

A User Guide for Creating a Stroke Data Reliability Process



WISCONSIN COVERDELL
STROKE PROGRAM



**American
Stroke
Association.**

*A division of the
American Heart Association.*



WISCONSIN DEPARTMENT
of HEALTH SERVICES

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Table of Contents

Overview.....	3
Acknowledgements.....	3
Preparing.....	4
Creating.....	5
Analyzing.....	10
References.....	12

Overview

Ensuring data reliability of a hospital's stroke abstracts is essential to its credibility and value. As stroke abstractors range from novice to expert, the need for a process to determine reliability of data entry that will demonstrate knowledge deficits and learning opportunities is essential. This user guide will provide step-by-step directions on how to prepare for, create, and analyze stroke data for reliability. This guide is relevant for hospitals entering into the Get With the Guidelines® (GWTGs) - Stroke Registry.

Acknowledgements

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- Renee Sednew, MPH, Senior Director, Quality & Systems Improvement, American Heart Association
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Preparing

The first steps to perform in creating a reliability process are to:

1. Determine who your re-abstractor is. This is someone different than the abstractor.
2. Contact your local American Heart Association (AHA) to notify them of the need for a free GWTGs re-abstractation site. Your local AHA contact is found on the GWTGs Community Page.

Next, determine the data you would like to analyze for agreement between two abstractors. The Wisconsin Coverdell Stroke Program analyzes five records and 30 data elements quarterly. It is important to analyze performance measures consistent with your stroke certification level to ensure abstractors' understanding of the data elements and identify learning opportunities. For ease of demonstrating the process, this user guide will look at three GWTGs data elements:

- Was patient screened for dysphagia prior to any oral intake, including water or medications?
- Was antithrombotic therapy administered by the end of hospital day 2?
- Were cholesterol reducing treatment instructions or medication provided at discharge?

The final step in preparing for your reliability process is to determine your random sample. The Joint Commission does not recommend a methodology to monitor data reliability, but does suggest five abstracts be reviewed per quarter. A simple random sampling method may be utilized. With this method, each abstract is equally likely to be chosen, removing potential bias. Simply assign each abstract a number starting with one, then write each number on a separate piece of paper. Fold each piece of paper and put them in a box, then draw five of these numbers. This is your random selection!

This user guide will demonstrate the creation of data downloads and analyzing for reliability five randomly selected cases: 1903, 1907, 1910, 1915, and 1917.

Creating

Log into your GWTGs abstraction site and click on the Run Reports icon.



Community Page

News | Contact Us | Logout

Get Started!

Stroke N/A/N/A  



Trainings

Advanced Reporting: Learn more about using measures interface features such as filters, display options, and exporting your reports to PDF and Excel.
Downloading: Learn how to quickly access your data in a spreadsheet format
HF: An introduction to the HF tool, including navigating the system, entering data, and running reports
Report Writer: Create customized reports on your data
Stroke: An introduction to the Stroke tool, including navigating the system, entering data, and running reports
Uploader 2.0: Step-by-step instructions on the file creation and upload processes
Resuscitation: An introduction to the Resuscitation tool, including navigating the system, entering data, and running reports

My Hospital

	Start Date	AHA Baseline Date
Stroke	0	N/A
TOTAL	0	

Snapshot

	# of Hospitals:	# of Records:
AtrialFib	197	59177
CAD	470	117128
Heart Failure	1204	1678500
Resuscitation - Patients	889	952230
Resuscitation - CPA		429714
Resuscitation - ARC		62440
Resuscitation - MET		661310
Resuscitation - PCAC		2029
Stroke	2970	5156059

LEGEND:

-  New Patient
-  All Patients
-  Reports
-  Resources

This system and all materials herein are confidential and are the property of Quintiles or the American Heart Association/American Stroke Association, as separately agreed between them.

Click on Download.

QUINTILES outcome Contact Us Logout

Download Reports My Account Home



Reports User Manual

- Site-Level Reports**
 - Configurable Measure Reports**
Build your own Quality Measure Reports
 - Pre-Defined Measure Reports**
Select from the Most Common Measure Reports or run your previously saved report types.
 - Stroke InSights Data Quality Report**
 - Stroke Mortality Report**
- Data Quality Review**
 - Submission Error Report**
Submission Errors identified by QualityNet and The Joint Commission.

Select Stroke in the Select Forms section.

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Download Reports My Account Home

Current User: Doc Pluma - City: JUNDH - Missouri, Div: Public Health - City ID: 23127

Data Download Tool Help

Choose Fields and Time Period for Download

Select Forms	All Forms Stroke Stroke Post Discharge Follow Up Form
Complete records	
Date range	From: 2019 Jan To: 2019 Jan <input type="checkbox"/> Include Patients without Core Dates
Format Download File	Coded fields format: <input type="radio"/> As Descriptives <input checked="" type="radio"/> As Codes (Help) Multiselect fields format: <input checked="" type="radio"/> Split Fields <input type="radio"/> Single Field (Help)



[Generate Download File](#)

Please be patient after making your selection, as it may take the server a few minutes to compile your data.
The following DDT requests were completed within the past 24 hours and are available for download.

Go to the Select Individual Fields and left click on the desired data elements you want to analyze. The data elements are listed in the same order as the Patient Management Tool (PMT). Remember to hold the ctrl key down when selecting multiple data measures.

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Select a Set of Fields

- Coverdell Michigan
- MaRISS
- JC STK Clinical XML
- JC STK Population XML
- CMS Outpatient Population XML
- CMS STK Clinical XML
- CMS STK Population XML
- JC CSTK Clinical XML
- JC CSTK Population XML
- JC CSTK-MRS Clinical XML

Select Individual Fields

(Hold down the "Ctrl" key to select multiple fields.
Click on a single entry to de-select all but that entry.)

Reason for Oral Factor Xa Inhibitor
Other Therapeutic Anticoagulation
Was DVT or PE documented?
Was antithrombotic therapy administered by the end of hospital
Antithrombotic day 2 type
Reason for Not Administering Antithrombotic Therapy by End of
Was patient treated for a urinary tract infection (UTI) during this
If patient was treated for a UTI, did the patient have a Foley cath
Total Cholesterol:
Triglycerides:

Save the Set of Fields (optional): Save

QUINTILES OUTCOME Contact Us Logout

Current User: Dot Bluma Site: WIDPH - Wisconsin Div of Public Health Site ID: 73127

Download Reports My Account Home

Select a Set of Fields

- Coverdell Michigan
- MaRISS
- JC STK Clinical XML
- JC STK Population XML
- CMS Outpatient Population XML
- CMS STK Clinical XML
- CMS STK Population XML
- JC CSTK Clinical XML
- JC CSTK Population XML
- JC CSTK-MRS Clinical XML

Select Individual Fields

(Hold down the "Ctrl" key to select multiple fields.
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Reason for Oral Factor Xa Inhibitor
Other Therapeutic Anticoagulation
Was DVT or PE documented?
Was antithrombotic therapy administered by the end of hospital
Antithrombotic day 2 type
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If patient was treated for a UTI, did the patient have a Foley cath
Total Cholesterol:
Triglycerides:

Save the Set of Fields (optional): Save

QUINTILES OUTCOME Contact Us Logout

Download Reports My Account Home

Select a Set of Fields

- Coverdell Michigan
- MaRISS
- JC STK Clinical XML
- JC STK Population XML
- CMS Outpatient Population XML
- CMS STK Clinical XML
- CMS STK Population XML
- JC CSTK Clinical XML
- JC CSTK Population XML
- JC CSTK-MRS Clinical XML

Select Individual Fields

(Hold down the "Ctrl" key to select multiple fields.
Click on a single entry to de-select all but that entry.)

Other Antithrombotic(s) Day 2
Other Antithrombotic(s) Day 2
Other Antithrombotic(s) Freq 2
Persistent or Paroxysmal Atrial Fibrillation/Flutter:
If atrial fibrillation or history of PAF documented, was patient disc
If NC, documented reasons for no anticoagulation:
Anti-hypertensive Tx:
Cholesterol Reducing Tx:
Statin Medication
Statin Dose
Reason for Not Prescribing Statin Medication at Discharge:

Save the Set of Fields (optional): Save

Save your download if you will be using it again. All saved downloads can be found in the Saved Sets.

Continue formatting your download by selecting the timeframe desired. Format the download file by selecting As Descriptives and Single Field. Then click Generate Download File.

The screenshot shows the 'Generate Download File' interface. At the top, there are navigation tabs: 'Download', 'Reports', 'My Account', and 'Home'. Below these are 'Contact Us' and 'Logout' links. The main content area is divided into several sections:

- Select Individual Fields:** A dropdown menu is open, showing a list of fields. 'Cholesterol Reducing Tx' is highlighted in blue. An orange arrow points to this field.
- Save the Set of Fields (optional):** A text input field labeled 'Reliability' and a 'Save' button.
- Complete records:** A checkbox labeled 'Include Complete Records Only'.
- Date range:** Two date pickers. 'From:' is set to '2018 Oct' and 'To:' is set to '2018 Dec'. An orange arrow points to the 'To:' date. Below the date pickers is a checkbox 'Include Patients without Discharge Date:'.
- Format Download File:** Two sections of radio buttons. The first section has 'As Descriptives' selected and 'As Codes (Help)'. The second section has 'Single Field (Help)' selected and 'Split Fields'. An orange arrow points to the 'Single Field' option.

At the bottom left, there is a 'Generate Download File' button. An orange arrow points to this button. Below the button, a message reads: 'Please be patient after making your selection, as it may take the server a few minutes to compile your data.'

Upon selecting Generate Download File, this screen will appear. In a few moments, you will be sent an email notifying you when your download is complete. Upon this email notification, click on Back to Data Download Tool.

The screenshot shows a confirmation message. At the top, there are navigation tabs: 'Download', 'Reports', 'My Account', and 'Home'. Below these are 'Contact Us' and 'Logout' links. The main content area contains the following text:

Current User: Dot Bluma Site: WIDPH - Wisconsin Div of Public Health Site ID: 73127

[Back to Data Download Tool](#)

Thank you for submitting your DDT request. You will receive an e-mail notification when the file is ready for download.

Note: To confirm the e-mail address on file, please go to the "My Account" tab and click "User Information". If the e-mail address shown is incorrect, please contact technical support at 888-526-6700 to update it.

An orange arrow points to the 'Back to Data Download Tool' link.

Click on Download completed DDT request.

The screenshot shows the 'Download completed DDT request' screen. At the top, there are navigation tabs: 'Download', 'Reports', 'My Account', and 'Home'. Below these are 'Contact Us' and 'Logout' links. The main content area is divided into several sections:

- Select Individual Fields:** A dropdown menu is open, showing a list of fields. 'Stroke Form Type Bitmap' is selected. An orange arrow points to this field.
- Save the Set of Fields (optional):** A text input field and a 'Save' button.
- Complete records:** A checkbox labeled 'Include Complete Records Only'.
- Date range:** Two date pickers. 'From:' is set to '1009 Oct' and 'To:' is set to '2019 Jan'. An orange arrow points to the 'To:' date. Below the date pickers is a checkbox 'Include Patients without Discharge Date:'.
- Format Download File:** Two sections of radio buttons. The first section has 'As Codes (Help)' selected and 'As Descriptives'. The second section has 'Split Fields' selected and 'Single Field (Help)'. An orange arrow points to the 'Split Fields' option.

At the bottom left, there is a 'Generate Download File' button. Below the button, a message reads: 'Please be patient after making your selection, as it may take the server a few minutes to compile your data.'

The following DDT requests were completed within the past 24 hours and are available for download.
[Download completed DDT request \(21Jan2019_01:31\)](#)

An orange arrow points to the 'Download completed DDT request (21Jan2019_01:31)' link.

Open the download.

Select Individual Fields

- Stroke Form Type Bitmap
- ASR Form Group Present
- Gender
- Date of Birth
- Age:
- Homeless Stroke
- Zip Code Stroke
- Zip Code Ext Stroke
- Health Insurance Status:
- Payment Source - Medicare

Save the Set of Fields (optional): Save

Complete records Include Complete Records Only

Date range

From: 1009 Oct

To: 2019 Jan

Include Patients without Discharge Date:

Format Download File

Coded fields format: As Descriptives As Codes (Help)

Multiselect fields format: Split Fields Single Field (Help)

Generate Download File

Please be patient after making...

The following DDT requests we... Download completed DDT r...

What do you want to do with StrokePMT.zip (4.3 KB)?
From: heart.rp.iqvia.com

Open Save ^ Cancel

Select the Stroke Excel file.

Compressed Folder Tools StrokePMT (3)

File Home Share View Extract

Local Packages > Microsoft.MicrosoftEdge_8wekyb3d8bbwe > TempState > Downloads > StrokePMT (3)

Name	Type	Compressed size	Password ...	Size	Ratio	Date m...
codes	Microsoft Excel Comma S...	1 KB	No	1 KB	60%	1/21/20
elements	Microsoft Excel Comma S...	1 KB	No	1 KB	56%	1/21/20
fieldgroups	Microsoft Excel Comma S...	1 KB	No	1 KB	56%	1/21/20
forms	Microsoft Excel Comma S...	1 KB	No	1 KB	32%	1/21/20
site_codes_AHA_Hospital_ID	Microsoft Excel Comma S...	1 KB	No	1 KB	33%	1/21/20
site_codes_EMS_Agency	Microsoft Excel Comma S...	1 KB	No	1 KB	23%	1/21/20
site_codes_Optional_11	Microsoft Excel Comma S...	1 KB	No	1 KB	23%	1/21/20
site_codes_Optional_12	Microsoft Excel Comma S...	1 KB	No	1 KB	23%	1/21/20
site_codes_Ph...anProvider_NPI	Microsoft Excel Comma S...	1 KB	No	1 KB	36%	1/21/20
Stroke	Microsoft Excel Comma S...	2 KB	No	10 KB	84%	1/21/20
studies	Microsoft Excel Comma S...	1 KB	No	1 KB	29%	1/21/20

Our download of abstractions has 19 cases. To look at only the five random cases selected, you can delete columns C-E and I-V, and rows 13, 5-7, 9-10, 12-15, 17, and 19-20.

1	site_os_id	patient_os_id	study_id	C	D	E	F	G	H	I	J	K	L	M	N	O	P
2	12345	1901	1388	1457	1 Yes	Yes	Statin	Complete	1/4/2019 15:31	Abby Abtractor (aabtractor)					800	1	1
3	12345	1902	1388	1457	1 Yes	Yes	None - co	Complete	1/4/2019 16:19	Abby Abtractor (aabtractor)					800	1	1
4	12345	1903	1388	1457	2 Yes	NC	Statin	Complete	1/6/2019 7:42	Abby Abtractor (aabtractor)					800	1	1
5	12345	1904	1388	1457	1 Yes	Yes	None - co	Complete	1/6/2019 8:41	Abby Abtractor (aabtractor)					800	1	1
6	12345	1905	1388	1457	1 Yes	Yes	Statin	Complete	1/7/2019 11:28	Abby Abtractor (aabtractor)					800	1	1
7	12345	1906	1388	1457	1 Yes	No/ND	None pre	Complete	1/7/2019 12:57	Abby Abtractor (aabtractor)					800	1	1
8	12345	1907	1388	1457	1 Yes	Yes	Statin	Complete	1/7/2019 13:01	Abby Abtractor (aabtractor)					800	1	1
9	12345	1908	1388	1457	1 Yes	Yes	Statin	Complete	1/7/2019 13:01	Abby Abtractor (aabtractor)					800	1	1
10	12345	1909	1388	1457	1 No/ND	Yes	Statin	Complete	1/8/2019 17:35	Abby Abtractor (aabtractor)					800	1	1
11	12345	1910	1388	1457	1 Yes	NC	Statin:Fibi	Complete	1/9/2019 11:23	Abby Abtractor (aabtractor)					800	1	1
12	12345	1911	1388	1457	1 Yes	Yes	Statin	Complete	1/10/2019 15:16	Abby Abtractor (aabtractor)					800	1	1
13	12345	1912	1388	1457	1 NC		None - co	Complete	1/10/2019 15:54	Abby Abtractor (aabtractor)					800	1	1
14	12345	1913	1388	1457	1 Yes	Yes	Other me	Complete	1/10/2019 16:32	Abby Abtractor (aabtractor)					800	1	1
15	12345	1914	1388	1457	1 Yes	NC	Statin	Complete	1/10/2019 16:57	Abby Abtractor (aabtractor)					800	1	1
16	12345	1915	1388	1457	1 Yes	Yes	Statin	Complete	1/10/2019 17:55	Abby Abtractor (aabtractor)					800	1	1
17	12345	1916	1388	1457	1 Yes	Yes	None pre	Complete	1/10/2019 18:00	Abby Abtractor (aabtractor)					800	1	1
18	12345	1917	1388	1457	1 Yes	Yes	Statin	Complete	1/14/2019 7:56	Abby Abtractor (aabtractor)					800	1	1
19	12345	1918	1388	1457	1 No/ND	Yes	Statin	Complete	1/14/2019 14:37	Abby Abtractor (aabtractor)					800	1	1
20	12345	1919	1388	1457	1 Yes	Yes	Statin	Complete	1/14/2019 19:56	Abby Abtractor (aabtractor)					800	1	1

You are left with a much easier data set to analyze. The hospital abstraction identification number is 12345 in column A. The five abstractions chosen randomly for selection are in Column B. The desired data measures are seen in:

- Column C: Was patient screened for dysphagia prior to any oral intake, including water or medications?
- Column D: Was antithrombotic therapy administered by the end of hospital day 2?
- Column E: Were Cholesterol Reducing Treatment instructions or medication provided at discharge?

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
	site_os_id	patient_os_id	gs_dysphagia	gs_antiplatetadm	gs_cholredtx													
2	12345	1903	Yes	NC	Statin													
3	12345	1907	Yes	Yes	Statin													
4	12345	1910	Yes	NC	Statin:Fibrate													
5	12345	1915	Yes	Yes	Statin													
6	12345	1917	Yes	Yes	Statin													

Notify your re-abstractor of the randomly selected cases chosen. Decide on a timeline for completion. They will then re-abtract the random selection into your hospital’s re-abstraction site using the same identification number. Once the cases have been re-abtracted, create a download in your re-abstraction site identical to the one just detailed in your abstraction site.

Once you have downloaded the re-abstractions, delete columns C-E and I-V, and rows 1–3, 5–7, 9–10, 12–15, 17, and 19–20. You are left with the same rows and columns as from the abstraction download with the exception of column A. Your hospital re-abstraction identification number is 67891.

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	site_os_id	patient_os_id	gs_dysphagia	gs_antiplatetadm	gs_cholredtx														
2	67891	1903	NC	NC	Statin														
3	67891	1907	Yes	Yes	Statin														
4	67891	1910	Yes	No/ND	None - contraindicated														
5	67891	1915	No/ND	Yes	Statin														
6	67891	1917	Yes	Yes	Statin														

Analyzing

To analyze your data, copy and paste in Excel your five abstractions above your re-abstractions. We have labeled abstractions in row one and re-abstractions in row nine. Changing the text to red easily identifies a mismatch in responses. For example, in Column C for dysphagia screen, we see for case 1903 the abstractor selected “Yes” and the re-abstractor answered “NC.” This is a mismatch between the abstractor and the re-abstractor. Continue analyzing for mismatches and identifying them in red text or the color of your choice.

Abstractions					
site_os_id	patient_os_id	gs_dysph	gs_antipl	gs_chole	redtx
12345	1903	Yes	NC	Statin	
12345	1907	Yes	Yes	Statin	
12345	1910	Yes	NC	Statin:Fibrate	
12345	1915	Yes	Yes	Statin	
12345	1917	Yes	Yes	Statin	
Re-abstractions					
site_os_id	patient_os_id	gs_dysph	gs_antipl	gs_chole	redtx
67891	1903	NC	NC	Statin	
67891	1907	Yes	Yes	Statin	
67891	1910	Yes	No/ND	None - contraindicated	
67891	1915	No/ND	Yes	Statin	
67891	1917	Yes	Yes	Statin	

To determine the agreement rate, divide the numerator by the denominator for each data element. For example, the dysphagia measure has a denominator of five and a numerator of three. Three out of five times the abstractor and re-abstractor agreed for the dysphagia measure, which equals 60%. The overall agreement rate is determined by the total number of opportunities or data elements analyzed and the total number of agreements. In this example there are 15 opportunities for agreement: there are three data measures with five cases each, so $3 \times 5 = 15$. The abstractor and re-abstractor did not agree four times, thus there are 11 agreements. Eleven divided by 15 gives us a 73% agreement rate. A respectable goal for agreement rates between two abstractors is 90%.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Abstractions																
2	site_os_id	patient_os_id	gs_dysphagia	gs_antiplaetadm	gs_cholredtx												
3	12345	1903	Yes	NC	Statin												
4	12345	1907	Yes	Yes	Statin												
5	12345	1910	Yes	NC	Statin:Fibrate												
6	12345	1915	Yes	Yes	Statin												
7	12345	1917	Yes	Yes	Statin												
8																	
9	Re-abstractions																
10	site_os_id	patient_os_id	gs_dysphagia	gs_antiplaetadm	gs_cholredtx												
11	67891	1903	NC	NC	Statin												
12	67891	1907	Yes	Yes	Statin												
13	67891	1910	Yes	No/ND	None - contraindicated												
14	67891	1915	No/ND	Yes	Statin												
15	67891	1917	Yes	Yes	Statin												
16																	
17			3/5=60%	4/5=80%	4/5=80%												
18																	
19	Aggregated	11/15=73%															
20																	

It is imperative for the abstractor and re-abstractor to meet and determine learning opportunities based on the disagreements that occurred. The correct answer for each data measure must be identified. Developing a source of truth document is highly recommended. The source of truth document identifies the place in the electronic health record from which to abstract each data element. Also, a review of the coding instructions where mismatches occurred is essential to ensure both abstractors are interpreting them similarly. These quarterly reviews will help the abstractor and re-abstractor in discovering learning opportunities and will ensure the most reliable data is abstracted, reported on in team meetings, and submitted to your certification body.

References

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