GEORGIA QUALITY IMPROVEMENT PROGRAM

GQIP WINTER MEETING 2022

S. Rob Todd, MD
GQIP Trauma Medical Director
Gina Solomon MHA RN
GQIP Director

GQIP Trauma Advisory Committee

GEORGIA QUALITY IMPROVEMENT PROGRAM

- Dr. S. Rob Todd – Grady
- Dr. Katherine Kohler – Wellstar AMC
- Dr. Matthew Vassey – Northeast Georgia Medical Center
- Dr. Naila Avery – Northside Gwinnett
- Dr. Kyle Thomas – Wellstar Kennestone
- Dr. Greg Patterson – Archbold Medical Center

GEORGIA QUALITY IMPROVEMENT PROGRAM

GQIP Research Resident

2020-2022

Jesse Codner MD
General Surgery Resident

GQIP Research Resident

Grants:

TL1, NIH/NCATS Georgia Clinical and
Translational Science Alliance NRSA Training Core

Education:

Master of Science
Clinical Research

GQIP Research Resident: Presentations

Predicting acute kidney injury in a Georgia Quality Improvement Program Trauma Cohort

A State-wide collaborative drill down and analysis of unplanned ICU admissions

Predicting acute kidney injury in a Georgia Quality Improvement Program Trauma Cohort

Georgia Quality Improvement Programs multi-institutional collection of postoperative opioid data using ACS-NSQIP Abstraction

Improving postoperative sepsis performance measurement using hospital risk-adjustment and concomitant monitoring of prevention and rescue within a statewide surgical collaborative

GEORGIA QUALITY IMPROVEMENT PROGRAM

Fall 2021 TQIP Report Performance Matrix Summary

Dr. S. Rob Todd

Gina Solomon

Fall 2021 TQIP Performance Matrix Summary

GEORGIA QUALITY IMPROVEMENT PROGRAM

		A	R	K	L	P	H	F	D	O	N	C	J	E		
Outcome	Cohort	Outlier (High, Average,Low)													Spring Collaborative Report	Fall Collaborative Report
Mortality - Table 2	All Patients	High	Average	Average	Average	Average	High	Average	High	Average	Average	Average	High	High	Average	High
	Blunt Multisystem	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	High
	Penetrating	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	Shock	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	Severe TBI	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	Elderly	High	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	High
	Elderly Blunt Multisystem	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	High
	Isolated Hip Fracture	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
Major Hospital Events - Table 3	All Patients	High	High	Average	Low	Average	High	High	Average	Average	Average	High	Average	Average	Average	High
	Blunt Multisystem	High	Average	Average	Average	Average	High	High	Average	Average	Average	High	Average	Average	Average	High
	Penetrating	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	`Average
	Shock	Average	Average	Average	Average	Average	High	Average	Average	Average	Average	High	Average	Average	Average	Average
	Severe TBI	High	Average	Average	Average	Average	Average	Average	Average	Average	Average	High	Average	Average	Average	Average
	Elderly	High	Average	Average	Average	Average	High	High	Average	Average	Average	High	Average	Average	Average	Average
	Elderly Blunt Multisystem	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	Isolated Hip Fracture	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	High	Average	Average	Average	High
Major Hospital Events Incl. Death - Table 4	All Patients	High	Average	Average	Average	Average	High	High	Average	Average	High	Average	High	Average	Average	High
	Blunt Multisystem	High	Average	Average	Average	Average	Average	Average	Average	Average	High	Average	Average	Average	Average	High
	Penetrating	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	Shock	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	Severe TBI	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	Elderly	High	Average	Average	Average	Average	High	Average	Average	Average	Average	High	Average	Average	Average	High
	Elderly Blunt Multisystem	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	Isolated Hip Fracture	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
Acute Kidney Injury - Table 5	All Patients	High	Average	Average	Average	Average	High	Average	High	Average	Average	High	High	High	High	High
	Shock	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	High
Ventilator-Associated Pneumonia	All Patients	High	Average	Average	Average	Average	Average	High	High	High	Average	High	High	High	Average	Average
	Severe TBI	Average	Average	Average	Average	Average	Average	High	High	Average	Average	High	Average	Average	Average	Average
Pulmonary Embolism	All Patients	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
Surgical Site Infection	All Patients	High	Average	Average	Average	Average	Average	Average	Average	High	High	High	Average	Average	Average	High
Unplanned Admission to the ICU	All Patients	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	High	Average	Average	Average	Average
Unplanned Visit to OR	All Patients	Average	High	Average	Average	Average	Average	High	Average	Average	High	High	Average	Average	Average	Average
Catheter-Associated UTI	All Patients	Average	Average	Average	Average	Average	Average	High	Average	High	Average	Average	High	Average	Average	High

Fall 2021 TQIP Performance Matrix Summary

GEORGIA QUALITY IMPROVEMENT PROGRAM

		A	R	K	L	P	H	F	D	O	N	C	J	E		
Outcome	Cohort	Decile													Spring 2021 Collabprative Report	Fall 2021 Collabprative Report
Mortality - Table 2	All Patients	10	7	7	2	8	10	9	10	6	9	3	10	9	8	9
	Blunt Multisystem	10	5	6	1	9	9	7	6	6	10	2	10	10	8	10
	Penetrating	5	6	2	3	8	2	10	1	7	4	1	9	3	3	3
	Shock	10	3	7	5	7	9	9	1	3	3	1	10	9	7	7
	Severe TBI	9	9	9	6	7	9	5	9	5	6	3	10	8	9	9
	Elderly	10	5	8	3	9	10	8	9	7	10	7	7	5	8	9
	Elderly Blunt Multisystem	10	5	9	1	10	6	3	8	9	9	10	4	7	5	10
	Isolated Hip Fracture	1	10	3	1	3	9	4	9	1	8	3	9	1	4	3
Major Hospital Events - Table 3	All Patients	10	10	2	2	8	10	9	8	8	7	9	7	5	7	8
	Blunt Multisystem	10	10	5	1	3	10	10	7	9	9	10	6	7	8	9
	Penetrating	1	10	2	1	8	7	9	1	4	10	8	9	4	4	6
	Shock	9	2	2	3	9	10	8	1	7	5	10	8	9	7	9
	Severe TBI	10	7	4	2	5	9	8	9	4	5	10	6	7	8	7
	Elderly	10	10	5	2	8	10	9	7	5	4	10	1	4	7	8
	Elderly Blunt Multisystem	8	10	3	1	4	8	10	5	9	4	10	3	6	8	9
	Isolated Hip Fracture	10	10	9	4	4	8	9	10	8	9	10	4	1	9	10
Major Hospital Events Incl. Death - Table 4	All Patients	10	10	5	2	8	10	9	9	8	9	8	9	6	8	9
	Blunt Multisystem	10	8	7	1	6	10	10	6	8	10	8	8	7	8	9
	Penetrating	2	9	1	2	9	4	10	1	5	9	4	8	4	5	5
	Shock	10	2	6	5	9	10	9	1	6	7	10	10	9	6	10
	Severe TBI	8	10	9	5	5	9	5	9	5	7	7	10	7	8	9
	Elderly	10	7	8	2	9	10	8	7	6	9	10	4	2	7	9
	Elderly Blunt Multisystem	10	9	8	1	9	8	10	3	8	9	10	2	5	4	9
	Isolated Hip Fracture	9	10	7	2	3	9	8	10	5	9	10	8	1	7	9
Acute Kidney Injury - Table 5	All Patients	10	9	2	6	8	10	5	10	7	3	8	10	10	9	9
	Shock	10	5	4	9	9	10	7	7	5	2	10	9	10	10	10
Ventilator-Associated Pneumonia	All Patients	10	6	5	2	3	6	9	9	8	4	9	9	8	7	7
	Severe TBI	9	8	4	1	4	2	9	9	8	1	10	9	8	7	7
Pulmonary Embolism	All Patients	5	7	7	6	5	2	9	1	3	8	7	2	6	5	5
Surgical Site Infection	All Patients	10	9	4	1	4	9	7	9	10	10	9	7	2	7	9
Unplanned Admission to the ICU	All Patients	8	4	8	2	5	2	6	8	8	7	10	2	4	7	6
Unplanned Visit to OR	All Patients	7	10	4	4	6	8	8	2	7	8	7	5	3	6	6
Catheter-Associated UTI	All Patients	9	4	8	9	4	5	10	8	10	7	8	10	7	8	9

Fall 2021 TQIP Performance Matrix Summary

GEORGIA QUALITY IMPROVEMENT PROGRAM

Report: Fall 2021	A	R	K	L	P	H	F	D	O	N	C	J	E	Fall Collaborative Report	All Others
From Table 7: Confirmed COVID-19 %	Confirmed COVID-19 %														
All Patients	3.39	0	0.37	3.5	0.92	1.56	1.23	3.96	4.93	4.11	4.79	3.8	4.03	3.47	1.97
Blunt Multisystem	2.43	0	0	7.83	3.45	2.15	1.98	1.91	8.2	5.88	5	2.06	6.22	4.30	2.26
Penetrating	5.77	0	0	3.33	0	0.00	1.71	3.95	5.26	5.56	5.47	4	1.83	4.07	2.93
Shock	8.16	0	0	10.26	0	0.00	3.57	2.94	6.38	0	5.71	6.67	6.25	5.22	2.61
Severe TBI	2.74	0	0	4.00	5	3.23	1.96	1.35	6.25	3.81	3.92	4.35	3.85	3.41	2.55
Elderly	3.36	0	0.95	2.26	0.72	2.62	1.36	6.05	5.83	2.79	4.88	2.4	3.87	3.28	1.88
Elderly Blunt Multisystem	2.63	0	0	0.00	0	7.14	2	3.03	3.57	11.9	4.26	0	4.08	3.91	1.70
Isolated Hip Fracture	4.12	0.97	6.78	1.09	2.06	3.33	4.17	1.52	5.67	4.55	4	0	6.06	3.63	2.03

Fall 2021 TQIP Performance Matrix Summary

GEORGIA QUALITY IMPROVEMENT PROGRAM

	A	R	K	L	P	H	F	D	O	N	C	J	E	COLLABORATIVE	All Others
From Table 12(pg 31 & 32): Hospital Events by Cohort	Acute Kidney Injury %														
All Patients	1.5	2.2	0.0	0.9	0.9	2.5	0.8	2.3	0.7	0.6	1.8	2.1	1.9	1.5	0.9
Blunt Multisystem	3.9	9.7	0.0	3.5	0.0	7.5	2.5	3.2	3.3	1.2	4.5	6.2	6.2	4	2.2
Penetrating	1.9	8.3	0.0	6.7	0.0	3.7	0.9	0	0	2.8	1.8	4	1.8	1.9	1.9
Shock	8.2	0.0	0.0	5.1	10.0	11.4	3.6	2.9	2.1	0	6.9	4.4	7.5	5.8	3.4
Severe TBI	4.1	7.7	0.0	2.0	0.0	3.2	1	2.7	0	1.3	3.1	2.2	3.8	2.5	1.7
Elderly	2.1	1.9	0.0	0.4	0.7	2.2	1.1	3.3	0.6	0.3	3.4	0.8	1.9	1.6	0.9
Elderly Blunt Multisystem	7.9	11.1	0.0	0.0	0.0	7.1	6	6.1	7.1	0	10.8	6.3	6.1	6.2	2.3
Isolated Hip Fracture	4.1	1.0	0.0	0.0	1.0	1.0	1.2	6.1	0	1.1	1	0	0.0	1.1	0.5
From Table 12(pg 31 & 32): Hospital Events by Cohort	CAUTI %														
All Patients	0.4	0.0	0.4	0.5	0.0	0.2	0.7	0.4	0.6	0.3	0.4	0.9	0.2	0.4	0.3
Blunt Multisystem	1.0	0.0	4.3	0.9	0.0	1.1	2	1.3	1.6	1.2	0.6	2	0.5	1.1	0.7
Penetrating	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0	0	0	0.5	4	0.0	0.5	0.3
Shock	2.0	0.0	0.0	2.6	0.0	0.0	3.6	0	0	0	0.4	2.2	0.0	0.9	0.7
Severe TBI	0.0	0.0	0.0	4.0	0.0	3.2	1	2.7	4.2	1.3	0.8	0	0.0	1.2	0.8
Elderly	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0	1	0.3	0.6	0.8	0.3	0.3	0.3
Elderly Blunt Multisystem	0.0	0.0	0.0	0.0	0.0	0.0	2	0	3.6	0	0	0	0.0	0.5	0.6
Isolated Hip Fracture	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0	0.7	0	0	0	0.0	0.1	0.1
From Table 12(pg 31 & 32): Hospital Events by Cohort	Severe Sepsis %														
All Patients	1.2	1.1	0	0	0	3.4	0.4	1.6	0.4	0.7	1.4	0.8	1.5	1.1	0.4
Blunt Multisystem	1.5	3.2	0	0	0	8.6	0	3.2	1.6	2.9	2.6	1	5.2	2.5	1.2
Penetrating	1	8.3	0	0	0	3.7	0	0	0	2.8	2.1	2	0.9	1.4	1.1
Shock	4.1	0	0	0	0	14.3	0	0	0	0	6.1	0	7.5	4.1	1.5
Severe TBI	2.7	7.7	0	0	0	3.2	1	5.4	0	2.5	2.8	2.2	1.9	2.3	1
Elderly	2.4	0.9	0	0	0	3.9	0.5	2.8	0.3	0	2.3	0.8	1.7	1.3	0.4
Elderly Blunt Multisystem	0	0	0	0	0	10.7	0	3	3.6	0	6.5	0	4.1	3	1.2
Isolated Hip Fracture	2.1	0	0	0	0	0.5	0	4.5	0	0.6	1	2.6	0.0	0.6	0.2

Fall 2021 TQIP Performance Matrix Summary

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	A	R	K	L	P	H	F	D	O	N	C	J	E	COLLABORATIVE	All Others
From Table 12(pg 31 & 32): Hospital Events by Cohort							**Deep SSI %**								
All Patients	0.3	1.1	0	0.1	0	0.8	0.4	0.5	0.7	0.3	0.5	0.6	0.1	0.4	0.2
Blunt Multisystem	0.5	3.2	0	0.0	0	4.3	1	2.5	3.3	0.6	1.1	1	0.5	1.3	0.5
Penetrating	0	8.3	0	0.0	0	0.0	1.7	0	4.3	0	1.3	2	0.0	1	0.9
Shock	2	0	0	0.0	0	5.7	0	0	6.4	0	2.4	2.2	0.0	1.9	0.8
Severe TBI	0	0	0	2.0	0	6.5	0	1.4	4.2	0	0.4	0	1.0	0.9	0.3
Elderly	0	0	0	0.0	0	0.4	0.2	0	0	0	0	0.8	0.0	0.1	0
Elderly Blunt Multisystem	0	0	0	0.0	0	3.6	2	0	0	0	0	0	0.0	0.5	0.5
Isolated Hip Fracture	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0.0	0	0
From Table 12(pg 31 & 32): Hospital Events by Cohort							**Organ/Space SSI %**								
All Patients	0.2	0	0	0	0	0.2	0.1	0.2	0.1	0.3	0.6	0	0.1	0.2	0.2
Blunt Multisystem	0.5	0	0	0	0	0.0	0	1.3	0.8	0.6	0.4	0	0.0	0.4	0.3
Penetrating	1.9	0	0	0	0	3.7	1.7	0	0	5.6	3.1	0	0.9	2	1.3
Shock	0	0	0	0	0	0.0	0	0	0	0	2	0	0.0	0.7	0.7
Severe TBI	0	0	0	0	0	0.0	0	0	2.1	0	0.4	0	0.0	0.2	0.2
Elderly	0	0	0	0	0	0.0	0	0.5	0	0	0.2	0	0.0	0.1	0
Elderly Blunt Multisystem	0	0	0	0	0	0.0	0	3	0	0	1.1	0	0.0	0.5	0.1
Isolated Hip Fracture	0	0	0	0	0	0.0	0	0	0	0	0	0	0.0	0	0
From Table 12(pg 31 & 32): Hospital Events by Cohort							**Superficial Incisional SSI %**								
All Patients	0.4	0	0	0	0	0	0.1	0.2	0.1	0.4	0.2	0.2	0.1	0.2	0.2
Blunt Multisystem	0	0	0	0	0	0	0	0	0	1.8	0.4	0	0.0	0.3	0.4
Penetrating	1	0	0	0	0	0	0.9	1.3	0	0	0.3	2	0.0	0.5	0.8
Shock	0	0	0	0	0	0	0	2.9	2.1	0	0.4	0	1.3	0.6	0.5
Severe TBI	0	0	0	0	0	0	0	0	0	0	0.4	0	1.0	0.2	0.3
Elderly	0.6	0	0	0	0	0	0	0.5	0	0	0.2	0	0.0	0.1	0.3
Elderly Blunt Multisystem	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0
Isolated Hip Fracture	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0

Fall 2021 TQIP Performance Matrix Summary

GEORGIA QUALITY IMPROVEMENT PROGRAM

	A	R	K	L	P	H	F	D	O	N	C	J	E	Collaborative	All Others
	Operative Fixation more than 48 hrs (%)														
Table 15: First Operative Fixation in Elderly Patients with Isolated Hip Fractures	5	9.1	3	5.1	6	6.5	8.1	24.1	6.4	2.4	16.5	21.1	19.1	8.1	7.4
	Severe TBI #														
Table 26: ED Intubation for Severe TBI Patients	73	13	13	50	20	31	102	74	48	58	254	46	58	908	25,463
	Intubation in ED (Percent)														
Table 26: ED Intubation for Severe TBI Patients	52.2	63.6	6	82	13	72.4	52	62.2	76.6	73.4	68.9	67.4	56.3	64.8	54.9
	Time to ED Intubation														
Table 26: ED Intubation for Severe TBI Patients	0.17	0.1	0.12	0.15	0.2	0.12	0.18	0	0.15	0.17	0.15	0	0.26	0.17	0.15
	Time to Tracheostomy (Days)														
Table 27: Tracheostomy Management for sTBI Patients	14	3	8	15	1	13	10	8	7	12	13	14	10	11	10
	Tracheostomy within 7 days of Admission (Percent)														
Table 27: Tracheostomy Management for sTBI Patients	5.9	100	0	16.7	1	0	29.2	41.2	56.3	30	22.2	0	16.5	30.6	25.5

Fall 2021 TQIP Performance Matrix Summary

GEORGIA QUALITY IMPROVEMENT PROGRAM

	A	R	K	L	P	H	F	D	O	N	C	J	E	Collaborative	All Others
From Table 39: Unknown Model Variables by Cohort	**SBP (Percent Missing)**														
All Patients	2	5.1	5.6	2.4	4.6	1.9	2.2	1	4.4	3.2	1.2	4.9	8.9	3.1	2.3
Blunt Multisystem	1.5	0	0	2.6	6.9	1.1	0	1.3	0.8	1.8	2	6.2	7.3	2.3	1.9
Penetrating	8.7	0	11.1	3.3	0	3.7	0.9	0	0	0	1.8	4	1.8	2.4	4.6
Shock	0	0	0	0.0	0	0.0	0	0	0	0	0	0	0.0	0	0
Severe TBI	1.4	0	7.7	2.0	5	0.0	0	4.1	2.1	0	1.2	6.5	1.9	1.8	2.5
Elderly	1.8	4.6	6.7	3.0	5.8	1.3	3	0.5	6.5	2.8	0.8	8	11.0	3.9	2.5
Elderly Blunt Multisystem	5.3	0	0	10.7	10	3.6	0	3	3.6	2.4	3.2	6.3	12.2	4.6	1.9
Isolated Hip Fracture	5.2	5.8	0	5.4	11..3	4.8	4.2	0	7.1	7.4	0	2.6	24.2	6.5	3.5
From Table 39: Unknown Model Variables by Cohort	**Pulse**														
All Patients	1.7	4.4	5.2	2.4	4.3	1.6	2.1	0.9	3.7	2.5	1.8	4.9	9.6	3.1	2
Blunt Multisystem	1	0	0	2.6	3.4	0.0	0	1.3	0	1.2	2.6	8.2	8.3	2.4	1.6
Penetrating	9.6	0	11.1	3.3	0	3.7	0.9	0	0	0	2.1	4	2.8	2.7	3.6
Shock	2	0	0	0.0	0	0.0	0	0	0	0	2	0	0.0	0.9	0.7
Severe TBI	1.4	0	7.7	0.0	5	0.0	0	2.7	0	0	1.2	6.5	1.9	1.4	1.7
Elderly	1.8	3.7	6.7	3.8	5.8	0.9	2.7	0.5	5.5	2.8	1.9	7.2	12.4	4	2.3
Elderly Blunt Multisystem	5.3	0	0	10.7	0	0.0	0	3	0	2.4	3.2	6.3	16.3	4.4	1.7
Isolated Hip Fracture	4.1	5.8	0	6.5	11.3	4.3	4.2	0	6.4	6.8	1	2.6	24.2	6.5	3.4
From Table 39: Unknown Model Variables by Cohort	**GCS Motor**														
All Patients	8.6	3.3	3.3	3.9	7.6	12.5	1.2	1.2	5.8	17.4	0.7	12.1	1.4	5	3.4
Blunt Multisystem	6.8	0	0	3.5	0	11.8	1	0	1.6	5.9	1.3	6.2	1.0	2.9	2.1
Penetrating	10.6	0	0	0.0	20	14.8	0	0	0	5.6	2.1	4	0.0	3	2
Shock	6.1	0	0	0.0	0	2.9	0	0	0	0	1.2	6.7	0.0	1.6	1.6
Severe TBI	0	0	0	0.0	0	3.2	0	0	0	1.3	0.4	2.2	0.0	0.4	0.4
Elderly	6.4	2.8	5.7	3.8	9.4	12.2	1.6	2.3	8.7	26.3	0.6	24.8	2.2	7.1	4.5
Elderly Blunt Multisystem	10.5	0	0	7.1	0	14.3	0	0	0	11.9	1.1	6.3	0.0	3.9	2.8
Isolated Hip Fracture	21.6	4.9	0	6.5	20.6	15.7	4.2	1.5	13.5	29	0	28.2	4.0	11.8	7.5

GEORGIA QUALITY IMPROVEMENT PROGRAM

AKI Workgroup

Dr. Katherine Kohler

AKI Workgroup

GEORGIA QUALITY IMPROVEMENT PROGRAM

- Continued work on AKI guideline
- Physician Practice Survey created & completed
  - All 13 Level I & II centers responded
  - 12 questions

GEORGIA QUALITY IMPROVEMENT PROGRAM

AKI Physician Practice Survey Results

Survey Responders: 13 Centers

Survey Results

GEORGIA QUALITY IMPROVEMENT PROGRAM

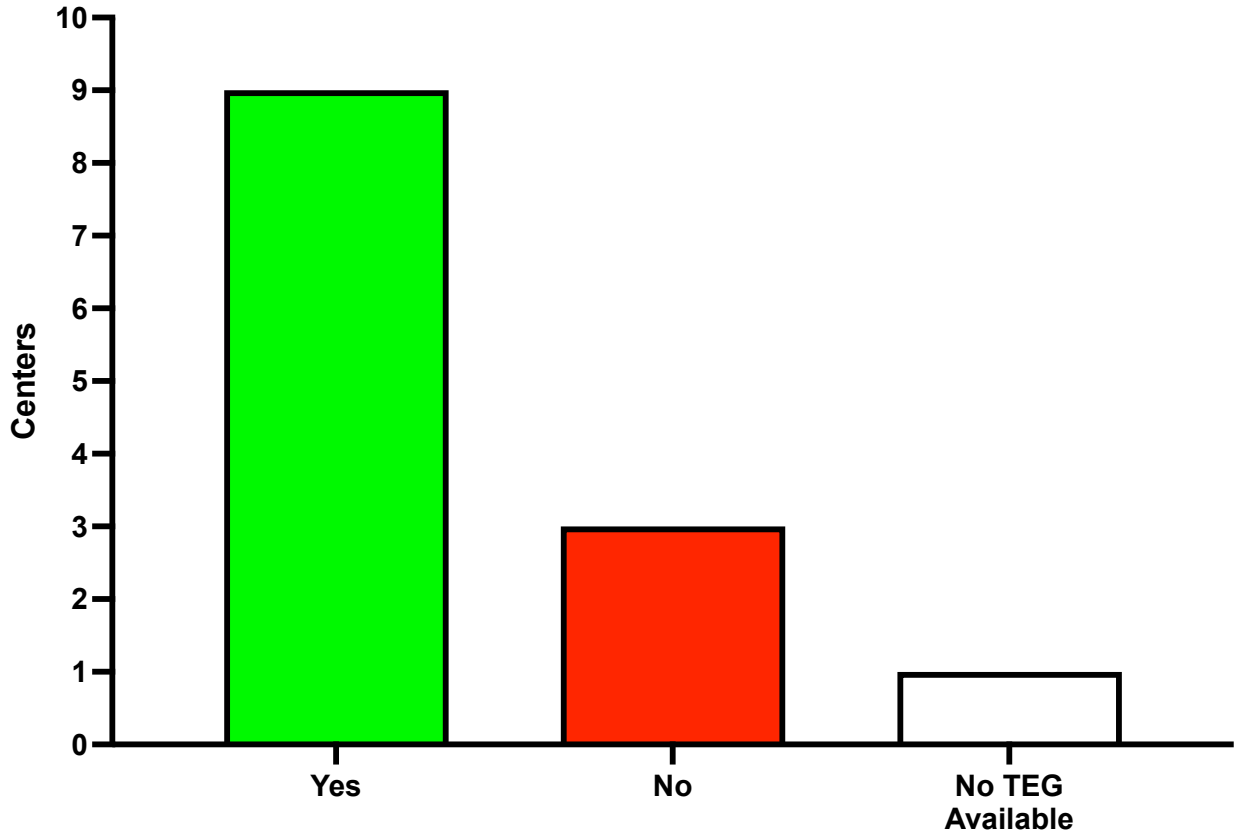
Question:

Do you use TEG-based resuscitation?

Yes:
9/13 Centers: 69%

No:
3/13 Centers: 23%

No TEG Available:
1/13 Centers: 7%



Survey Results

GEORGIA QUALITY IMPROVEMENT PROGRAM

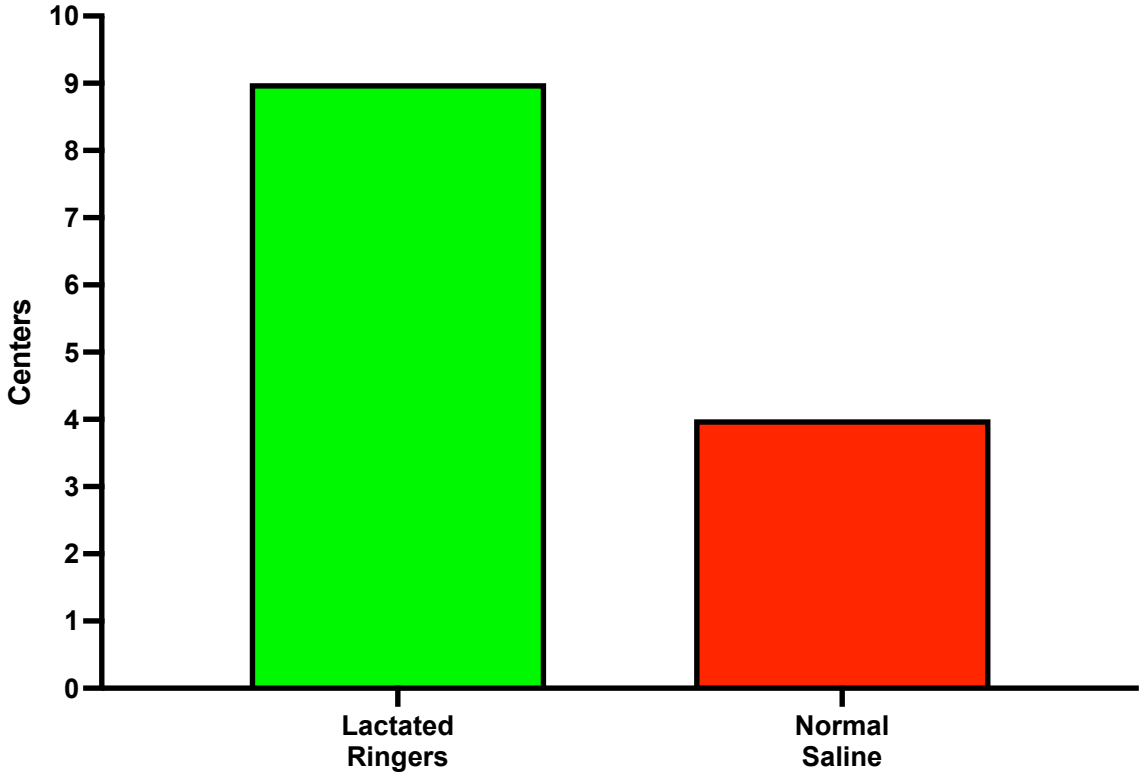
Question:

Which crystalloid is your preferred IVF for resuscitation of patients?

Lactated Ringers:
9/13 Centers: 69%

Normal Saline:
4/13 Centers: 31%

Plasmalyte:
0/13



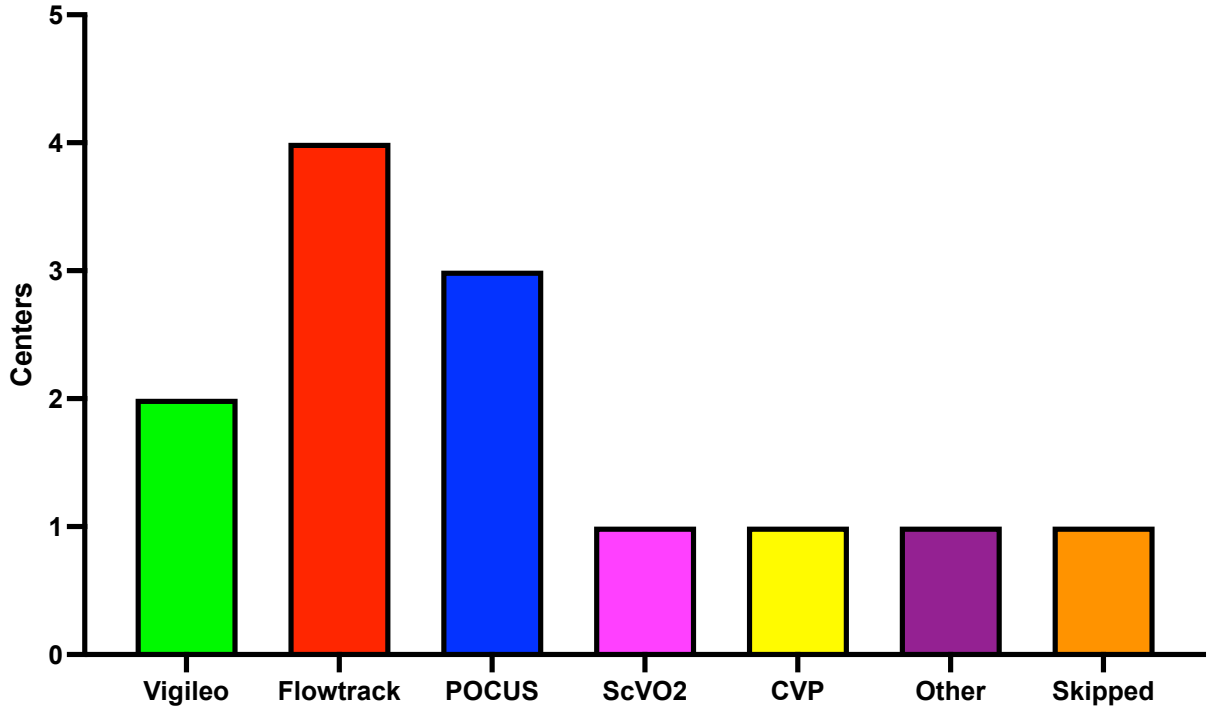
Survey Results

GEORGIA QUALITY IMPROVEMENT PROGRAM

Question:

Do you routinely use any of the following adjuncts for monitoring/guiding resuscitation?

Vigileo:
2/12 Centers: 17%
Flowtrack:
4/12 Centers: 33%
POCUS:
3/12 Centers: 25%
ScVO2:
1/12 Centers: 8%
CVP:
1/12 Centers: 8%
Other
1/12 Centers: 8%
Swan-Ganz:
0
hTEE Probes:
0



Survey Results

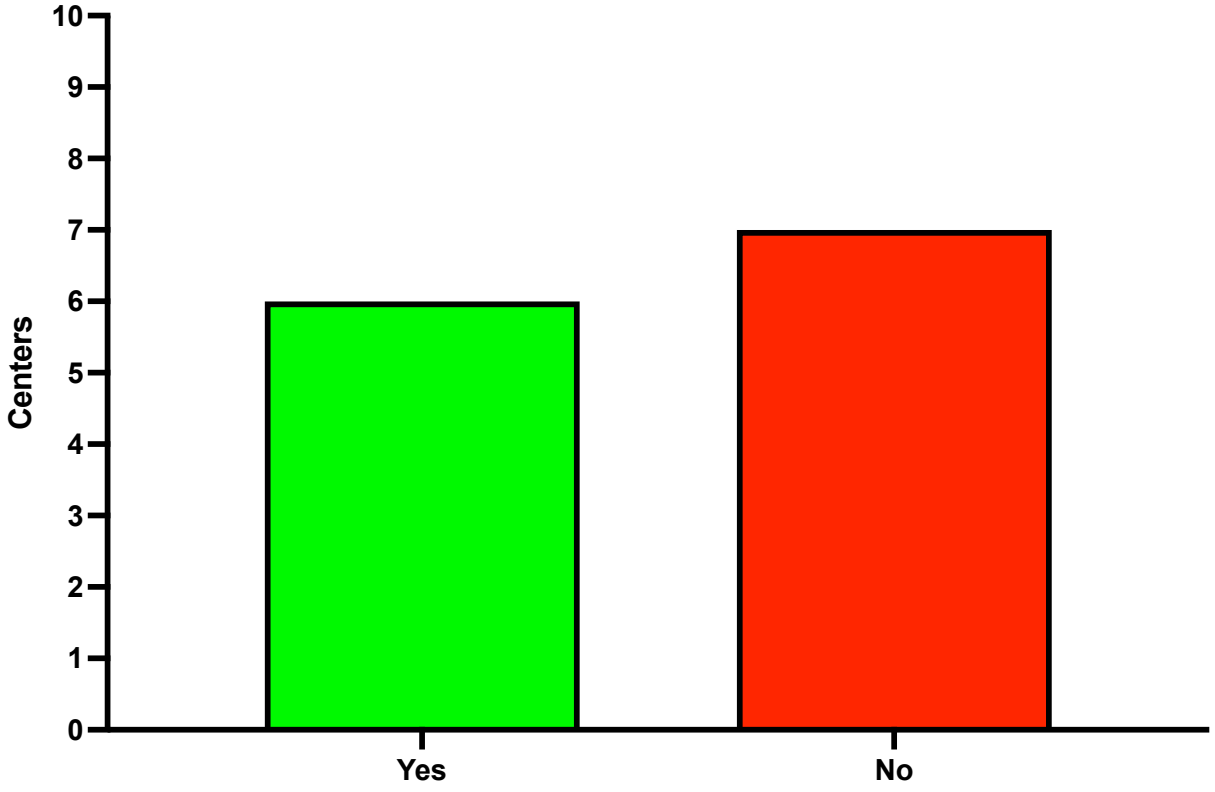
GEORGIA QUALITY IMPROVEMENT PROGRAM

Question:

Do you routinely use Vancomycin/Zosyn for empiric Abx coverage?

Yes:
6/13 Centers: 46%

No:
7/13 Centers: 54%



Survey Results

GEORGIA QUALITY IMPROVEMENT PROGRAM

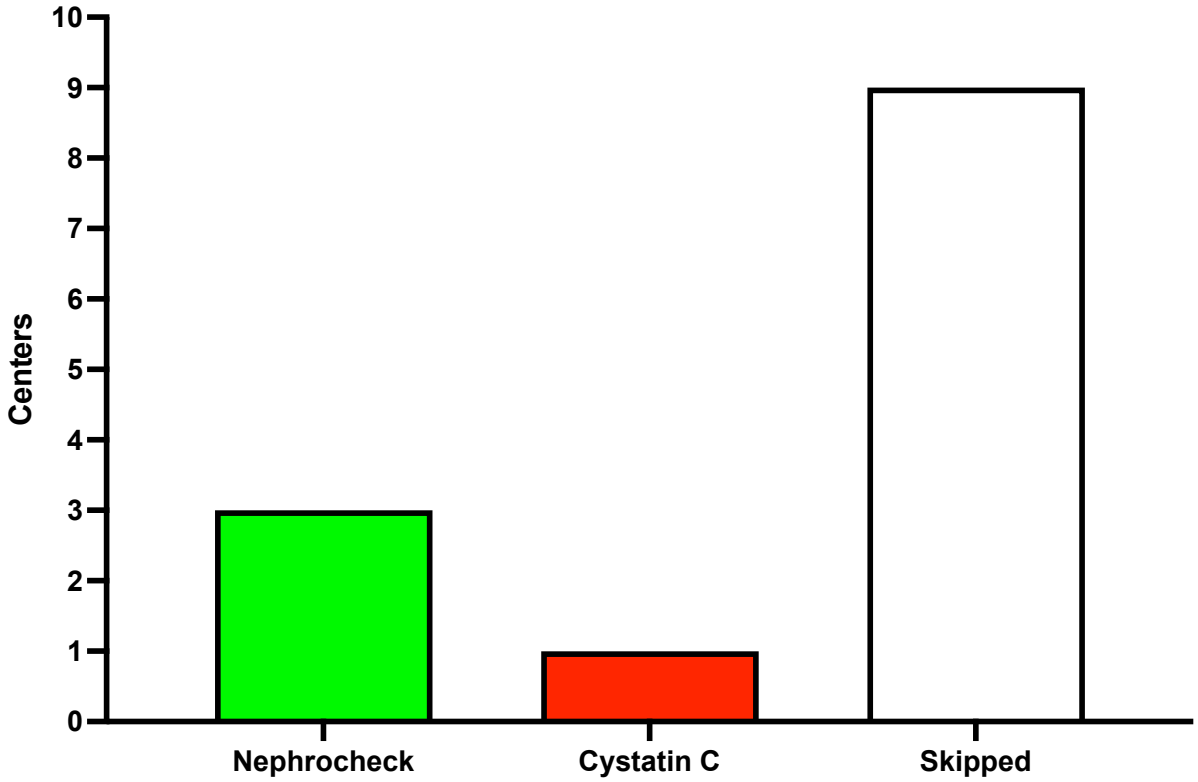
Question:

Does your institution have any of the following renal biomarkers?

Nephrocheck:
3/4 Centers: 75%

Cystatin C:
1/4 Centers: 25%

Skipped:
9 Centers



Survey Results

GEORGIA QUALITY IMPROVEMENT PROGRAM

Question:

If you have access to renal biomarkers Have you used them to monitor and treat AKI for 2 yrs. or greater?

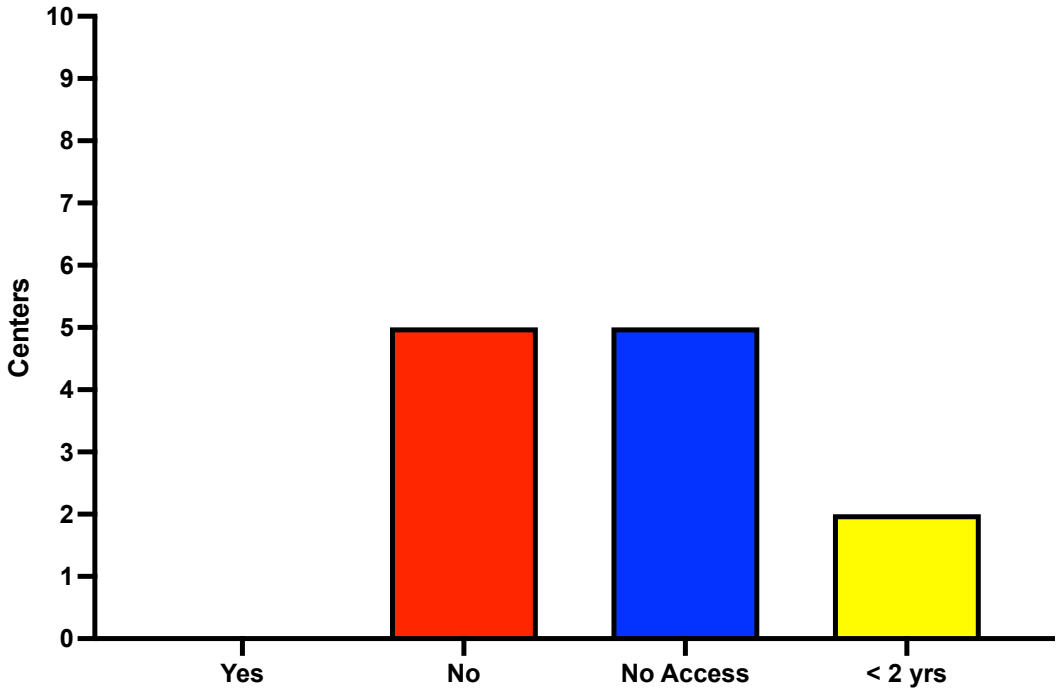
Yes:
0

No:
5/12 Centers: 42%

We do not have access to renal biomarkers:
5/12 Centers: 42%

We have access, but used less than 2 yrs.:
2/12 Centers: 16%

Skipped: 1



Survey Results

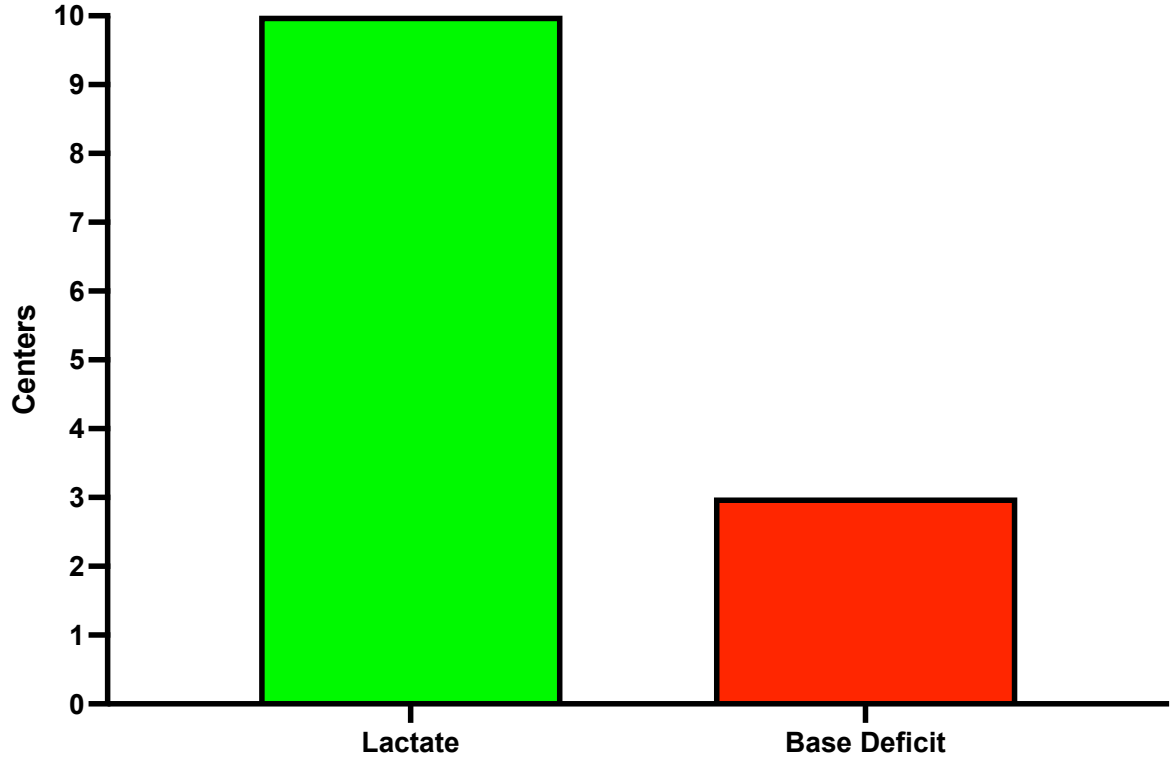
GEORGIA QUALITY IMPROVEMENT PROGRAM

Question:

Which lab value do you trend for resuscitation?

Lactate:
10/13 Centers: 77%

Base Deficit:
3/13 Centers: 23%



Survey Results

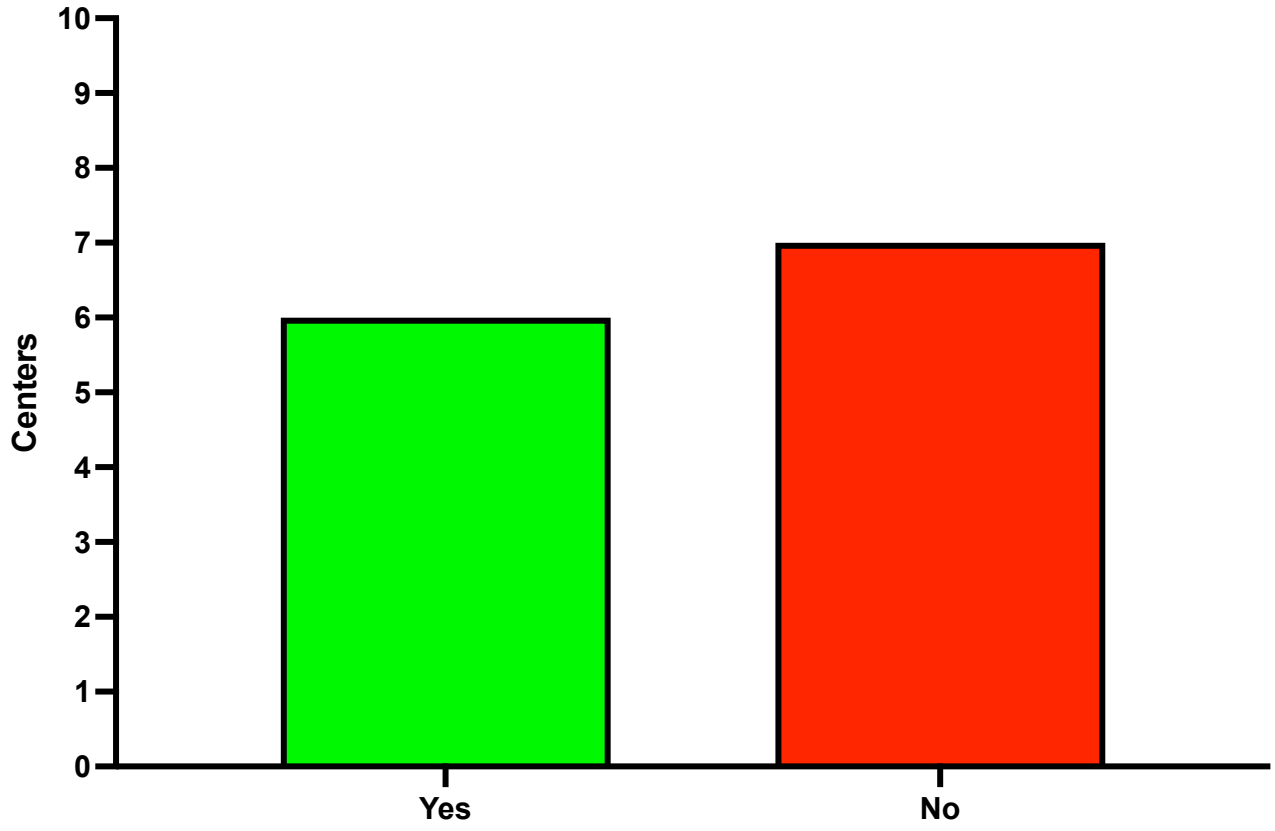
GEORGIA QUALITY IMPROVEMENT PROGRAM

Question:

Does your center use whole blood?

Yes:
6/13 Centers: 46%

No:
7/13 Centers: 54%



Survey Results

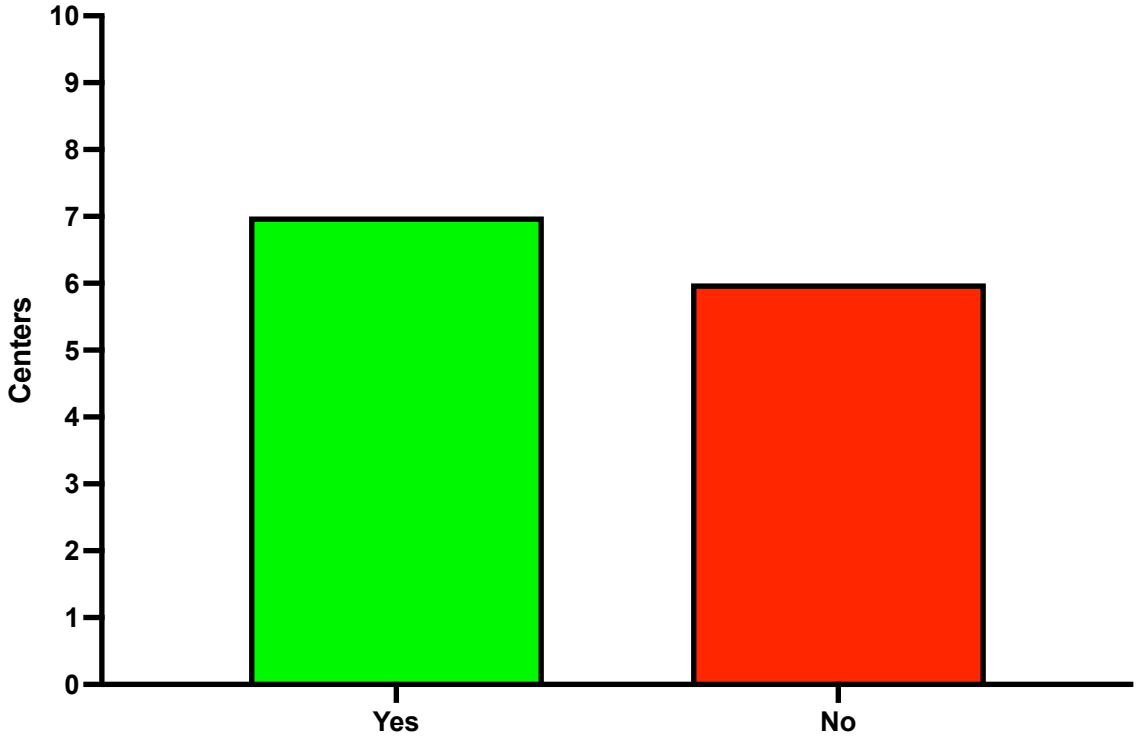
GEORGIA QUALITY IMPROVEMENT PROGRAM

Question:

Does your center have a well-defined algorithm for resuscitation?

Yes:
7/13 Centers: 54%

No:
6/13 Centers: 46%



Survey Results

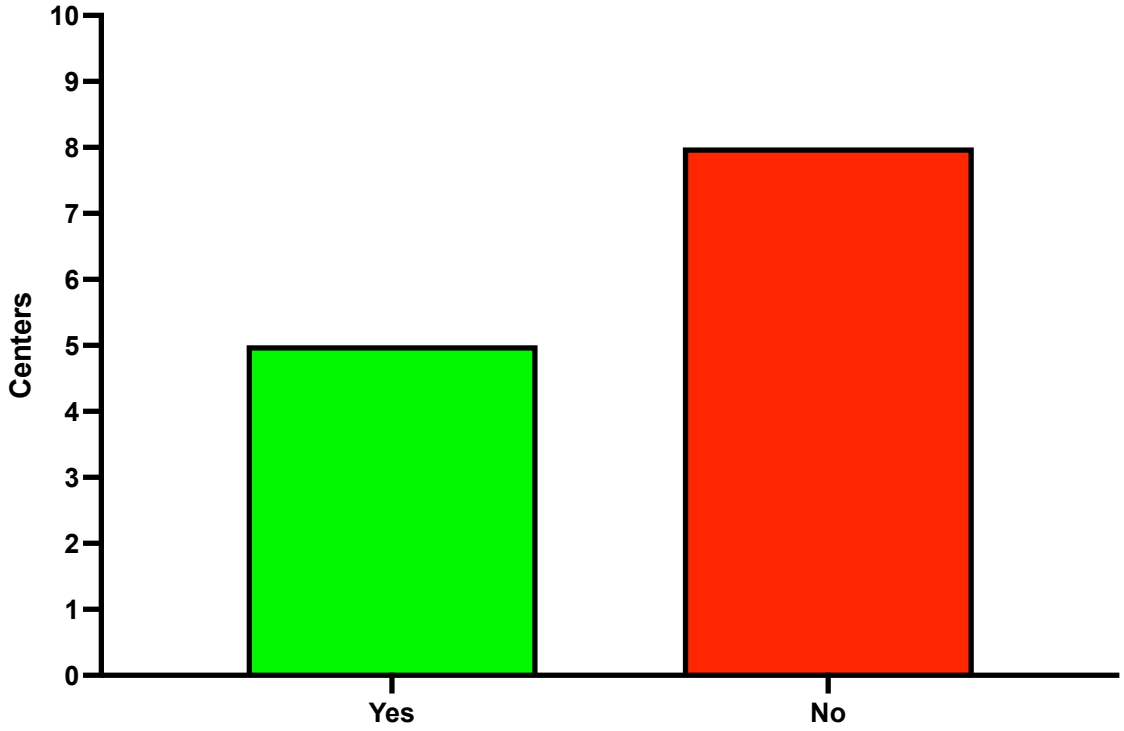
GEORGIA QUALITY IMPROVEMENT PROGRAM

Question:

Does your center use point of care creatinine testing to decide on IV contrast?

Yes:
5/13 Centers: 38%

No:
8/13 Centers: 62%



Survey Results

GEORGIA QUALITY IMPROVEMENT PROGRAM

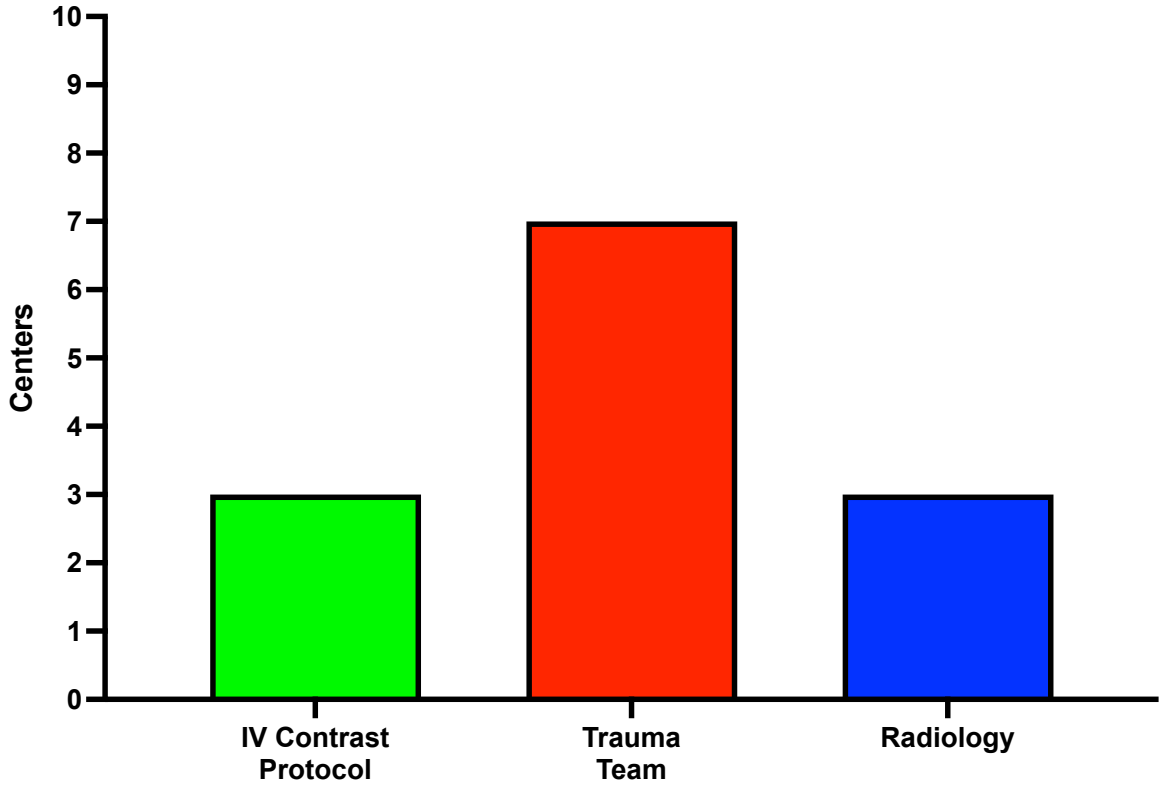
Question:

How does your center determine patient selection for IV contrast use?

IV Contrast Protocol:
3/13 Centers: 23%

Trauma Staff:
7/13 Centers: 64%

Radiology Approval:
3/13 Centers: 23%



AKI Workgroup

GEORGIA QUALITY IMPROVEMENT PROGRAM

- Next steps
  - Utilizing survey results and other input complete initial draft of state AKI guideline
  - Potentially due another data pull since initial data set is > 5 years old
  - Revisit ISS estimation study

GEORGIA QUALITY IMPROVEMENT PROGRAM

TBI Workgroup

Dr. Elizabeth Benjamin

TBI Workgroup

GEORGIA QUALITY IMPROVEMENT PROGRAM

- Preliminary data presented at summer meeting
  - Identified areas of opportunity in morbidity and patient placement
- Building report to include all severe TBI patients
  - Report in testing stage prior to release
  - Anticipated release by mid March
  - Anticipated data return by mid April
- Research goals
  - Identify most common complications amongst GA centers
  - Identify high performers with process sharing aimed at performance improvement
  - National comparison/match to define differences in patient placement and outcomes in our long stay population

TBI Workgroup

GEORGIA QUALITY IMPROVEMENT PROGRAM

- Problem:
  - Identified shared challenge with TBI rehabilitation placement across centers
- Aim 1:
  - Determine pool of available resource across state
    - No central resource currently repository exits
    - Working with SW & Case Mangers at centers to compile shareable list
    - GHA potentially interested in assisting with developing comprehensive list
- Aim 2:
  - Identify supply/demand ratio
- Aim 3:
  - Address barriers to disposition

GEORGIA QUALITY IMPROVEMENT PROGRAM

Opioid Workgroup

Dr. Katherine Kohler

Opioid Workgroup

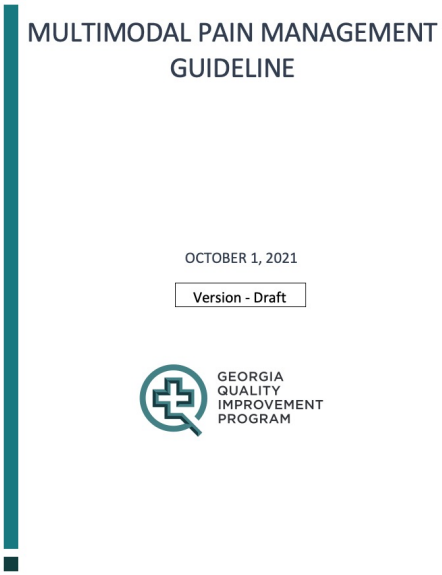
GEORGIA QUALITY IMPROVEMENT PROGRAM

Goals

- Discussion on current state of opioid use/prescribing models in trauma patients
- Gather existing multimodal guidelines from trauma centers
- Develop a state level guideline to share with all trauma centers
- Consider a Georgia TQIP Opioid Project with retrospective data collection/analysis

Opioid Workgroup

- Draft multimodal pain management guideline completed
- Looking for feedback from larger group on current draft
- Key Sections:
  - Multimodal Medication Options
  - Long-acting opioids with continuous pain source
  - Regional Anesthesia
  - Alternative Pain Management
  - Discharge Planning
  - Patient Education


MULTIMODAL PAIN MANAGEMENT GUIDELINE

OCTOBER 1, 2021

Version - Draft

GEORGIA QUALITY IMPROVEMENT PROGRAM

Opioid Workgroup

GEORGIA QUALITY IMPROVEMENT PROGRAM

Multimodal Options: Recommend use of a combination of ***two or more*** medication classes that are prescribed on a ***scheduled*** basis.

Tylenol

- 1000mg IV q6hrs for 24hrs - with pharmacy approval *Then*
- 1000mg PO q6hrs
- *Max 4g in 24hrs*

NSAID

- Toradol (15mg/30mg) IV q6hrs 24hrs vs 5 days (dose specific based on GFR)

  Or
- Toradol 10mg PO q6hrs for 5 days

  Or
- Ibuprofen 600 q6hrs

  Or
- Naproxen 500mg q12hrs (250mg for Geriatric)

Opioid Workgroup

- **Antispasmodic** *(Caution for sedating effects and cross reactions in conjunction with other medications)*
- Methocarbamol 1000mg IV x 24-48hrs

  Then/Or
- Methocarbamol 750mg PO q8hr - Adjust dosing for over 65 years to 500 mg four times daily (least sedating of antispasmodics)

  Or
- Metaxalone 800mg PO q8hr
- Flexeril 5mg PO q8hr
- **Consider for refractory spasms:**
- Baclofen 5mg PO q8hr* requires taper if it has been given regularly

- **Gabapentinoid** *(Caution sedating effects in certain individuals and rare depression)*
- Pregabalin 75mg PO q8hr x 48hrs

  Then
- Gabapentin 300mg PO q8hr *(max 3600mg/24hrs)*

Opioid Workgroup

Other

- Lidocaine patches 5% up to 3 patches – Must have 12 hours off in each 24-hour period PRN

PRN Opioid Breakthrough Options

- Oxycodone 5mg PO q4hr PRN
- Tramadol 100mg PO q6hr (renal/geriatric 50mg q12hr)
- Dilaudid 0.25 to 0.5 mg IV Q 2 to 4 hours
- Morphine 2 to 4 mg IV Q 2 to 4 hours * not for patients with renal dysfunction

Opioid Workgroup

GEORGIA QUALITY IMPROVEMENT PROGRAM

Next Steps

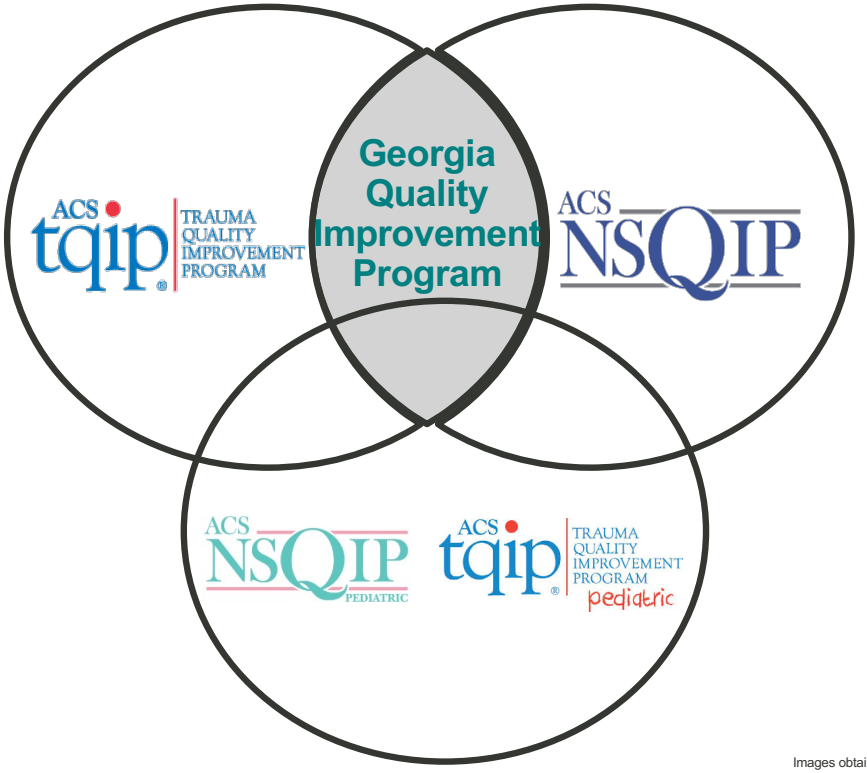
- Feedback on the initial draft of guidelines then creating a final draft for approval
- Follow up on data collection opportunities in the EHR at different centers
- Future research opportunities; ongoing educational opportunities

GEORGIA QUALITY IMPROVEMENT PROGRAM

Georgia Quality Improvement Program & NSQIP Collaborative Update

Joe Sharma, MD, FACS, FACE
GQIP Chair

GEORGIA QUALITY IMPROVEMENT PROGRAM

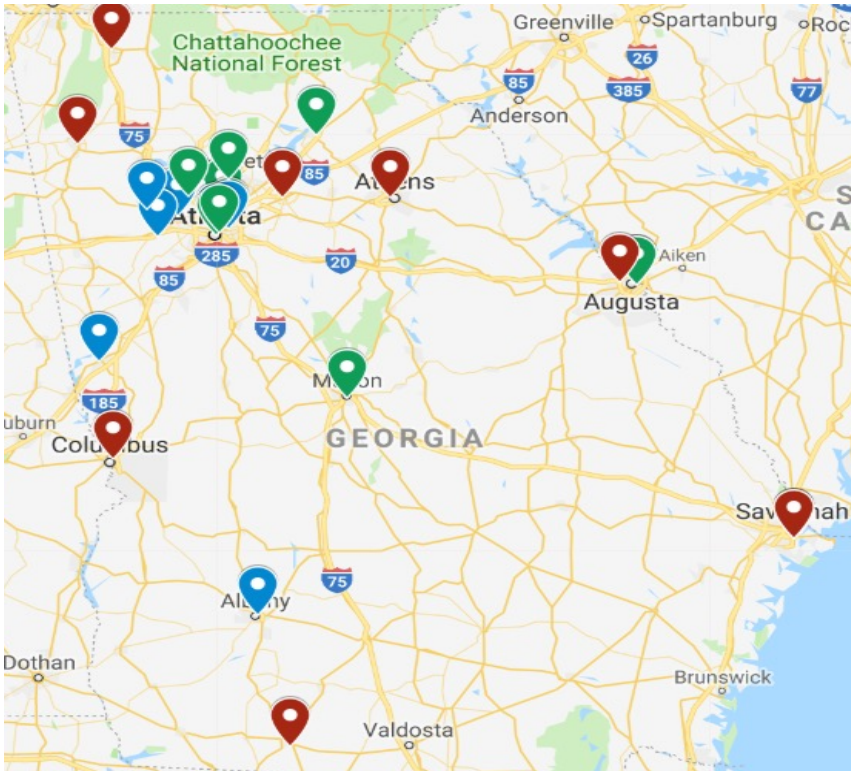


Images obtained from the American College of Surgeons

TQIP & NSQIP Centers

GEORGIA QUALITY IMPROVEMENT PROGRAM

TQIP Only	NSQIP Only	TQIP & NSQIP
Archbold	Eisenhower Army	Atrium Navicent
Piedmont Columbus	Emory Johns Creek	Augusta University
Northeast Georgia	Emory St. Joseph's	Grady
Northside Gwinnett	Emory University	Hamilton
Piedmont Athens	Emory Midtown	Wellstar AMC
Piedmont Walton	Martin Army	Wellstar Cobb
Crisp	Northside Hospital-Atlanta	Wellstar Paulding
Doctors Hospital	Phoebe Putney	Wellstar Kennestone
Memorial Health	Wellstar Douglas	Wellstar North Fulton
Atrium Floyd	Wellstar Spaulding	Winn Army
Redmond	West Georgia	Hamilton
Fairview Park		
Piedmont Cartersville		



- **Red** marker = TQIP participating center only
- **Blue** marker = NSQIP participating center only
- **Green** marker = NSQIP and TQIP participating center

GEORGIA QUALITY IMPROVEMENT PROGRAM

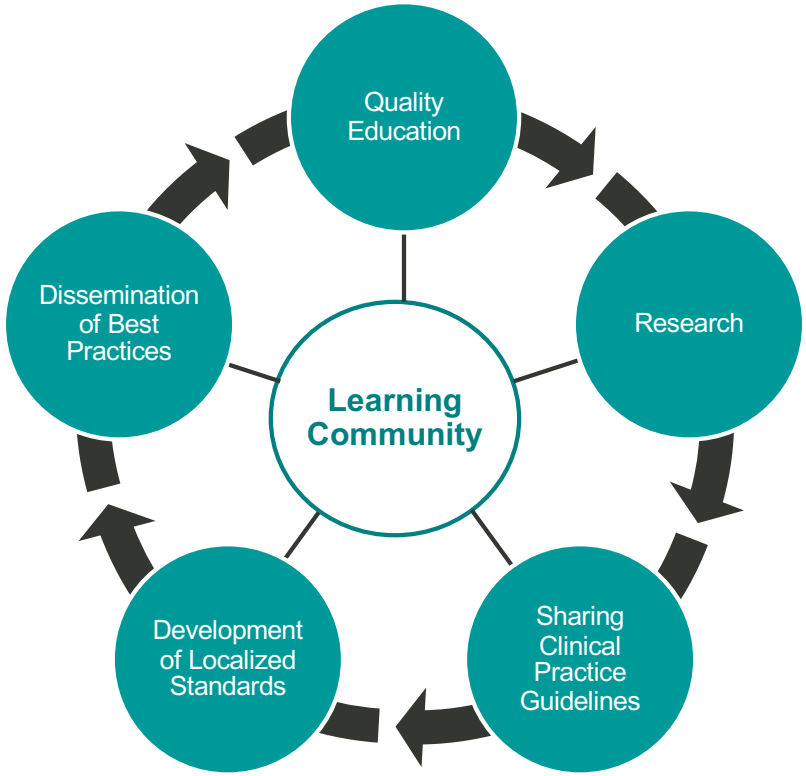
Vision

- Transparent, collaborative, supportive, non-punitive culture.
- Forum to share knowledge and best practices.
- Continually improve quality of care and prevent complications.

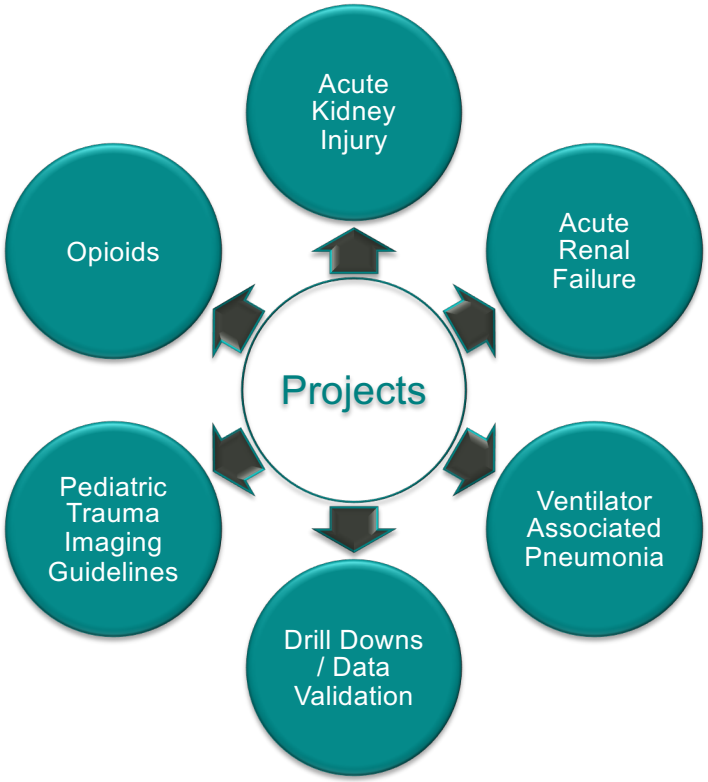
Goals

- Use available risk-adjusted clinical datasets
- Maximize the exchange of information, quality improvement strategies, and best practices.
- Participate in outreach to educate providers and the public on patient safety and quality improvement.

GEORGIA QUALITY IMPROVEMENT PROGRAM



GEORGIA QUALITY IMPROVEMENT PROGRAM



GEORGIA QUALITY IMPROVEMENT PROGRAM

- Flagship project- opportunities in general surgery and trauma
- Collection of common variables additional to NSQIP and TQIP
- Important state-wide view of this complication across populations
- Predictive tools and protective bundles (individually and joint)

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IMPROVEMENT
PROGRAM

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COVID-19 Resource Center

The American College of Surgeons (ACS) **COVID-19 Resource Center** is an online resource for the surgical community facing the impact of Coronavirus Disease 2019 (COVID-19). Content has been developed or curated under the auspices of ACS Regents and Officers to bring surgeons trusted information, including best practices and guidance that specifically target the concerns and challenges surgeons face.

If you have any relevant information you want to bring to our attention, please email covid19@facs.org.

#TalkItUp

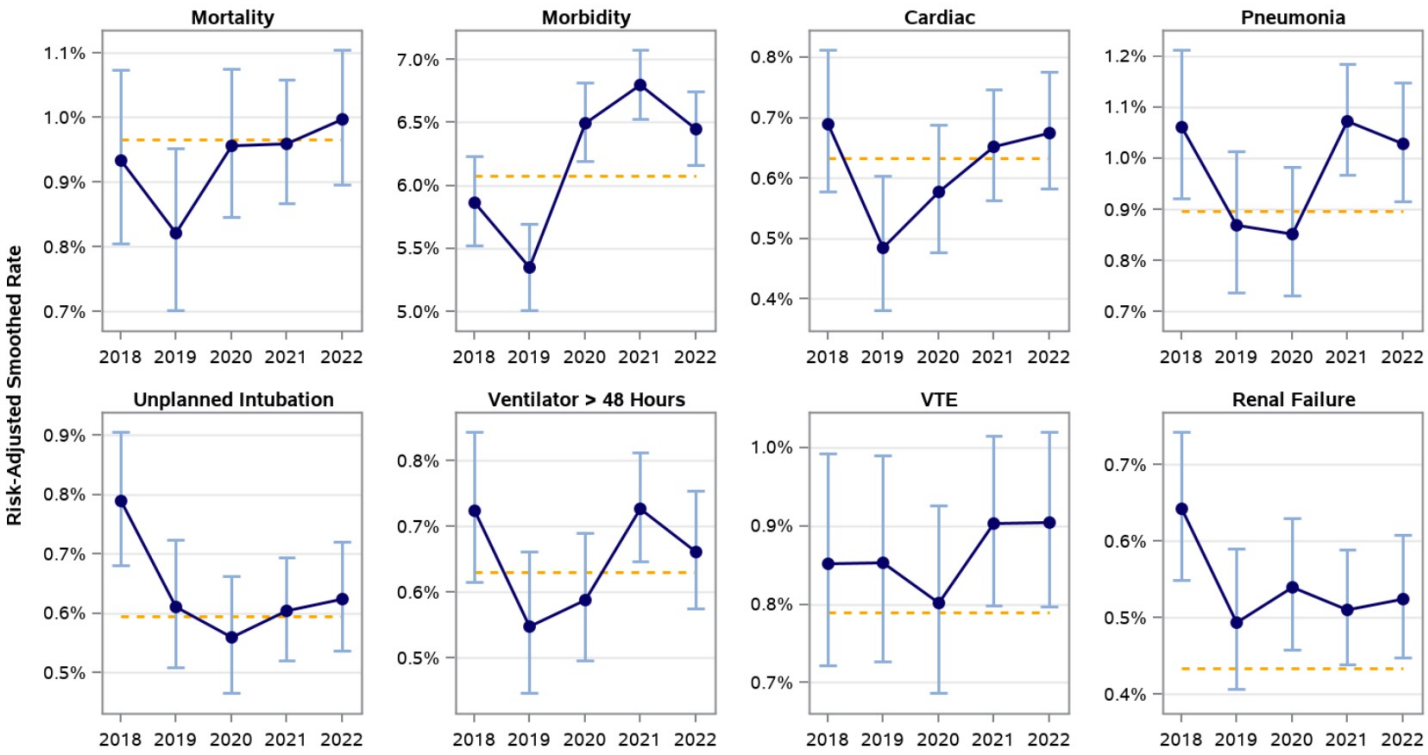
Joint Statement

Well-Being

GEORGIA QUALITY IMPROVEMENT PROGRAM

ALL CASES

These graphs depict the risk-adjusted smoothed rates, with confidence intervals, computed for the collaborative over time compared to the NSQIP population rate over time. Each collaborative rate is calculated using 12-months of independent, non-overlapping data.



GEORGIA QUALITY IMPROVEMENT PROGRAM

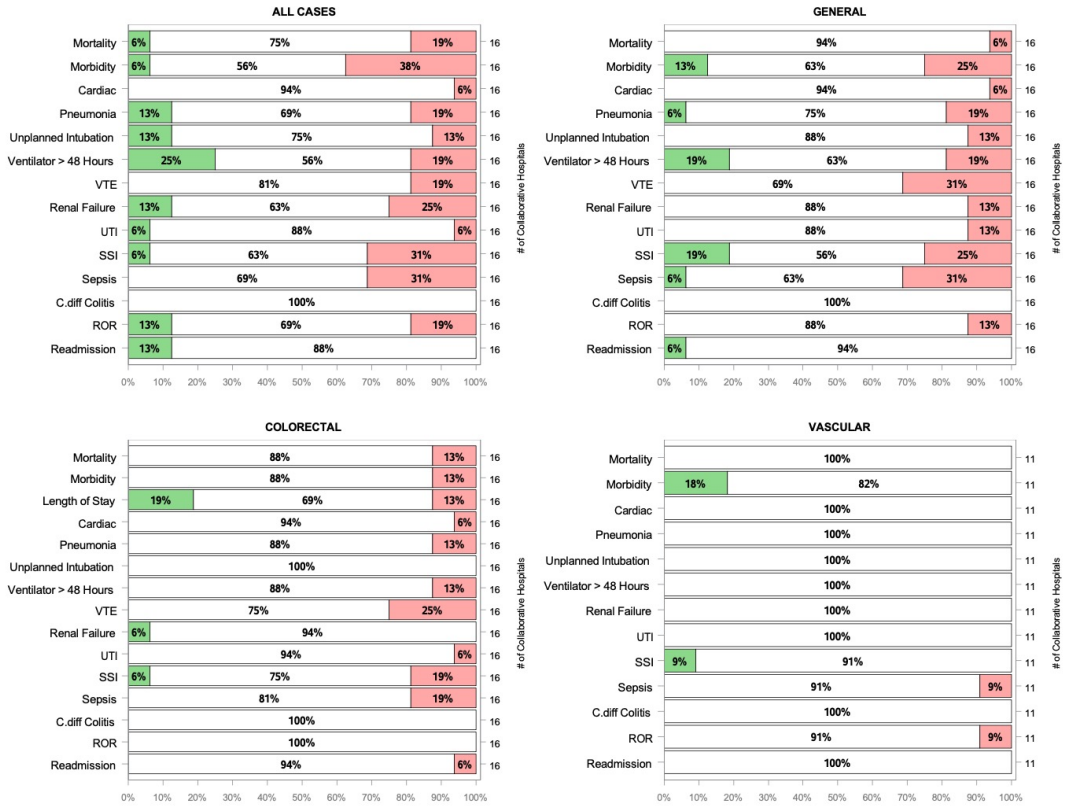
ALL CASES

These graphs depict the risk-adjusted smoothed rates, with confidence intervals, computed for the collaborative over time compared to the NSQIP population rate over time. Each collaborative rate is calculated using 12-months of independent, non-overlapping data.

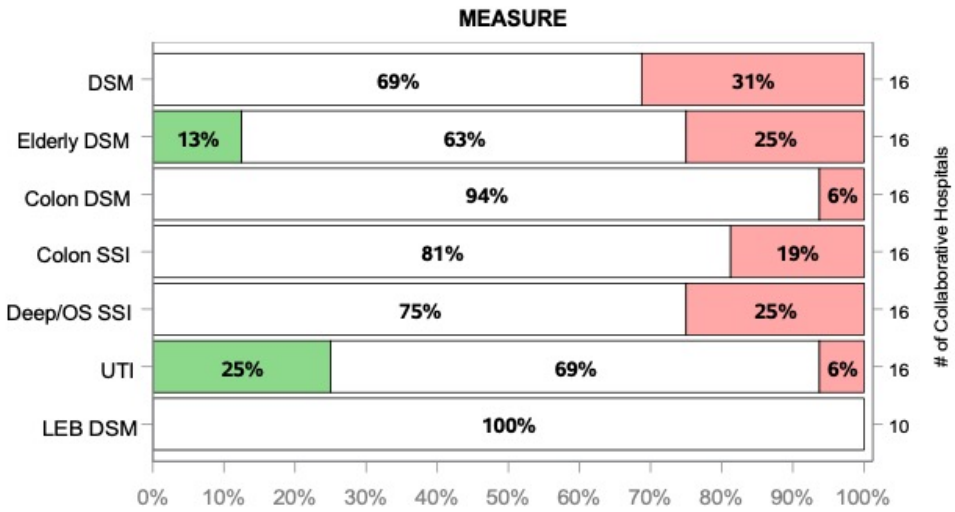
GEORGIA QUALITY IMPROVEMENT PROGRAM

Surgery Dates July 1, 2020 to June 30, 2021

These graphs depict the percentage of collaborative hospitals assigned to the performance assessment categories based on the current SAR.



GEORGIA QUALITY IMPROVEMENT PROGRAM



GEORGIA QUALITY IMPROVEMENT PROGRAM

Complication	Number Avoided	Cost without a complication	Cost with complication	Diff	Cost Savings in Resource
Pneumonia	662	18939	49060	30121	$19,940,102
UTI	233	19048	27166	8118	$1,891,494
Superficial SSI	143	18851	28180	9329	$1,334,047
Deep SSI	0	19178	32973	13795	$0
Organ Space SSI	0	18990	35477	16487	$0
Sepsis	272	18499	45361	26862	$7,306,464
PE	0	19215	31405	12190	$0
Readmission	0			11300	$0
				TOTAL	$30,472,107

TOTALS	
2014	18899
2015	21393
2016	18956
2017	17458
2018	15250
Total Pts 2014-2018	91956

Essentials of a Collaborative

Resources	Education/Training	Key considerations

• Common Data Registry
• Leadership
• Culture
• Infrastructure
• Engaged Clinicians
	• Guideline/Best Practices dissemination
	• Training for QI
		• Payor
		• Benchmarks
		• Bandwidth
		  • Support staff
		  • Research Scholars

GEORGIA QUALITY IMPROVEMENT PROGRAM

“If culture eats strategy for breakfast, then infrastructure eats culture for lunch.”
Brent James

GEORGIA QUALITY IMPROVEMENT PROGRAM

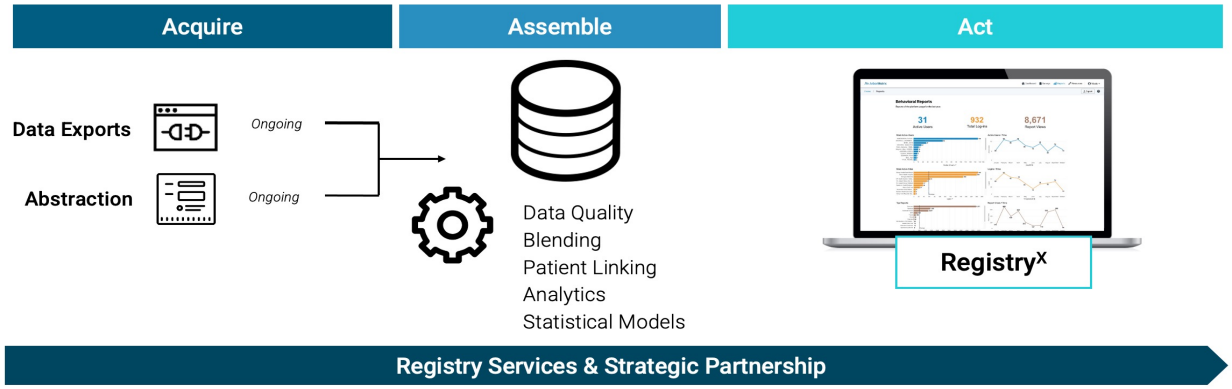
ArborMetrix Update

Gina Solomon

ArborMetrix Update

GEORGIA QUALITY IMPROVEMENT PROGRAM

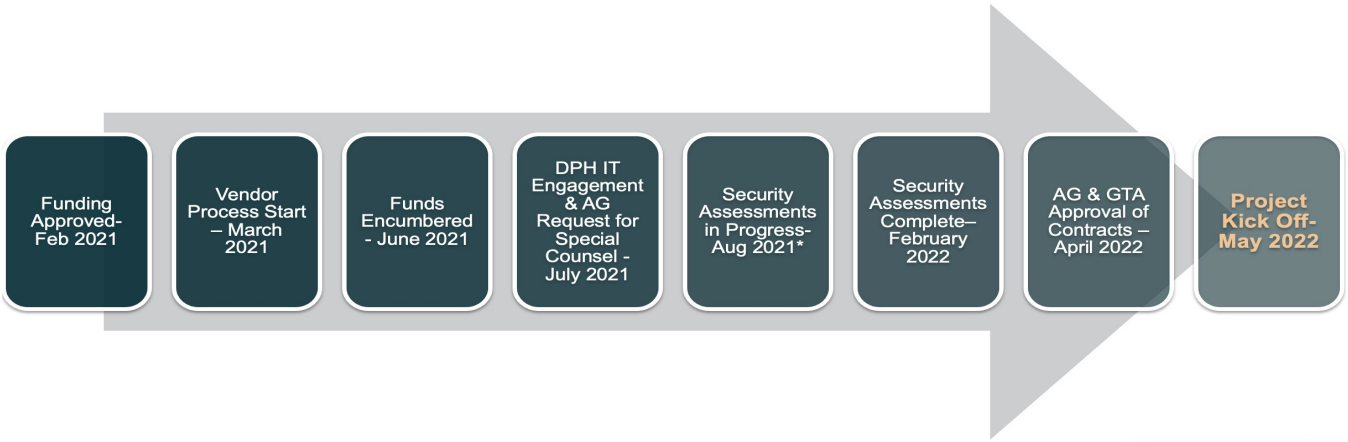
- What is ArborMetrix?
  - Risk-adjusted statewide trauma care registry to support collaborative quality improvement
  - Uses clinically proven validation, transformation, and risk adjustment
  - Makes data and reports accessible, engaging and easily understood
  - Data analysis completed as data is imported for more real time results
  - System access for GQIP ***AND*** center level access for individual centers
  - Provided with 1.3 million dollars in funding by the Georgia Trauma Commission



ArborMetrix Update

GEORGIA QUALITY IMPROVEMENT PROGRAM

- Security assessments complete
- Contract under review by state contracts team
- Peer Review policy and procedure development underway
- Record retention schedules process began
- Projection of project build kick-off: **May 2022**
- Projection of project completion: **November 2022**



Important Dates

GEORGIA QUALITY IMPROVEMENT PROGRAM

- GQIP Summer Meeting – King & Prince, St. Simons Island
  - August 11-12, 2022

- ACS Quality and Safety Conference – Chicago, IL
  - July 15 – 18, 2022

- TQIP Conference – Phoenix, AZ
  - December 11 – 13, 2022

GEORGIA QUALITY IMPROVEMENT PROGRAM

Polling Questions