

# Coverdell Training Webinar

## Re-Abstraction and Data Quality

Ian Brissette, PhD

Anna Colello, Esq.

# Overview

- Status of Project –Updates from Year 1
- Addressing Questions from 5/29/2013 Webinar
- Data Re-abstraction
- Data quality reports from CDC
- CDC Coverdell Performance Reports
- Questions

# Coverdell Initiative Update

Year 1 July 1, 2012-June 30, 2013

- 39 participants/accepting new members Fall '13
- Access to GWTG Coverdell data
- Selection of measures
- QI Consultant/Outline of Year 2 trainings
- Recruitment of Project Coordinator
- Contract with IPRO for re-abstraction

# When does data abstraction need to be completed?

- Deadlines are 45 days from end of Quarter
- This allows for completion of coding to determine which records need to be abstracted as well as completion of the medical records (standard for completion of medical record is 30 days post discharge.)

# What are the additional data elements required for the Coverdell Program?

1. ICD-9-CM Principal diagnosis Code
2. How patient arrived at your hospital
3. Health insurance status
4. Ambulatory status prior to current event
5. Medications prior to admission (antihypertensive)
6. IA catheter-based reperfusion at this hospital (Y/N)
7. Treatment for hospital-acquired pneumonia (Y/N)
8. DVT or PE documented
9. Antihypertensive treatment at discharge

# What Stroke ICDs will be included in the re-abstraction?

Ischemic Stroke (433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 346)

Hemorrhagic Stroke (430, 431)

Transient Ischemic Attack (435, 435.0, 435.1, 435.2, 435.3, 435.8, 435.9)

Additional ICD-9-CM PCDs that may apply to stroke in pregnancy (671.5X, 674.0X)

# Re-Abstraction - Overview

**CDC Deliverable:** Plan and implement a method to assess hospital case ascertainment and case selection for inclusion, as well as annual chart audits to ensure reliability of data.

- **Timeline:** September 2013 to November 2013
- **Participants:** American Heart Association, IPRO, Coverdell Hospitals, NYSDOH

# Re-Abstraction - Selection

- 5 records from each Coverdell hospital will be selected at random by NYSDOH from GWTG;
- Records will have dates of service between June 30, 2012 and December 31, 2012;
- Cases will include at least 1 hemorrhagic stroke, 1 patient who received tPA and 1 patient where Medicaid was the expected payer;
- NYSDOH will inform Coverdell hospitals of the records selected for re-abstraction; The patient ID recorded in GWTG will be used as the primary key;

# Re-Abstraction – Data Elements

- Data elements for re-abstraction represent a limited set of all elements within the GWTG PMT **(Hand outs 1 & 2)**
- CDC elements relate to performance measures, new data elements and complications;
- Selection of data elements was informed by data past performance of hospitals participating in the Paul Coverdell National Acute Stroke Registry

# Re-Abstraction - Implementation

## 5 Identified Cases

### Option # 1

Hospital transmits copies of medical records for the 5 selected cases to IPRO.

IPRO staff abstract required data elements onto paper form using GWTG PMT definitions;

Forms are transmitted by fax to NYSDOH for data entry, management and analysis.

### Option # 2

Hospital staff pull medical records for 5 cases and abstract required data elements onto paper form using GWTG PMT definitions;

Forms are transmitted by fax to NYSDOH for data entry, management and analysis.

# Re-Abstraction

## Data Management & Analysis

- NYSDOH Staff (within BCDER) will enter data from abstraction form into dataset using codes/instructions consistent with GWTG PMT
- Data from newly abstracted cases will be merged with cases previously entered into GWTG using Patient ID as the primary key
- Statistics reflecting the agreement between the two abstractions (% agreement, kappa) will be calculated to include in Coverdell cohort and hospital-specific reports; Hospitals will be the only ones to see their own data;

# Questions about Re-abstraction

# CDC Quarterly Data Quality Reports

Reports CDC develops from the data transmitted for the project period (June 30, 2012 to current quarter)

Reports provide information about completeness of key data elements and quality of information on cases in the PCNASR

On this webinar we will review contents of the report (see hand out) and how they will be used in the NYS Coverdell Program.

# Table 1. Percentage Missing Time/Dates

Variable	Detail	Number missing (%)
Time of Sign and Symptom	LKW only	44 (6%)
	DISC only	22 (3%)
	Both LKW and DISC	370 (53%)
Hospital Admission Time		0
ED Arrival Time		1 (0.1%)
Discharge Time		0
Image Time	Based on 429 had imaging performed	22 (5%)

Number and percent missing records for Last Known Well (LKW) date, Discovery (DISC) date, both LKW and Disc dates, Hospital admission time, Emergency Department (ED) Arrival time, Discharge time, and Image time.

# Invalid/Questionable Time Intervals – Last Known Well and ED Triage

Note: Apparent data entry errors for those highlighted below.

Obs	covpatid	lkwdt	edtriagdt	interval	inhosp_stroke
1	1496387	14MAR2013:17:00:00	12MAR2012:21:28:00	-8803.53	Yes
2	A0089316	17JAN2013:15:15:00	17JAN2013:12:27:00	-2.80	Yes
3	A0717530	18SEP2012:15:00:00	08SEP2012:00:52:00	-254.13	Yes
4	E0005734	27OCT2012:12:35:00	17OCT2012:08:12:00	-244.38	Yes
5	E0144632	08JAN2013:17:00:00	03JAN2013:20:13:00	-116.78	Yes
6	E0462794	21OCT2012:20:30:00	10OCT2012:21:14:00	-263.27	Yes
7	hv579081	27JAN2013:16:30:00	27JAN2013:15:14:00	-1.27	Yes
8	01157	13FEB2012:17:00:00	13FEB2013:20:57:00	8787.95	No
9	5013236	01FEB2012:12:00:00	14FEB2013:12:46:00	9096.77	No
10	MIL5392	22JAN2012:20:00:00	22JAN2013:22:48:00	8786.80	No

Quarterly reports will include cases with out of range values that may represent data entry errors.

# Other Invalid/Questionable Time Intervals

## On Handout 3

- Discovery and ED Triage (in hours)
- Imaging and ED Triage (in hours)
- Hospital Admission and ED triage date interval (in days)
- ED Triage and tPA date interval (in hours)
- Length of Stay (more than 1 year or negative)

# Use of Quarterly Data Quality Reports in NYS Coverdell Program

- Hospitals will be provided feed back on completeness and of time and data information; NYS will track completeness throughout the project
- Coverdell hospitals will be given a list of patient IDs CDC has highlighted as apparent/potential data entry errors;
- Hospitals should either confirm the data entered into GWTG is consistent with the clinical record, or make modifications to the record with GWTG

**Questions  
about  
Data Quality Reports**

# Coverdell Performance Reports - CDC

Paul Coverdell National Acute Stroke Registry Quarterly Performance Measure Results (Eight States)

Number of Hospitals: 239

Quarter	Coverdell Performance Measures	Numerator*	Denominator*	Percent*	HS/SNS	IS	TIA
	tPA Given	577	724	79.7%		X	
	Dysphagia Screening	9474	11398	83.1%	X	X	
	VTE/DVT Prophylaxis by end of Day 2	10161	11338	89.6%	X	X	
	Antithrombotic Therapy by end of Day 2	8932	9418	94.8%		X	X
	Assessed for Rehabilitation	10864	11114	97.8%	X	X	
	Stroke Education	7409	8208	90.3%	X	X	X
	Smoking Cessation Counseling	NA	NA	NA	X	X	X
	Antithrombotic Therapy at Discharge	11001	11160	98.6%		X	X
	Statin Therapy at Discharge	8245	8774	94.0%		X	X
	Anticoagulation for Atrial Fibrillation	1665	1806	92.2%		X	X

\*Indicated weighted estimates

Yellow fill implies a statistically significant disparity

source: 10/01/12-12/31/12

# Coverdell Performance Reports - CDC

Paul Coverdell National Acute Stroke Registry Quarterly Performance Measure Results (Eight States)

Number of Hospitals: 239

Ischemic Stroke Only	Numerator*	Denominator*	Percent*	White*	Race Other*	Male*	Female*
tPA Given	577	724	79.7%	80.6%	77.1%	81.7%	77.7%
Dysphagia Screening	7998	9527	83.9%	83.7%	84.7%	84.2%	83.7%
VTE/DVT Prophylaxis by end of Day 2	8273	9183	90.1%	89.5%	91.8%	90.1%	90.1%
Antithrombotic Therapy by end of Day 2	7478	7915	94.5%	94.7%	93.9%	95.0%	93.9%
Assessed for Rehabilitation	9058	9247	98.0%	97.7%	98.5%	97.5%	98.4%
Stroke Education	4776	5160	92.6%	92.7%	92.2%	92.9%	92.2%
Smoking Cessation Counseling	NA	NA	NA	NA	NA	NA	NA
Antithrombotic Therapy at Discharge	8779	8874	98.9%	98.9%	99.0%	99.2%	98.7%
Statin Therapy at Discharge	6586	6921	95.2%	95.0%	95.5%	95.8%	94.5%
Anticoagulation for Atrial Fibrillation	1371	1459	94.0%	93.4%	97.2%	94.4%	93.6%

Centers for Disease Control and Prevention - Division for Heart Disease and Stroke Prevention

Data source: 10/01/12-12/31/12

\*Indicated weighted estimates

Yellow fill implies a statistically significant disparity

# Coverdell Performance Reports - CDC

Paul Coverdell National Acute Stroke Registry Quarterly Performance Measure Results (Eight States)

Number of Hospitals: 239

TIA Only	Numerator*	Denominator*	Percent*	White*	Race Other*	Male*	Female*
Antithrombotic Therapy by end of Day 2	1454	1502	96.8%	96.7%	97.1%	97.2%	96.5%
Stroke Education	1844	2154	85.6%	85.7%	85.3%	86.0%	85.3%
Smoking Cessation Counseling	NA	NA	NA	NA	NA	NA	NA
Antithrombotic Therapy at Discharge	2222	2286	97.2%	97.2%	97.2%	98.0%	96.6%
Statin Therapy at Discharge	1659	1852	89.6%	89.7%	89.2%	90.5%	88.9%
Anticoagulation for Atrial Fibrillation	294	347	84.7%	84.5%	87.1%	88.4%	82.1%

Hemorrhagic Stroke Only	Numerator*	Denominator*	Percent*	White*	Race Other*	Male*	Female*
Dysphagia Screening	1249	1567	79.7%	77.2%	84.7%	80.9%	78.7%
VTE/DVT Prophylaxis by end of Day 2	1713	1864	91.9%	90.6%	94.2%	90.4%	93.3%
Assessed for Rehabilitation	1523	1567	97.2%	97.1%	97.3%	97.2%	97.2%
Stroke Education	628	718	87.5%	85.6%	91.1%	87.0%	87.9%
Smoking Cessation Counseling	NA	NA	NA	NA	NA	NA	NA

Centers for Disease Control and Prevention - Division for Heart Disease and Stroke Prevention

Data source: 10/01/12-12/31/12

\*Indicated weighted estimates

Yellow fill implies a statistically significant disparity

# Coverdell Performance Reports - CDC

Quarterly performance reports provide an additional source of information for benchmarking performance

Performance reports may identify disparities in care that may exist in your Stroke Center

Data on administration of tPA is also included with CDC Performance Reports this data will be reviewed at a future date

# Questions Performance Reports