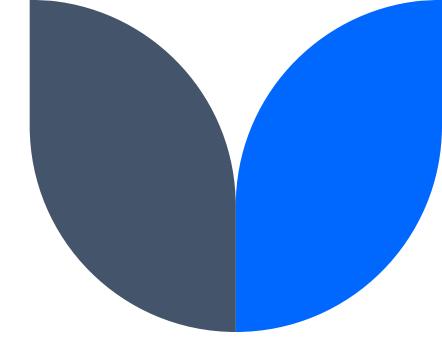
STROKE DATA ABSTRACTION "CHARTING" NEW TERRITORY



Pat Veinot, MSN, RN SCRN

Michelle Vallelunga, MS RN CNRN, SCRN

Data Coordinators

Upstate University Hospital, Syracuse NY

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OBJECTIVES

- Stroke Case Abstraction Methods
- Implementing EMR (EPIC) Uploader to GWTG
- New Processes and Lessons Learned
- Summary



CASE ABSTRACTION METHODS: PROS/CONS

Concurrent – real time clinical analysis, can catch some Core Measure/Quality outliers, teach staff about stroke measures/documentation, and communicate timely process issues for QI. Difficult to accurately identify who is on your list, may capture case data on nonstrokes(traumatic etc.) or double entry of data.

Retrospective- can "batch" entry of cases when timing is good, based on final case ICD 10 coding.

Combination – captures pros from both above, concurrent lists feed daily abstraction and review, day may carryover, monthly diagnosis report to ensure all cases captured.

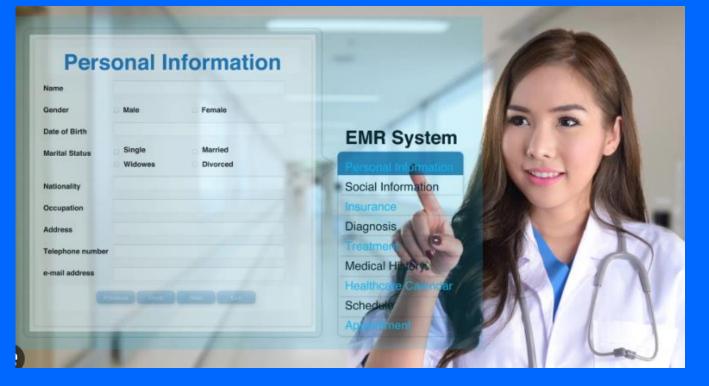
REDUCING ABSTRACTION TIME? EPIC UPLOADER TO GWTG: BASICS AND OUR PROCESS



IMPLEMENTATION AND NEW ABSTRACTION PROCESS STEPS

Build a Case Abstraction-"Tool" Smart Form in EPIC-identify data points to be pulled

- Create a File of all cases (with IMT)
- Upload File to INQVIA/GWTG & Check errors
- Verifying and Saving Complete
- Developing routine of Upload



PROJECT TIMELINE

April 2022

Initial meetings with HF group selling the idea

August – October 2022

IMT would call to schedule update meetings. Business Objects expert would begin mapping of all the fields and work with the Uploader Guide from GWTG.

December 2022

Began using the abstraction tool in EPIC exclusively (December 15).

Waiting on new INQVIA platform to go LIVE to test file upload.

 \bigcirc

May -July 2022

Initial design discussion meetings with IMT explaining all the fields/data points of the stroke tool

November 2022

Testing the Abstraction Tool to ensure it was pulling correctly.

January - February 2023

Verified correct function of the Uploader. Developed a routine for all cases and new process.

CASE ABSTRACTION "TOOL" OR RECORD

- Must have IMT Support and Expertise
- Must put your IMT "hat on" and relate to a non-clinical person
- Can pre-fill or pull discrete data points from EMR (labs, date/times)
- Our design is based on old platform, same fields
- Case is started in GWTG
- Customized to give biggest help or time saver

	Brain Sidebar Summary American Heart Associate Get with the											
1	American Heart Associate Get with the Guidelines- Stroke											
	Dem	ographics Admin Admiss	sion Hospitaliza	ation Advanced Stroke Care [ischarge	Special Initiatives		<i>¥</i> -				
	E	Admin						← →				
	<u> ∮ Populate</u> <u>↓</u> alidate											
	Admin											
	Ar	rrival Date/Time:	10/12/ 📋	7:16 AM ④								
		Admit Date:	10/12 📋									
		Final clinical diagnosis re	lated to stroke	1								
		Ischemic Stro		Transient Ischemic Attack (<			id Hemorrhage 🤫					
		Inracerebral Hem	-	Stroke not otherwise spe	cified	No stroke re	lated diagnosis					
		Elective Carotid Interv	vention only									
	1	Was the Stroke etiology d	ocumented in th	ne patient medical record?			Yes No					
Þ		When is the earliest docu	imentation of co	omfort measures only?								
		Day 0 or 1	Day 2 or a	fter Timing unclear	Not D	ocumented/UTD						
	Di	scharge Date/Time:	ä	(1)								
		Not Admitted:										
		Yes, not admitte	d No,	patient admitted as inpatient								
		For patients discharged of	on or after 04/01	I/2011: What was the patient's	discharge	disposition on the (day of discharge?					
		Home		Hospice - Home	Hospie	ce - Health Care Fa	cility					
		Acute Care Facil		Other Health Care Facility		Expired						
		Left Against Medical Ad	vice/AMA	Not Documented/UTD								
	← Previous → Next											
	Status: New Ready for Export (<u>F</u>)											

CASE ABSTRACTION "TOOL" OR RECORD

American Heart Associate Get with the Guidelines- Stroke	American Heart Associate Get with the Guidelines- Stroke
	Demographics Admin Admission Hospitalization Advanced Stroke Care Discharge Special Initiatives
Demographics Admin Admission Hospitalization Advanced Stroke Care Discharge Special Initiatives	(UTI) during this admission?
symptom onset, done at any facility Not Available	Active bacterial or viral infection at admission or Bacterial Infection
Was acute vascular or perfusion Yes No	during hospitalization: Emerging Infectious Disease
imaging (e.g. CTA, MRA, DSA) performed at your hospital?	Other Infectious Respiratory Pathogen
Date/Time 1st vessel or perfusion imaging initiated at your hospital: Hospitalized	seasonal Cold
10/17/2023 🛱 8: 🕐 Date/Time Unknown	Influenza
If yes, type of vascular imaging (select all that apply)	Other Viral Infection
CTA CT Perfusion MRA	None/ND
MR Perfusion DSA (catheter angiography) Was a target lesion (large vessel occlusion) visualized? Yes No/ND Additional Time Tracker Date/Time Stroke 1 🖹 8: O Date/Time Unknown Date/Time of ED 1 🗋 8: O Date/Time Unknown Date/Time of ED Physician 1 🗋 8: O Date/Time Unknown Assessment: Date/Time U Date/Time IV Image: O Date/Time Unknown Date/Time Lab Tests 1 Image: Research Date/Time Stroke 1 Image: Research Date/Time Brain Imaging Interpreted: 0 O Date/Time Unknown Date/Time Brain Imaging Interpreted: 1 Image: Research Date/Time Lab Tests 1 Image: Research Date/Time	Measurements (first measurement upon presentation to your hospital) Total chol 225 (mg/dl): 107 Triglycerides 107 (mg/dl): 107 HDL (mg/dl): 85 LDL (mg/dl): 120 Lipids: NC Lipids: ND A1C (%): 5.2 A1C: ND Image: the transformation of
Date/Time O Date/Time Unknown Neurointerventional Team Activation Date/Time Pt Arrival O Date/Time Unknown in Neurointerventional Suite IV Thrombolytic Therapy IV thrombolytic initiated at this hospital? Yes No	edier hospital arrival? Is there documentation in the medical record that the INR value performed closest to hospital arrival was greater than 1.4? ← Previous ← Next Status: New ✓ Ready for Export (E),

CREATING THE FILE "BUSINESS OBJECTS"

Software used to pull data into useable form for analytics

Web Intelligence 🔻 🗋 🥟 🛄 💌 📇 👻 🎢	ା 🍄 📥 🖂 🔸 🐚 🖉 🔸	🔀 Track 🔹 🤿	Drill 🔹 🏹 Filter Ba	r 📰 Freeze	→ <u> <u> <u> </u> <u> </u></u></u>												Reading
Navigation Map • «	UPSTATE Universit GWTG Stroke #ERROR	ity Health S	ystem														
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		*	Required prompts							_							
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UPLOADING THE FILE

Errors? What to do and how to figure it out

Facility Details Name: ID: City: State: Form Type:	Upstate Medical University 35707 Syracuse New York
	Upload File Check Mapping Format Review Validate File
	Drag and Drop File Here to Upload -or-
	Choose File from Computer (Max File Size: 50 MB)

CHECKING ERRORS AND VALIDATION

Errors may be a data entry, a program error or a mapping issue when data goes from EPIC to the file.

Jploader Validation Report												
: File 5 C												
Uploader Validation Report												
File Based Issue VALDATION ALE MESSAGE Passed File Upload Co	Validation Alert Summary warning (18.2%) Error (78.6%)	VALIDATION ALERT Critical Error	lerts by UpIo-add Records Record ID 3 (Empty) 7 (Empty) 15 (Empty)	Form Name Critical 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2								
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DEVELOP A ROUTINE



A process that made sense for us and our staffing to ensure that all cases are being uploaded, and work-flow needs are met.

Process goes quick now that the kinks are worked out!

NEW PROCESS: ABSTRACTION CASE SCENARIO

Sunday evening, patient M Smith came in through the ER with L weakness, slurred speech, got TNK and was still in the ICU when the abstractor came in Monday morning. Patient was then discharged Wednesday afternoon to home.



Phase I – Monday

- ✓ Admission Info reviewed within EPIC and new abstraction tool started in EPIC AHA tab
- ✓ Patient added to "Stroke Follow" shared list in EPIC

Phase II- Thursday

- ✓ List shows patient Smith is **discharged**. Case assigned a GWTG ID. Case abstraction tool is re-opened in EPIC, discharge and other information is added to the case.
- ✓ Case marked " Ready for Export"

ABSTRACTION CASE SCENARIO (cont)



Phase III – Tuesday (weekly)

- Business Objects program is run to extract all cases marked "Ready for Export" (from previous Monday –Sunday) and creates a very large Excel file. This file is named and saved and printed for future reference.
- \checkmark Abstractor signs on to GWTG Upload section and selects the file and Uploads it
- ✓ Error reports are checked until all cases are loaded

Phase IV – Tuesday

✓ List of the file of exported cases is checked case by case in GWTG to correct any errors or add ICD10 or procedure codes as required and marked as "Complete".



DID WE GET THEM ALL.....



- Validating that all strokes were uploaded... Compare file list to an internal database.
- Can be a report if doing retrospective. Can compare to your file lists

WORTH IT?...IS IT THOUGH?..... YES!

TIME SAVED! ~ 30% to 50% faster from old process

- From fields automatically pulled from EPIC EMR
- Upload process loads multiple cases quickly (10-12 min to run the report- 2 minutes for actual upload)
- > Shifts the focus of the task to the Quality of the data/process vs correctness of the typing and data entry
- Time can be used other efforts Quality, teaching etc.
- More streamlined One Screen- it is like having GWTG built in

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	Summary			🖬 🕗 🕐 💷 🗤	Ar	merican Heart Associat	te Get with the Guidelines-	Stroke
Tricia Lavender	IP Nursing Clinical Overv AHA GWT	TG Stroke 💌 💾 d	n 🗗 🗩 🕖 🗛 🕅			emographics Admin Admission	Hospitalization Advanced Stroke Care Di	scharge Special Initiatives 🖋
MRN: 3405123 09F-TRN 09F-MedSurg TRN 09F Code: Not on file (No Advance Care Documents on File)	Registry Abstraction None Patient Information			Create Abstraction #		Discharge Information Modified Rankin Scale at Dischar	-	Yes No/ND
⊘ «Search»	Patient Name Lavender, Tricia	Legal Sex DOB Female 10/19/1989	SSN xxx-xx-46-	40		NIH Stroke Scale at discharge		
Isolation: None		reisare isy isy isos		~		Ambulatory status at discharge	Able to ambulate independently (no	help from another person) w/ or w/o device
DOUBLICH, HOURE	Basic Information						With assist	ance (from person)
Nancy Neuron, MD Attending	Date Of Birth Legal Sex 10/19/1989 Female	Race Ethnic Group White or Caucasian Not Hispanic or L	atino English	Language			Unabl	e to ambulate ND
PRIMARY PROVIDER TEAM	Patient Demographics					Discharge Blood Pressure (Meas	unement elecent to discharge)	NO
No Primary Team Assigned	Address	Phone .	E-mail Address			Systolic (mmHg)		
Allergies: Not on File	256 Main St LIVERPOOL NY 13088	315-632-7895 (Home)	trish@gmail.com			Diastolic (mmHg)		
ADMIT TO ICU: <1H	Hospital Account					Discharge Blood Pressure ND		
Patient Class: Inpatient	Acct Number	Financial Class				Discharge Treatments		
Level of Care: None	10000097456	None		I		Antithrombotic Therapy approved	d in stroke	
No active principal problem	Primary Payer Payer	Patient Insurance ID	Group Number			Prescribed? Yes	No/ND NC	
Ht —	AETNA	25634	None			Persistent or Paroxysmal Atrial I	Fibrillation/Flutter	Yes No
Last Wt: BMI:	Plan Plan Number Pl	lan Address	Plan Phone	PreAuth Phone		If atrial fib/flutter or history of PA	F documented, was patient discharged or	Yes No/ND NC
	AETNA 10010201 Pr	O BOX 981106 EL PASO, TX 79998-1106	888-632-3862	None	- 11	anticoagulation?		
NO ORDERS TO ACKNOWLEDGE	Account Information					Anti-hypertensive Tx (Select all		
NO NEW RESULTS, LAST 36H	Hospital Account Primary Payor	Affiliated Recurring Accounts	Combined	from HAR		None prescribed/ND	Other anti-hypertensive med	Ace Inhibitors
NO ACTIVE MEDS	10000097456 - AETNA [100102]	None	None			Beta Blockers	None- Contraindicated	Diuretics
	LAVENDER, TRICIA					ARB	CA++ Channel Blockers	
MY PAT LIST REMINDERS	Admission Information					Cholesterol-Reducing Tx (Sele	ct all that apply)	
None +	Arrival Date/Time:	Admit Date/Time: 10/12/2023 0800		10/12/2023 0800		None prescribed/ND Nor	ne - contraindicated Statin	Fibrate
	Admission Type: Urgent Means of Arrival:	Point of Origin: Self/home/work Primary Service: General Medicine	Admit Category: Secondary Service:	N/A		Other med	Niacin Absorption inhibi	tor PCSK 9 inhibitor
	Transfer Source:	Service Area: UPSTATE MEDICA UNIVERSITY		09F NEUROSCIENCE CRITICAL CARE UH		Statin Medication		
	Admit Provider: Nancy Neuron, MD	Attending Provider: Nancy Neuron, M	ID Referring Provider:			Lovastatin + Niacin (Advic	or) Lovastatin (Altoprev)	Amlodipine + Atorvastatin (Caduet)
	Discharge Information					Rosuvastatin (Crestor)	Fluvastatin (Lescol)	Atorvastatin (Lipitor)
	Discharge Date/Time Discharge Disport	sition Discharge Destination Disc	charge Provider Uni					
	None None	None Nor		NELIBOSCIENCE	×		Status: New	 Ready for Export (

LESSONS LEARNED

Old people can learn new things: Be open and let it go



We can be so invested in processes we created Once open new things come easier Ask for help with the more technical pieces Win-Win for both teams!

Trust your translation process: IMT is not healthcare but able to understand and help us make our work-flow more efficient

Establish a management framework from the inside- "you do you". i.e. What are the biggest timesavers? Does not have to be the whole case tool

WHAT'S NEXT?

ICH Layer

Image Trend/Hospital Hub EMS data integration

TOC form follow up form

SUMMARY

Consider asking for hospital/IMT support for this project

Do analysis of time spent now vs potential savings in your pitch



Be persistent in your request-(worth it)-keep it on your list



Be aware it takes time to implement and trust your process

If you do use the Uploader- Kudos and try to maximize use

THANK YOU!



Lisa Capra- Upstate



Lindsay Bugge- Upstate

