td><input type="text"/></td><td><input type="text"/></td><td>n/a</td><td>February 15, 2012</td></tr></tbody></table>					Discharge Dates	Numerator	Denominator	%	Submission Deadline	Quarter 3, 2011: 7/1-9/30	<input type="text"/>	<input type="text"/>	n/a	February 15, 2012
Discharge Dates	Numerator	Denominator	%	Submission Deadline											
Quarter 3, 2011: 7/1-9/30	<input type="text"/>	<input type="text"/>	n/a	February 15, 2012											
	Door-to-Imaging Performed Time (% imaged in 25 minutes or less)														
	<table border="1"><thead><tr><th>Discharge Dates</th><th>Numerator</th><th>Denominator</th><th>%</th><th>Submission Deadline</th></tr></thead><tbody><tr><td>Quarter 3, 2011: 7/1-9/30</td><td><input type="text"/></td><td><input type="text"/></td><td>n/a</td><td>February 15, 2012</td></tr></tbody></table>					Discharge Dates	Numerator	Denominator	%	Submission Deadline	Quarter 3, 2011: 7/1-9/30	<input type="text"/>	<input type="text"/>	n/a	February 15, 2012
Discharge Dates	Numerator	Denominator	%	Submission Deadline											
Quarter 3, 2011: 7/1-9/30	<input type="text"/>	<input type="text"/>	n/a	February 15, 2012											
	<input type="button" value="Save"/> <input type="button" value="Reset"/>														
	<hr/> <p>Minnesota Department of Health, 85 East 7th Place, St. Paul, MN 55101</p>														

REPORTS

Facility Reports Resources

Reports Home

Run QI Reports

[Clear](#)

TIME PERIOD

Interval :

Range : 2011 to 2011

REPORT

Report Type : Quality Indicators

Report Name :

Report Format : On Screen PDF CSV

Chart Type :

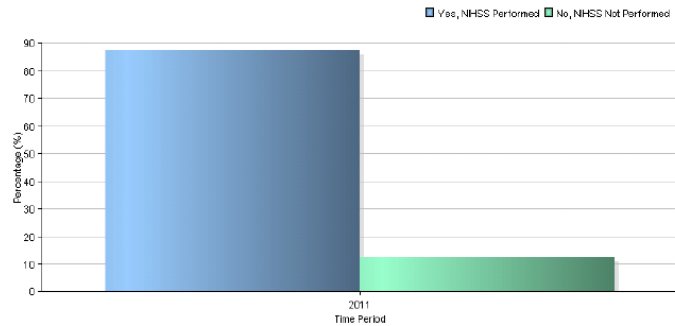
Report Options : Filter Compare Failures

FILTERS [View](#)

MSRT QUALITY: REPORTS

NIHSS documented. Patients for whom a National Institutes of Health Stroke Scale (NIHSS) was performed and documented as part of the initial evaluation.

Facility: Albert Lea Medical Center - Mayo Health System, Report Interval: Annually, Range: 2011 - 2011, Filters: Diagnosis: Ischemic Stroke, Transient Ischemic Attack, Stroke not otherwise specified

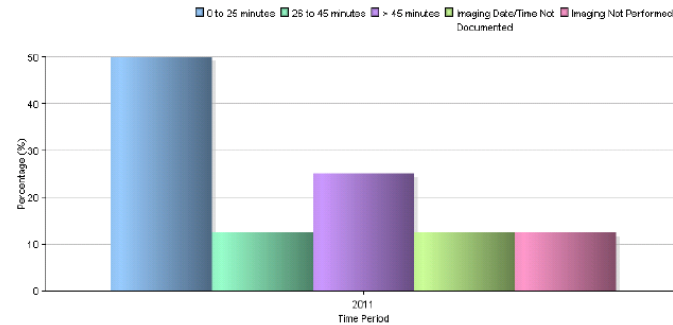


Time Period	Indicator	N	Percent
2011	Yes, NIHSS Performed	7	87.5%
	No, NIHSS Not Performed	1	12.5%

ED - NIH Stroke scale performed -- Created on December 29, 2011 by Jacob-quality Zdon
Facility: Albert Lea Medical Center - Mayo Health System, Report Interval: Annually, Range: 2011 - 2011, Filters: Diagnosis: Ischemic Stroke, Transient Ischemic Attack, Stroke not otherwise specified

ED - Door-to-imaging performed time.

Facility: Albert Lea Medical Center - Mayo Health System, Report Interval: Annually, Range: 2011 - 2011, Filters: Diagnosis: Ischemic Stroke, Transient Ischemic Attack, Stroke not otherwise specified



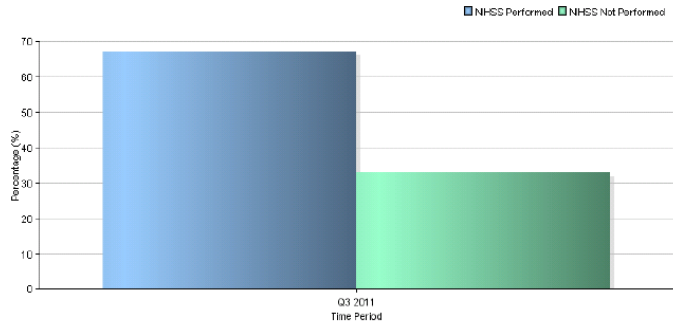
Time Period	Indicator	N	Percent
2011	0 to 25 minutes	4	50.0%
	26 to 45 minutes	1	12.5%
	> 45 minutes	2	25.0%
	Imaging Date/Time Not Documented	1	12.5%
	Imaging Not Performed	1	12.5%

Door-to-image performed -- Created on December 29, 2011 by Jacob-quality Zdon
Facility: Albert Lea Medical Center - Mayo Health System, Report Interval: Annually, Range: 2011 - 2011, Filters: Diagnosis: Ischemic Stroke, Transient Ischemic Attack, Stroke not otherwise specified

MSRT SUMMARY: REPORTS

NIHSS documented. Patients for whom a National Institutes of Health Stroke Scale (NIHSS) was performed and documented as part of the initial evaluation.

Facility: Albert Lea Medical Center - Mayo Health System, Report Interval: Quarterly, Range: Quarter 3 2011 - Quarter 3 2011, Filter Filters: Diagnosis: Ischemic Stroke, Transient Ischemic Attack, Stroke not otherwise specified

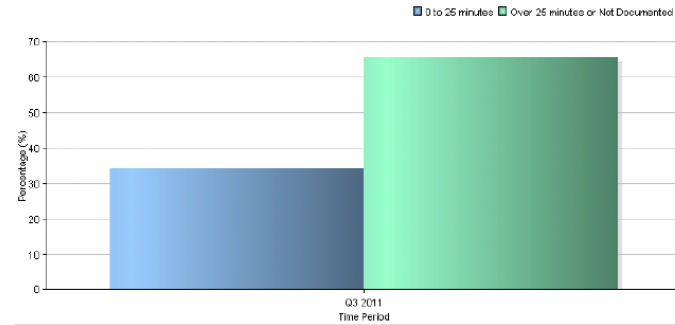


Time Period	Indicator	N	Percent
Q3 2011	NIHSS Performed	45	67.2%
	NIHSS Not Performed	22	32.8%

ED - NIH Stroke scale performed -- Created on December 29, 2011 by Jacob-sum Zdon
Facility: Albert Lea Medical Center - Mayo Health System, Report Interval: Quarterly, Range: Quarter 3 2011 - Quarter 3 2011, Filter Filters: Diagnosis: Ischemic Stroke, Transient Ischemic Attack, Stroke not otherwise specified

ED - Door-to-imaging performed time.

Facility: Albert Lea Medical Center - Mayo Health System, Report Interval: Quarterly, Range: Quarter 3 2011 - Quarter 3 2011, Filter Filters: Diagnosis: Ischemic Stroke, Transient Ischemic Attack, Stroke not otherwise specified



Time Period	Indicator	N	Percent
Q3 2011	0 to 25 minutes	23	34.3%
	Over 25 minutes or Not Documented	44	65.7%

Door-to-image performed -- Created on December 29, 2011 by Jacob-sum Zdon
Facility: Albert Lea Medical Center - Mayo Health System, Report Interval: Quarterly, Range: Quarter 3 2011 - Quarter 3 2011, Filter Filters: Diagnosis: Ischemic Stroke, Transient Ischemic Attack, Stroke not otherwise specified

CREATING ADDITIONAL ACCOUNTS (2)

Facility	Reports	Resources			
Case History	First Name	Last Name	Email	Active	Password Expire
Add Case	Curtis	Fraser	curtis.fraser@health.state.mn.us	true	11/27/2050
Facility Staff	Curtis Quality	Fraser		true	06/10/2012
	John	Smith	john.smith@state.mn.us	true	06/16/2012
	Al - Quality	Tsai	albert.tsai@state.mn.us	true	06/17/2012
	Albert	Tsai	albert.tsai@state.mn.us	true	04/02/2012
	Jacob	Zdon	jacob.zdon@state.mn.us	true	06/09/2012
	Jacob-admin	Zdon	Jacob.Zdon@state.mn.us	true	06/10/2012

Edit Staff - Add Staff

First Name:

Last Name:

Work Phone:

Email:

Login: (max 10 char)

Password: (max 20 char) *change automatically expires p

Security Level: Quality - Staff Admin

Active: Yes Account Suspended: Yes

Assigned Facilities

Albert Lea Medical Center - Mayo Health System Albert L

RESOURCE DOCUMENTS

Facility	Reports	Resources			
Resource Documents		Data Collection Dictionary MSRT Dictionary 2.3 (141 pgs, 713 KB, PDF) MSRT Dictionary Release Notes 2.3 (1 pg, 44 KB, PDF) MSRT Dictionary Cheat Sheet 2.3 (4 pgs, 53 KB, PDF) MSRT MSRT Case Report Form 2.3 (4 pgs, 96 KB, PDF) MSRT Case Report Form 2.3 Long (5 pgs, 108 KB, PDF) MSRT Logic 2.3 (4 pgs, 58 KB, PDF) Case Ascertainment Case Definition and Identification (6 pgs, 114 KB, PDF) MSR Conference Calls MSRT MSRT Conference Call Slides 9-28-2011 (26 pgs, 346 KB, PDF) GWTG MSR-GWTG Conference Call Slides 9-28-2011 (18 pgs, 126 KB, PDF) Quality Improvement Performance Measures MSR Stroke Performance Measure Guide 2.0 (47 pgs, 571 KB, PDF) Minnesota Statewide Quality Reporting and Measurement System MSRT Quality Measure Training Slides (15 pgs, 130 KB, PDF) Data Submission Guide (35 pgs, 450 KB, PDF) Emergency Department Stroke Registry Process of Care Indicator Specifications (5 pgs, 120 KB, PDF)			



SETTING UP YOUR MSRT ACCOUNT

- Submit MSRT Registration Form (deadline January 28, 2012)
- Primary Contact will receive account information via email
 - The Primary Contact will be assigned as the hospital's stroke account "administrator"
 - A login name, temporary password, and link to the MSRT will be emailed to the Primary Contact.
 - You will be prompted to immediately change your password.
 - Your personal password must be a minimum of 8 characters and include a number, a symbol, and a capitalized letter.
 - The Administrator can set up other accounts for staff (e.g., another administrator, data entry-only, reports-only)

SETTING UP YOUR MSRT ACCOUNT

- You will receive a notice if your hospital has not set up an account by February 8, 2012.
- First data submissions due **February 15, 2012**
 - MSR participants:
 - Enter cases discharged July 1, 2011 - September 30, 2011 (Q3 2011)
 - MSRT Quality users:
 - Enter cases discharged July 1, 2011 - September 30, 2011 (Q3 2011)
 - MSRT Summary users:
 - Enter Q3 2011 numerator and denominator for both indicators

QUESTIONS

- Albert Tsai - albert.tsai@state.mn.us
- Jacob Zdon - (stroke abstraction questions)
jacob.zdon@state.mn.us
- Vicki Olson - Stratis Health - volson@stratishealth.org
- Sara Bonneville - (MN SQRMS) - sara.bonneville@state.mn.us