

July 14, 2023

NOTICE

The Board of Directors of the Kaweah Delta Health Care District will meet in a Quality Council Committee meeting at 7:30AM on Thursday, July 20, 2023, in the Kaweah Health Lifestyle Fitness Center Conference Room, 5105 W. Cypress Avenue, Visalia, CA 93277.

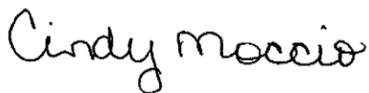
The Board of Directors of the Kaweah Delta Health Care District will meet in a Closed Quality Council Committee at 7:31AM on Thursday, July 20, 2023, in the Kaweah Health Lifestyle Fitness Center Conference Room, 5105 W. Cypress Avenue, Visalia, CA 93277, pursuant to Health and Safety Code 32155 & 1461.

The Board of Directors of the Kaweah Delta Health Care District will meet in an open Quality Council Committee meeting at 8:00AM on Thursday, July 20, 2023, in the Kaweah Health Lifestyle Fitness center Conference Room, 5105 W. Cypress Avenue, Visalia, CA 93277.

All Kaweah Delta Health Care District regular board meeting and committee meeting notices and agendas are posted 72 hours prior to meetings in the Kaweah Health Medical Center, Mineral King Wing entry corridor between the Mineral King lobby and the Emergency Department waiting room.

The disclosable public records related to agendas are available for public inspection at Kaweah Health Medical Center – Acequia Wing, Executive Offices (Administration Department) {1st floor}, 400 West Mineral King Avenue, Visalia, CA and on the Kaweah Delta Health Care District web page <https://www.kaweahhealth.org>.

KAWEAH DELTA HEALTH CARE DISTRICT
Michael Olmos, Secretary/Treasurer



Cindy Moccio
Board Clerk, Executive Assistant to CEO

DISTRIBUTION:

Governing Board, Legal Counsel, Executive Team, Chief of Staff
<http://www.kaweahhealth.org>



**KAWEAH DELTA HEALTH CARE DISTRICT BOARD OF DIRECTORS
QUALITY COUNCIL**

Thursday, July 20, 2023

5105 W. Cypress Avenue

Kaweah Health Lifestyle Fitness Center Conference Room

ATTENDING: Board Members; David Francis – Committee Chair, Michael Olmos; Gary Herbst, CEO; Keri Noeske, RN, BSW, DNP, Chief Nursing Officer; William Brien, MD, CMO/CQO, Daniel Hightower, MD, Chief of Staff and Professional Staff Quality Committee Chair; Lamar Mack, MD, Quality and Patient Safety Medical Director; Sandy Volchko DNP, RN CLSSBB, Director of Quality and Patient Safety; Ben Cripps, Chief Compliance and Risk Management Officer; Evelyn McEntire, Director of Risk Management; and Sylvia Salinas, Recording.

OPEN MEETING – 7:30AM

1. **Call to order** – *David Francis, Committee Chair*
2. **Public / Medical Staff participation** – Members of the public may comment on agenda items before action is taken and after it is discussed by the Board. Each speaker will be allowed five minutes. Members of the public wishing to address the Board concerning items not on the agenda and within the jurisdiction of the Board are requested to identify themselves at this time. For those who are unable to attend the beginning of the Board meeting during the public participation segment but would like to address the Board, please contact the Board Clerk (Cindy Moccio 559-624-2330) or cmoccio@kaweahhealth.org to make arrangements to address the Board.
3. **Approval of Quality Council Closed Meeting Agenda – 7:31AM**
 - **Quality Assurance** pursuant to Health and Safety Code 32155 and 1461 – *Daniel Hightower, MD, Chief of Staff and Professional Staff Quality Committee Chair*
 - **Quality Assurance** pursuant to Health and Safety Code 32155 and 1461 – *Evelyn McEntire, RN, BSN, Director of Risk Management and Ben Cripps, Chief of Compliance and Risk Officer.*
4. **Adjourn Open Meeting** – *David Francis, Committee Chair*

CLOSED MEETING – 7:31AM

1. **Call to order** – *David Francis, Committee Chair & Board Member*
2. **Quality Assurance** pursuant to Health and Safety Code 32155 and 1461 – *Daniel Hightower, MD, Chief of Staff and Professional Staff Quality Committee Chair*

3. [Quality Assurance](#) pursuant to Health and Safety Code 32155 and 1461 – *Evelyn McEntire, RN, BSN, Director of Risk Management, and Ben Cripps, Chief Compliance and Risk Officer.*

4. **Adjourn Closed Meeting** – *David Francis, Committee Chair*

OPEN MEETING – 8:00AM

1. **Call to order** – *David Francis, Committee Chair*

2. **Public / Medical Staff participation** – Members of the public wishing to address the Committee concerning items not on the agenda and within the subject matter jurisdiction of the Committee may step forward and are requested to identify themselves at this time. Members of the public or the medical staff may comment on agenda items after the item has been discussed by the Committee but before a Committee recommendation is decided. In either case, each speaker will be allowed five minutes.

3. **Written Quality Reports** – A review of key quality metrics and actions associated with the following improvement initiatives:

- 3.1. [Best Practice](#) Team Update (deferred from June)
- 3.2. [Rural Health Clinics Quality Improvement Program](#) (QIP)
- 3.3. [Stroke](#)
- 3.4. [Sepsis Quality Focus Team](#)

4. [Environmental Services Adenosine Triphosphate \(ATP\) Testing and Methicillin-Resistant Staphylococcus Aureus \(MRSA\) Quality Focus Team Report](#) – Action plan related to improve our performance and what we can expect to see in the coming quarters on the disinfection rates we are experiencing in the terminal cleaning of our patient rooms. *Tendai R. Zinyemba, MBA, MSMIS, CHESP, Director - Environmental Services, Laundry, & Patient Transport*

5. [Clinical Quality Goals Update](#)- A review of current performance and actions focused on the clinical quality goals for Sepsis, and Healthcare Acquired Infections. *Sandy Volchko, RN, DNP, Director of Quality and Patient Safety.*

6. **Adjourn Open Meeting** – *David Francis, Committee Chair*

In compliance with the Americans with Disabilities Act, if you need special assistance to participate at this meeting, please contact the Board Clerk (559) 624-2330. Notification 48 hours prior to the meeting will enable the District to make reasonable arrangements to ensure accessibility to the Kaweah Delta Health Care District Board of Directors committee meeting.

Best Practice Team Update

Michael Tedaldi, MD - Kaweah Health Medical Director of Best Practice Teams

Sandy Volchko, Director of Quality & Patient Safety

Wendy Jones, Director of Respiratory Services

Molly Niederreiter, Director of Rehabilitation Services

Emma Mozier, Director of Medical-Surgical

Christine Aleman, Director of Cardiovascular Operations

July 2023



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Best Practice Teams

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Kaweah Health Best Practice Teams

Acronyms



- ACE - Angiotensin Converting Enzyme inhibitors (medication to treat heart failure)
- ARBs - Angiotensin-Receptor Blocker (medication to treat heart failure)
- ARNI - Angiotensin Receptor-Nepriylsin Inhibitor (medication to treat heart failure)
- AMI-NSTEMI – Acute Myocardial Infarction - Non-ST Elevated Myocardial Infarction
- BB – Beta Blocker (heart medication)
- CAP – Community Acquired Pneumonia
- CHF_rEF (“reduced EF” or “systolic HF”)
- CKD – Chronic Kidney Disease
- CMS - Centers for Medicare & Medicaid Services
- COPD - Chronic Obstructive Pulmonary Disease
- CPG – Clinical Practice Guideline
- CPW – Care Pathway
- D - denominator
- ED – Emergency Department
- EF – Ejection Fraction
- EKG - electrocardiogram
- FYTD – Fiscal Year to Date
- GFR - glomerular filtration rate
- GOLD Standards - Global Initiative for Chronic Obstructive Lung Disease
- HF – Heart Failure
- KPI – Key Performance Indicator
- LOS – Length of stay
- N - Numerator
- O/E – Observed divided by Expected
- PN – Pneumonia
- QI - Quality Improvement
- SARA - Selective Aldosterone Receptor Antagonist

Kaweah Health Best Practice Teams

Goal: Improve patient outcomes by standardizing care on 4 key patient populations (AMI- NSTEMI, COPD, HF & PN)

- Standardized care based on Clinical Practice Guideline (CPGs) and operationalize the standardized care through provider power plans
- 4 “Core Teams” established for each population, includes Medical Director, Quality Facilitator, Operational Director & Advanced Nurse Practitioner (APN), and Clinical Educator
- Outcomes include: Mortality, Readmission and Length of Stay



Best Practice Teams

AMI (non-STEMI), COPD, Heart Failure & Pneumonia

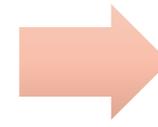
Initiation



- Prioritized & staggered
- Team identification: Q&P/S Facilitator, MD Champion, RN Director, process stakeholders
- Best Practice Guideline selection

Goal: Identify clinical processes that will yield optimal patient outcomes

Phase I



- Clinical KPIs Selection
- Measures defined
- Dashboard developed
- Initial QI work (ie. power plan optimization/work flow) to achieve targets

Goal: Identify KPIs that will reduce mortality o/e & complications (2° LOS & Readmission)

Phase II

- Clinical Practice Guidelines integrated into Cerner power plans & workflow
- QI Measures added to dashboard
- QI work to achieve targets

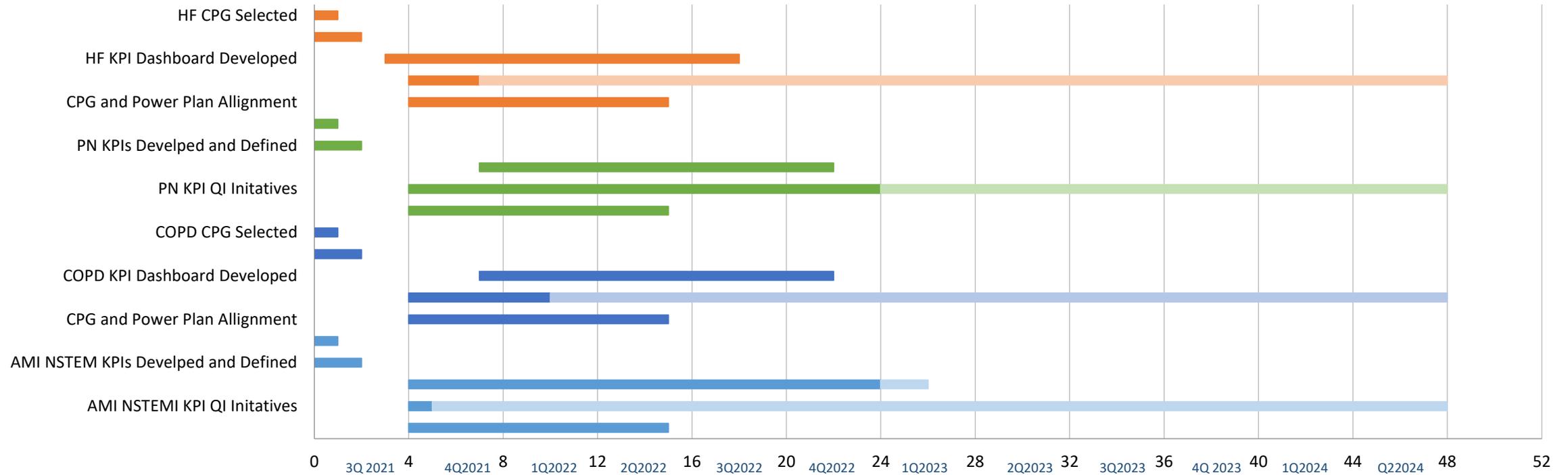
Goal: Improve efficiency and further reductions in LOS, mortality o/e & readmission



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Kaweah Health Best Practice Teams 2021-24 Gantt Chart



WEEKS STARTING OCT 2021 THROUGH JULY 2022

Duration of Task by Week
Dark = Complete, Light = Incomplete

Outcome Data



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Kaweah Health Best Practice Teams Outcome Dashboard FY 2022-23

	Population	Baseline	FY22	FY2023	3Q 2022	4Q2022	1Q2023	Apr-23	May-23	FYTD 2023
		(FY 2019)	July 21-June 22*	Goals						
Readmission Medicare Population	AMI (non-STEMI)	12.34%	7.35% (5/68)	7.16%	3.84% (1/26)	15.39% (2/13)	15.00% (2/20)	20.00% (1/5)	9.10% (1/11)	10.67% (8/75)
	COPD	16.09%	23.53% (8/34)	12.87%	8.3% (1/12)	12.50% (2/16)	12.50% (1/8)	0.0% (0/2)	33.33% (1/3)	12.20% (5/41)
	HF	18.22%	13.02% (25/192)	11.72%	20.69% (6/29)	4.88% (2/41)	18.18% (8/44)	31.25% (5/16)	0.0% (0/14)	14.58% (21/144)
	PN Viral/Bacterial	14.13%	16.67% (27/162)	11.30%	2.70% (1/37)	6.25% (3/48)	9.52% (4/42)	0.0% (0/12)	9.09% (2/22)	6.21% (10/161)
O/E Mortality Medicare Population	AMI (non-STEMI)	0.75	0.99 (n=49)	0.71	0.0 (n=14)	0.0 (n=6)	0.0 (n=17)	0.0 (n=3)	0.95 (n=6)	1.09 (n=46)
	COPD	2.4	1.41 (n=40)	0.93	0.0 (n=10)	0.0 (n=16)	0.0 (n=8)	0.0 (n=2)	0.0 (n=3)	0.0 (n=39)
	HF	1.78	0.52 (223)	0.52	1.79 (n=44)	1.41 (n=53)	0.68 (n=53)	1.47 (N=22)	0.0 (n=19)	1.10 (n=191)
	PN Bacterial	1.85	0.53 (n=43)	0.53	0 (n=7)	0 (n=6)	0 (n=10)	1.73 (N=4)	1.22 (n=8)	0.91 (n=35)
	PN Viral	1.34	1.09 (n=109)	0.81	0 (n=18)	0.40 (n=37)	0.84 (n=34)	0 (n=11)	2.56 (n=13)	0.68 (n=113)

*FY24 Midas updated version 5 will be used for all outcome data



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COPD Best Practice Team

Key performance indicators of focus:

- Pulmonary Function Tests (PFT) performed, 10% of patients have PFTs performed, goal is to increase the volume to 30% in 6 months
- Pneumococcal vaccine rates, 8% of patients accept and receive the vaccine prior to discharge, goal is to increase the rate of pneumococcal vaccines to 50% in 6 months
- Patient acceptance of smoking cessation education, 32% of eligible patients accept smoking cessation education, goal is to increase acceptance to 50% in 6 months

Current QI actions:

- Dr. Tedaldi attends monthly Hospitalist/Critical Care meeting to encourage utilization of the COPD Admission powerplan and provide education on when and what type of PFT to order.
- Respiratory Therapists assess patients' readiness for bedside PFTs and communicate this to the bedside nurses and/or providers



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COPD Best Practice Team

Current QI actions continued:

- Propose changes to nursing discharge summary form in EMR, which includes patient specific details about eligibility for the pneumonia vaccine
- Propose changes to nursing discharge summary form in EMR, which includes details about patient's smoking status

Barriers:

- PFT results do not automatically flow into EMR. Results are scanned into the EMR, requiring extra steps for providers to locate and access PFT results.



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Heart Failure Best Practice Team

Key performance indicators of focus:

- Increase usage of CARD HF Admission Power plan for HF inpatients, overall 47% of power plan usage is observed, goal is to improve rate to 75% by 12/31/23
- Increase use of Entresto for systolic heart failure patients during hospital stay & at discharge, 18% of patient received Entresto during hospital stay & 9% are Rx Entresto at discharge, goal is to improve rate to 50% for patients that have selected insurance (payers that cover Entresto) by 12/31/23
- Increase use of Beta Blocker for systolic heart failure patients at hospital discharge, 39% of patients are Rx BB at discharge, goal is to improve rate to 75% by 12/31/23

Current QI actions:

- Dr. Michael Tedaldi spearheading Physician outreach: educating in monthly dept. meetings, educating residents regarding order sets, partnering with ISS to assist providers to update HF power plan to their favorites
- Drill down to provider specific fall outs



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Heart Failure Best Practice Team

Current QI actions Cont.:

- Review data & identify if ACE/ARB available & check if pt candidate to switch to Entresto
- Split Entresto KPI: Inpatient vs. Rx at discharge to identify opportunities (COMPLETED)
- Explore feasibility of Nurse Practitioner consult: Chart biopsy & Re-start core measure checks
- HF BPT to utilize Heart Failure Medication Checklist & eventually to be used by providers on discharge

Barriers:

- Unable to retrieve Ejection Fraction numerical value directly into EMR, Syngo analytics is not sync to Cerner
- Limited amount of insurance companies covering Entresto
- Difficulty in evaluating contraindications to using full GDMT (Guideline Directed Medical Therapy)



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Pneumonia Best Practice Team

Key performance indicators of focus:

- Antibiotics administered within 3 hours, internal data shows 1.4% of patients receive antibiotics within 3 hours, goal is to increase volume of antibiotics administered within 3 hours to 50% in 6 months
- Transition of IV to oral antibiotics within 48 hours, 1.6% of patients transition from IV to oral within 48 hours, goal is to increase rate of transition to oral antibiotics within 48 hours to 50% in 6 months
- Utilization of Pneumonia admission powerplan, powerplan is ordered on 21% of admissions, goal is to increase rate of ordering powerplan to 50% in 6 months

Current QI actions:

- Data analysis to evaluate root causes for untimely antibiotic administration
- Collaborate with Antimicrobial Stewardship Team and Pharmacy



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Pneumonia Best Practice Team

Current QI actions continued:

- Encourage providers to save most current Pneumonia Admission powerplan to favorites
- Data analysis on non Pneumonia Admission powerplan utilization
- Dr. Tedaldi attends monthly Hospitalist/Critical Care meeting to encourage utilization of the powerplan

Barriers:

- Variability in process of ordering antibiotics presents challenges on how to best capture data
- Utilization of powerplans is recommended not required



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AMI NSTEMI Best Practice Team

Current actions:

- Cardiovascular staff are currently abstracting data for the KPI's that were identified by the AMI NSTEMI Best Practice Team.
- Once data is abstracted the team will identify which Key Performance Indicator(s) require their focus.

Barriers:

- Data abstraction and the population of the AMI NSTEMI dashboard with that data is a manual process

Team Charter

Pneumonia (PN)

Key Initiatives August 2023

- Dashboard complete
- Promote utilization of Pneumonia Admission powerplan to operationalize best practices for antibiotic type and transition of IV to oral antibiotics at Hospitalist/Critical Care meetings
- Data analysis/current state review

PROJECT NAME: Pneumonia BPT	CHAMPION: Dr. M. Tedaldi	QI Facilitator: Stacey Cajimat
DIRECTOR: Molly Niederreiter	APN: Katelyn Williams	ET SPONSOR: Dr. W. Brien
PROBLEM STATEMENT: Mortality, readmission and LOS data indicates opportunity in standardizing care and reducing variation through clinical practice guideline and care pathway implementation.	SHORT TERM PROJECT GOALS: 1. Select clinical practice guidelines (CPGs) COMPLETE 2. Develop Key Performance Indicators (KPIs) COMPLETE 3. Develop dashboards for outcome and KPIs COMPLETE 4. Improve KPI performance IN PROCESS	LONG TERM PROJECT GOALS: 1. Reduce mortality by 20% from 2019 baseline 2. Reduce readmissions by 20% from 2019 baseline 3. Reduce Length of Stay
SCOPE: (WHAT DOES THIS INCLUDE AND NOT INCLUDE?) Includes CAP patients in Emergency Department and admitted into the Medical Center	MEASURES: KPIs (in order of priority) 1. Percent of patients who receive first dose of antibiotic administered within 3 hours in In patients 2. Percent of patients who transition from IV to PO antibiotics within 48 hours of first antibiotic treatment 3. Percent of utilization of Pneumonia Admission powerplan Future KPIS • Rate of documented Pneumonia Severity Index (PSI)	
FINANCIAL IMPLICATIONS: Penalties associated with the CMS Value-Based Purchasing Program (mortality), penalties associated with CMS Readmission Reduction Program & reputational costs with CMS star ratings.		
Initiation	Team identification and guideline selection	
Phase I	Key Performance Indicator selection, plan and initiate QI activities to achieve KPI goals	
Phase II	Integration of Clinical Practice Guidelines, measure expansion, dashboard development	

Team Charter

Heart Failure (HF)

Key Initiatives August 2023

- Dashboard Complete
 - HF Order set revisions now live operationalize best practices including: addition of medication options with specific evidenced-based parameters (ie. Aldactone, Hydralazine, Entresto)
 - Ongoing Physician educational outreach
 - Identify Physician specific opportunities
 - Heart Failure Medication Checklist now live
 - Review data & identify if ACE/ARB available & check if pt candidate to switch to Entresto
- Next steps:
- Working with Population Health on frequently admitted patients

PROJECT NAME: Heart Failure		CHAMPION: Dr. M. Tedaldi	QI Facilitator: Erika Pineda
DIRECTOR: Emma Mozier		APN: Cody Ericson	ET SPONSOR: William Brien
PROBLEM STATEMENT: Mortality, readmission and LOS data indicates opportunity in standardizing care and reducing variation through clinical practice guideline and care pathway implementation.		PROJECT GOAL: 1. Select clinical practice guidelines (CPGs) COMPLETE 2. Develop Key Performance Indicators (KPIs) COMPLETE 3. Develop dashboards for outcome and KPIs COMPLETE 4. Improve KPI performance IN PROCESS	LONG TERM PROJECT GOALS: 1. Reduce mortality by 20% from 2019 baseline 2. Reduce readmissions by 20% from 2019 baseline 3. Reduce Length of Stay
SCOPE: (WHAT DOES THIS INCLUDE AND NOT INCLUDE?) Medical Center processes		MEASURES: KPIs (in order of priority) 1. What percentage of patients with Systolic Heart Failure (EF <40%) are discharged on correct BB, ACE/ARB/ARNI/SARA 1b. contraindications to (goal directed) med therapy documented appropriately? I.E Bradycardia/ hypotension for BB as well as CKD Stage 3b and greater(GFR≤30) and or serum potassium above 5 meq 2. What percentage of our patients with CHF rEF (“reduced EF” or “systolic HF”) that are eligible have been switched over to Entresto (ARNI) in house? 3. Percent of patients who started on ACE and d/c’d on an ARNI (Entresto)	
FINANCIAL IMPLICATIONS: Penalties associated with the CMS Value-Based Purchasing Program (mortality), penalties associated with CMS Readmission Reduction Program & reputational costs with CMS star ratings.			
TIMELINE & PLAN:			
Initiation	Team identification and guideline selection		
Phase I	Key Performance Indicator selection, plan and initiate QI activities to achieve KPI goals		
Phase II	Integration of Clinical Practice Guidelines, measure expansion, dashboard development		

Team Charter

Chronic Obstructive Pulmonary Disease (COPD)

Key Initiatives August 2023

- Dashboard complete
- Promote utilization of COPD Admission powerplan to operationalize best practices: Antibiotic options, steroid dosing/frequency, defining medication based on GOLD category, delineating medications for acute and maintenance therapy, PFTs (bedside or outpatient) at Hospitalist/Critical Care meetings

PROJECT NAME: COPD BPT		CHAMPION: Dr. M. Tedaldi	QI Facilitator: Stacey Cajimat
DIRECTOR: Wendy Jones		APN: Emma Camarena	SPONSOR: Keri Noeske
PROBLEM STATEMENT: Mortality, readmission and LOS data indicates opportunity in standardizing care and reducing variation through clinical practice guideline and care pathway implementation.		SHORT TERM PROJECT GOALS: 1. Select clinical practice guidelines (CPGs) COMPLETE 2. Develop Key Performance Indicators (KPIs) COMPLETE 3. Develop dashboards for outcome and KPIs COMPLETE 4. Improve KPI performance IN PROCESS	LONG TERM GOALS: 1. Reduce mortality from 2.40 to 1.92, by end of FY 22 (-20% from 2019 baseline)) 2. Reduce readmissions from 16.09 percent to 12.87%, by end of FY 22. (-20% from 2019 baseline) 3 Reduce Length of Stay
SCOPE: (WHAT DOES THIS INCLUDE AND NOT INCLUDE?) Inpatient admissions and discharges.		MEASURES: KPIs (in order of priority) 1. Percent of patients with Pulmonary Function Test (PFT) performed 2. Percent of patients who receive Pneumonia vaccine on discharge 3. Percent of patients who accept smoking cessation information on discharge	
FINANCIAL IMPLICATIONS: Penalties associated with the CMS Value-Based Purchasing Program (mortality), penalties associated with CMS Readmission Reduction Program & reputational costs with CMS star ratings.			
TIMELINE & PLAN:			
Initiation	Team identification and guideline selection		
Phase I	Key Performance Indicator selection, plan and initiate QI activities to achieve KPI goals		
Phase II	Integration of Clinical Practice Guidelines, measure expansion, dashboard development		

Team Charter

Acute Myocardial Infarction – Non ST Elevated Myocardial Infarction (AMI – NSTEMI)

Key Initiatives August 2023

- Dashboard under development
- CPGs and order set(s) reviewed for alignment
- Order set revisions completed and approved for 4 different order sets that intersect with care of NSTEMI population
- Operationalizing best practices through order set utilization: adding and revising medication orders and lab test to align with CPGs and pre-checking options
- Data analysis and current state

review.
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PROJECT NAME: AMI Non-STEMI BPT		CHAMPION: Dr. Michael Tedaldi	Quality RN Facilitator: Cindy Vander Schuur
DIRECTOR: Christine Aleman		APN: Cody Ericson	ET SPONSOR: Keri Noeske
PROBLEM STATEMENT: Mortality, readmission, and length of stay (LOS) data indicates opportunity in standardizing care and reducing variation through clinical practice guideline and care pathway implementation.		SHORT TERM PROJECT GOALS: 1. Select clinical practice guidelines (CPGs) COMPLETE 2. Develop Key Performance Indicators (KPIs) COMPLETE 3. Develop dashboards for outcome and KPIs IN PROGRESS 4. Improve KPI performance NEXT STEPS	LONG TERM GOALS 1. Reduce mortality by 5% from 2019 baseline 2. Reduce readmissions by 10% from 2019 baseline 3. Reduce length of stay
SCOPE: (WHAT DOES THIS INCLUDE AND NOT INCLUDE?) *Inpatient Medical Center processes. GUIDELINES: * <u>Denominator</u> : Patients with a diagnosis of NSTEMI who went to the Cath Lab. NSTEMI Definition: 1. Negative EKG (no ST elevation) 2. Positive Troponin resulted ≥ 0.5 * <u>Baseline Data</u> : Monthly starting July 2021		MEASURES: KPIs (in order of priority) Process Measures: 1. Percent of NSTEMI patients who have a 12 lead EKG done within 10 minutes of arrival. 2. Percent of NSTEMI patients administered oral beta blockers within 24 hours of positive Troponin. 3. Percent of NSTEMI patients who received IV UFH (unfractionated Heparin) or therapeutic subcutaneous (SQ) Lovenox (1mg/kg) within one hour of positive Troponin result. 4. Diagnostic Consideration/Measure: Percent of NSTEMI patients with a second Troponin done within 4 hours. (for risk stratification and early diagnosis) Using resulted time of initial Troponin. 5. Diagnostic Consideration/Measure: Percent of NSTEMI patients with a second EKG done within 4 hours. (for risk stratification and early diagnosis) 6. For NSTEMI patients who undergo revascularization: Percent of patients discharged on DAPT (dual antiplatelet therapy: Plavix, Effient, or Brilinta with aspirin) that do not have a contraindication such as aspirin sensitivity or history of gastrointestinal bleeding. 7. Percent of correct usage of CARD ACS/NSTEMI Admission order set.	
FINANCIAL IMPLICATIONS:			
Penalties associated with the CMS Value-Based Purchasing Program (mortality), penalties associated with CMS Readmission Reduction Program & reputational costs with CMS star ratings.			
TIMELINE & PLAN:			
Initiation	Team identification and guideline selection		
Phase I	Key Performance Indicator selection, plan and initiate QI activities to achieve KPI goals		
Phase II	Integration of Clinical Practice Guidelines, measure expansion, dashboard development. Address order sets inc. medication orders		



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Big Picture Next Steps

- Post medical staff event continue connect with hospitalists to ensure smooth transition to new order sets
- Develop and refine dashboards for each team so improvement is targeted
- Improve Key Performance Indicators through addressing identified root causes



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Unit/Department Specific Data Collection Summarization

Professional Staff Quality Committee/Quality Improvement Committee

Unit/Department:

ProStaff/QIC Report Date: 5/31/2023

Rural Health Clinics (Exeter/Dinuba/Lindsay/Woodlake/Tulare)

Measure Objectives/Goals:

Behavioral Health PHQ9 Screening **TARGET 53% (HRSA 25th percentile)** of patients presenting to the rural health clinics will have PHQ9 completed annually.

Controlling High Blood Pressure **GOAL 74% (HRSA 90th percentile)** of patients presenting to the rural health clinic with diagnosis of hypertension will have blood pressure controlled at 140/90 or less.

		2022														
PHQ-9 DEPRESSION SCREENING		Baseline	Target	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
	DINUBA RHC	18%	53%	24%	38%	39%	43%	40%	27%	18%	15%	19%	21%	16%	18%	26%
	EXETER RHC	38%	53%	16%	21%	26%	24%	22%	21%	42%	41%	40%	40%	37%	38%	31%
	LINDSAY RHC	26%	53%	18%	35%	35%	32%	35%	28%	13%	15%	30%	34%	37%	26%	28%
	TULARE RHC	31%	53%	52%	50%	48%	38%	18%	10%	48%	51%	50%	50%	34%	31%	40%
	WOODLAKE RHC	16%	53%	11%	9%	10%	15%	12%	13%	15%	18%	16%	14%	18%	18%	14%
		2022														
HYPERTENSION CONTROLLED		Baseline	Target	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
	DINUBA RHC	71%	74%	77%	79%	81%	79%	82%	84%	82%	79%	76%	77%	79%	81%	80%
	EXETER RHC	75%	74%	74%	67%	71%	68%	69%	78%	75%	84%	72%	76%	75%	85%	75%
	LINDSAY RHC	72%	74%	81%	76%	76%	71%	76%	71%	69%	84%	83%	77%	74%	74%	76%
	TULARE RHC	74%	74%	88%	80%	89%	83%	92%	75%	69%	67%	73%	76%	67%	76%	78%
	WOODLAKE RHC	72%	74%	69%	67%	65%	64%	67%	68%	76%	67%	74%	74%	75%	78%	70%
	KEY	Not meeting goal/benchmark		Within 10% of goal/benchmark				Meeting or Outperforming goal/benchmark								

Denominator = Patients aged 12+ seen at RHCs for outpatient visit during timeframe indicated.

Numerator = Patients from denominator who were screened with the PHQ-9 tool within the 12 months prior to the visit date.

Denominator = Patient aged 18+ with an in-person visit at an RHC location in the timeframe indicated **with** a prior diagnosis of Hypertension.

Numerator = Patients from the denominator who had documentation of both a Systolic and Diastolic value below the threshold of SBP <140 AND DBP <90

Date range of data evaluated:

12 rolling months (4/1/2022-3/31/2023)

Analysis of all measures/data: (Include key findings, improvements, opportunities)

The Behavioral Health PHQ9 Screening is a measure identified as an area of focus for improvement. Clinical staff are to perform PHQ9 screenings on all patients annually in an effort to capture behavioral health concerns and refer high-risk patients to additional behavioral health services. The data during this reporting period reflected RHC Dinuba-26%, RHC Exeter-31%, RHC Lindsay-28%, RHC Tulare-40%, and RHC Woodlake-14% of rural health clinic patients with an annual PHQ9 screening completed. Our combined goal for the Rural Health Clinics is 53% which represents the 25th percentile. Due to this measure only being performed once a year, it is often missed by clinical staff. Clinical staff fails to review Patient Advisories for health maintenance items needing follow-up.

The Controlling High Blood Pressure is a measure identified as an area of focus for improvement. The goal for this measure is to maintain 74% of hypertensive rural health patients under control which represents the 90th percentile. Efforts towards this measure include ordering free blood pressure cuffs to patients, educating **Please submit your data along with the summary to your PI liaison 2 weeks prior to the scheduled report date.**

Unit/Department Specific Data Collection Summarization

Professional Staff Quality Committee/Quality Improvement Committee

clinical staff on the appropriate workflows regarding repeating blood pressure checks when first BP is high, and referring uncontrolled hypertensive patients to a pharmacist for medication co-management with their primary care provider. The data during this reporting period reflected RHC Dinuba-80%, RHC Exeter-75%, RHC Lindsay-76%, RHC Tulare-78%, and RHC Woodlake-70% of rural health clinic patients that had a diagnosis of hypertension whose blood pressure was controlled at 140/90 or less. The data during this reporting period reflects 4 out of the 5 Rural Health Clinics met or exceeds the performance goal of 74% or 90th percentile.

If improvement opportunities identified, provide action plan and expected resolution date:

Behavioral Health PHQ9 Screening – The performance data will be shared with clinic providers and staff on an ongoing basis during monthly provider meetings and staff meetings. In addition to sharing the data, workflows will be reviewed with clinical staff and training will be provided to those who require it. Reports will be generated on a monthly basis to carefully monitor clinic performance. These reports are granular and generate data down to the employee level identifying who is not completing the required screenings.

Controlling High Blood Pressure – The performance data will be shared with clinic providers and staff on an ongoing basis during monthly provider meetings and staff meetings. In addition to sharing the data, workflows will be reviewed with clinical staff and training will be provided to those who require it. Reports will be generated on a monthly basis to carefully monitor clinic performance. Processes have been hardwired with staff as 4 out of 5 Rural Health Clinics have met or exceeded performance goal.

Monthly Clinical Lead meetings have been established to drive clinical performance in the outpatient clinics. These meetings are led by the RN over Clinical Operations and a Clinical Lead LVN. The attendees are clinical leads representing all clinic locations. During these meetings, the clinical team will review quality data and action plan areas identified needing improvement.

Next Steps/Recommendations/Outcomes:

Monitor data, share with providers and front line staff. Work with ISS to improve data capture capabilities within the EHR. Add complimentary measure data to the next Clinic Prostaff report, which will allow a comprehensive view of screening for clinical depression and follow up throughout the clinic network.

Submitted by Name:

Ivan Jara- Director of Outpatient Clinics

Crystal Clark- Population Health Data Analytics Supervisor

Date Submitted:

5/31/2023

Please submit your data along with the summary to your PI liaison 2 weeks prior to the scheduled report date.

Stroke Program Dashboard 2022-2023

	Bench- marks	2021	Jan'22	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan'23	Feb	Mar
<u>Grouping of Stroke Patients</u>																	
Ischemic		409	36	25	33	43	33	24	23	45	26	29	24	42	33	38	34
Hemorrhagic		93	4	6	7	14	7	10	8	4	11	5	9	6	7	8	10
TIA (in-patient and observation)		221	13	15	26	20	25	16	12	24	21	7	19	13	16	11	12
Transfers to Higher Level of Care (Ischemic)		26	1	1	2	1	5	3	2	1	1	2	4	1	0	3	2
Transfers to Higher Level of Care (Hemorrhagic)		14	2	3	1	4	0	2	1	1	2	1	2	1	1	2	2
TOTAL NUMBER OF PATIENTS		763	56	50	69	82	70	55	46	75	61	44	58	63	57	62	60
Total # of Pts who rec'd thrombolytic (Admitted/Transferred)		40	4	0	4	3	7	4	4	5	5	2	6	4	3	2	2
% of thrombolytics - Inpatient & Transfers		9%	11%	0%	11%	9%	18%	15%	16%	11%	19%	6%	7%	9%	9%	5%	6%
% Appropriate vital sign monitoring post thrombolytics	90%	83%	100%	100%	25%	100%	86%	50%	50%	100%	80%	100%	50%	100%	100%	100%	100%
Rate of hemorrhagic complications for thrombolytics pts	0%	7%	0%	NA	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Core Measure: OP-23 Head CT/MRI Results	72%	78%	100%	NA	67%	100%	100%	67%	0%	100%	33%	100%	60%	100%	100%	100%	75%
% Appropriate stroke order set used (In-Patient)	90%	92%	96%	97%	96%	94%	96%	91%	96%	97%	96%	94%	95%	92%	96%	92%	88%
% Appropriate stroke order set used (ED)	90%	87%	90%	80%	83%	91%	95%	92%	82%	88%	88%	93%	91%	87%	82%	76%	78%
STK-1 VTE (GWTG, TJC)	85%	88%	79%	88%	100%	89%	96%	89%	79%	83%	88%	83%	100%	94%	90%	79%	73%
STK-2 Discharged on Antithrombotic (GWTG, TJC)	85%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	100%
STK-3 Anticoag for afib/aflutter ordered at Dc (GWTG, TJC)	85%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
STK-4 Thrombolytics Given within 60 min (GWTG, TJC)	75%	92%	100%	0%	NA	NA	NA	NA	100%	NA	50%	100%	100%	NA	100%	100%	NA
STK-5 Early Antithrombotics by end of day 2 (GWTG, TJC)	85%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	100%	100%	97%
STK-6 Discharged on Statin (GWTG, TJC)	85%	98%	100%	100%	100%	100%	100%	100%	94%	100%	100%	100%	94%	97%	94%	96%	94%
STK-8 Stroke Education (GWTG, TJC)	75%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	91%	94%	91%
STK-10 Assessed for Rehab (GWTG, TJC)	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%
% Dysphagia Screen prior to po intake (GWTG)	75%	86%	84%	83%	88%	87%	79%	85%	74%	77%	83%	71%	83%	75%	80%	71%	71%
% Smoking Cessation (GWTG)	85%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	86%
% LDL Documented (GWTG)	75%	99%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	97%	97%	97%	100%	97%
Intensive Statin Therapy (GWTG)	75%	96%	97%	96%	100%	97%	93%	88%	94%	100%	100%	100%	94%	97%	94%	96%	94%
% IPA Arrive by 3.5 Hrs; Treat by 4.5 Hrs (GWTG)	75%	100%	100%	NA	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
% NIHSS Reported (GWTG)	75%	97%	97%	96%	97%	97%	100%	96%	100%	98%	96%	100%	94%	90%	90%	100%	97%
Ischemic ALOS/GMLOS excess	<1.0	2.09	3.43	8.74	2.49	4.69	5.04	1.32	4.31	3.55	1.54	1.2	1.38	2.66	4.45	4.6	1.7
Hemorrhagic ALOS/GMLOS excess	<1.0	3.72	3.43	23.45	8.39	5.61	2.99	6.83	2.42	7.68	10.93	14.18	8.22	18.8	0.9	15.4	-1.25
Ischemic Mortality ACA O/E Ratio (Midas)	<1.0	1.18	1.3	0	0.8	0.5	0	1.3	0	0	1.3	1.1	1.2	0.6	1.1	0.6	0

In-House Stroke Alert Dashboard

Stroke Alert Location

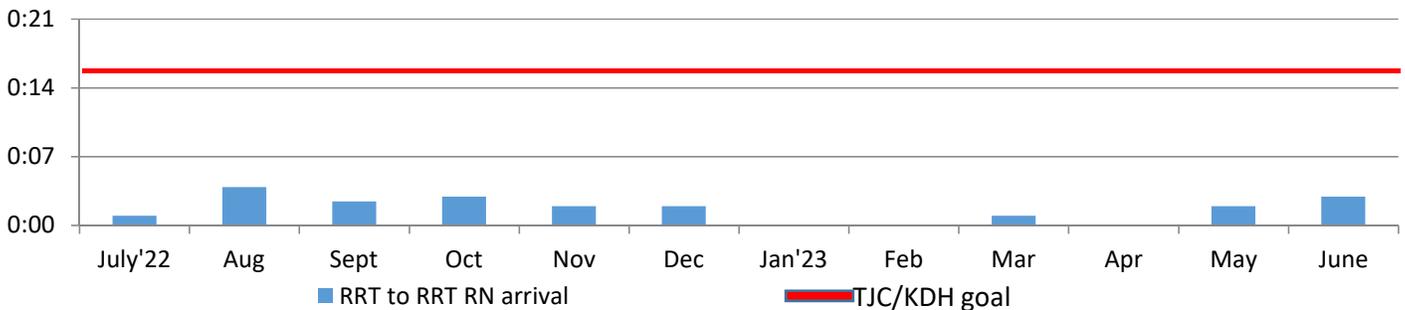
# alerts	July'22	Aug	Sept	Oct	Nov	Dec	Jan'23	Feb	Mar	Apr	May	June
3W	1				1	2	1				1	1
4S	6	2	7	3	4	1	3		1	1	3	2
2S				1	2			1	1	1	1	1
3S	2				1							1
Cath Lab				1	1							1
CVICU	1			1		1			1			1
ICU					1		1				1	
4N				1	1	2	1		1			
3N		1	1	1	4							
4T			1		2		1		1			
PACU												
2N	1	1	2					1	2	2	1	
5T	1	1		1		3	3	2	2	1	2	
BP												
1E	2	1			1	1	1					
MB								1				
CT/Nuc						1						
Endo												
Peds												

RRT to Stroke Alert



If patients exhibit any new or worsening neuro deficits while in the hospital; RNs are to call an RRT. The RRT RN will evaluate and determine if a stroke alert should be called. The goal from calling RRT to stroke alerts should be <15 minutes.

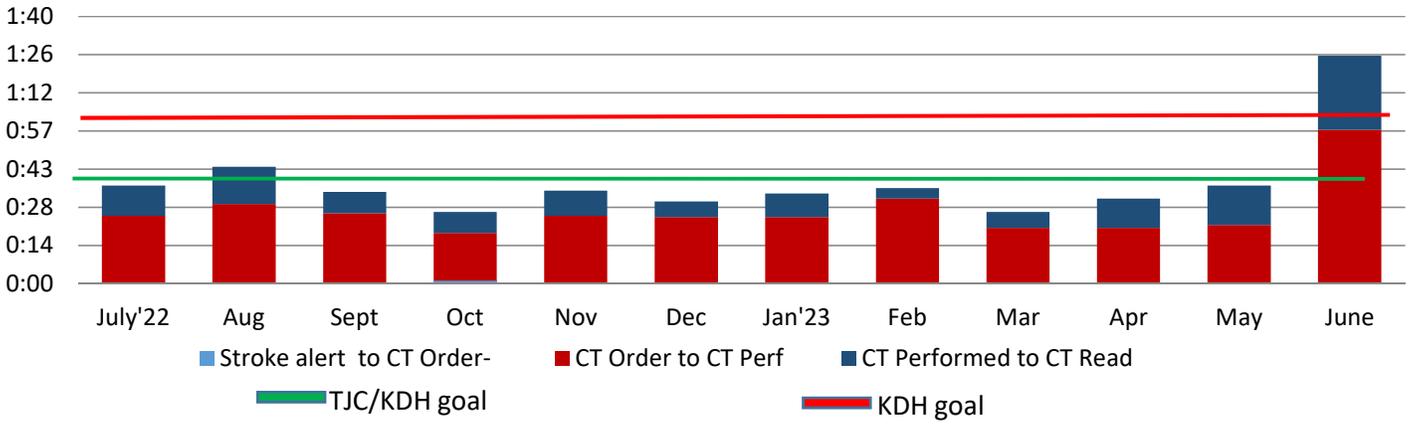
RRT to RRT RN arrival



TJC expectation is that a designated provider is at the bedside within 15 minutes of stroke alert. KDH has designated the RRT RN as the provider for in-house stroke alerts.

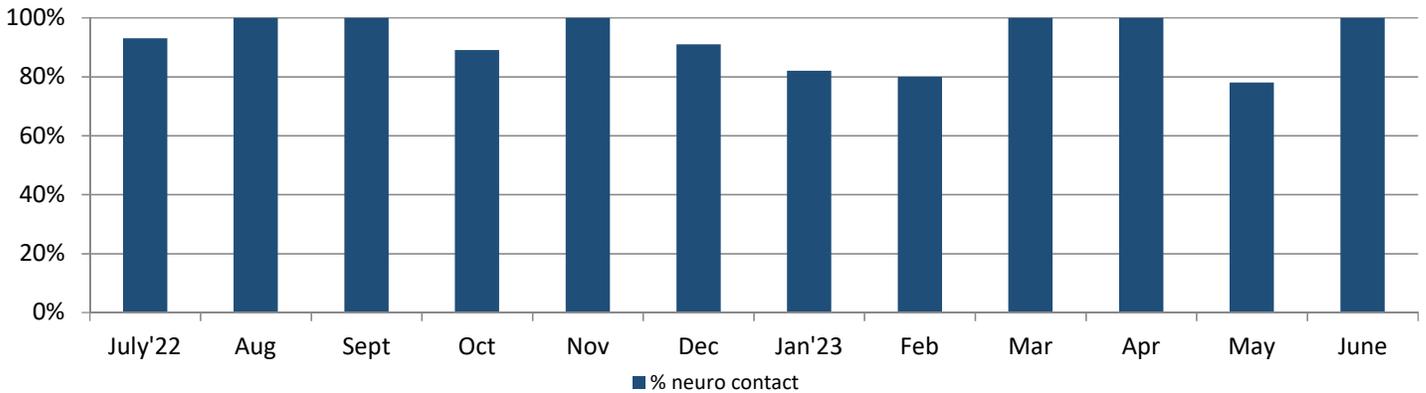
In-House Stroke Alert Dashboard

Stroke Alert to CT Times



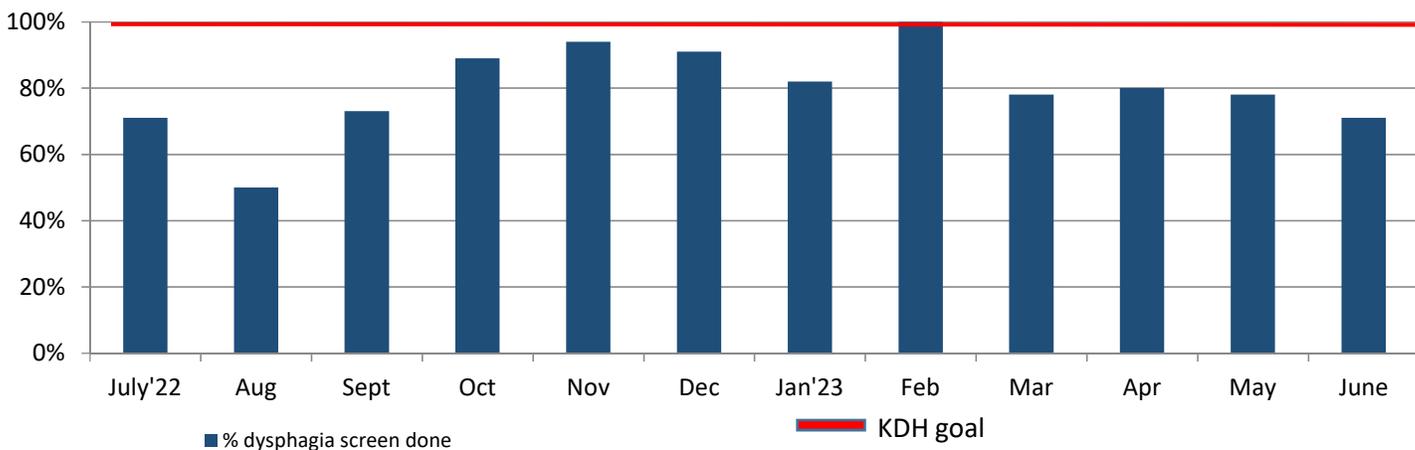
TJC expectation is that the CT will be read within 45 minutes of arrival. KDH's goal is 30 minutes (red line). The expectation is that the CT will be performed within 20 minutes of alert (green line).

% neuro contact



Neurology consultation should occur on all in-house stroke alerts.

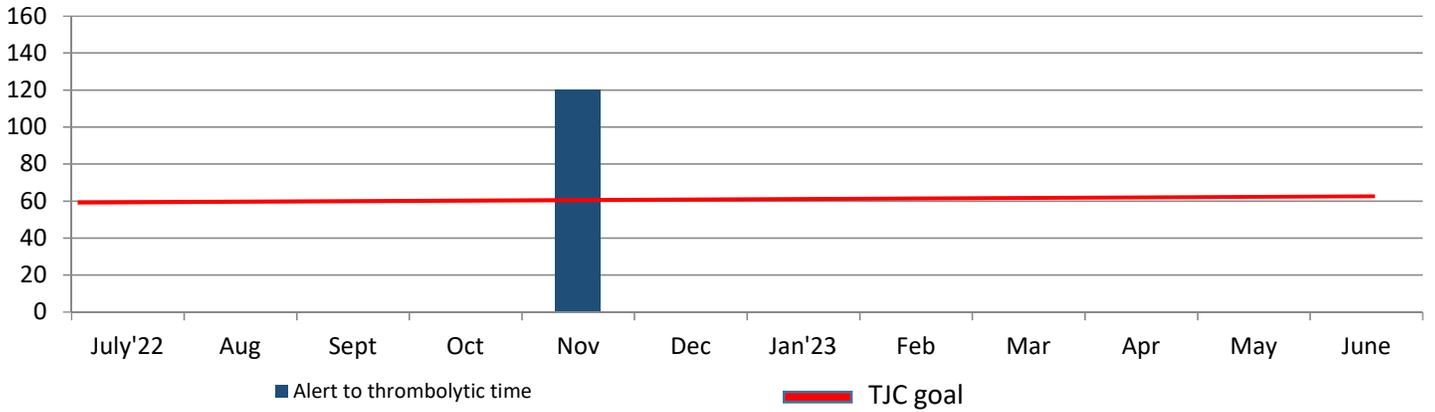
% dysphagia screen done



Whenever there are new or worsening neurological deficits ≥ 3 points, the RN should perform a dysphagia screen to evaluate the patient's ability to swallow.

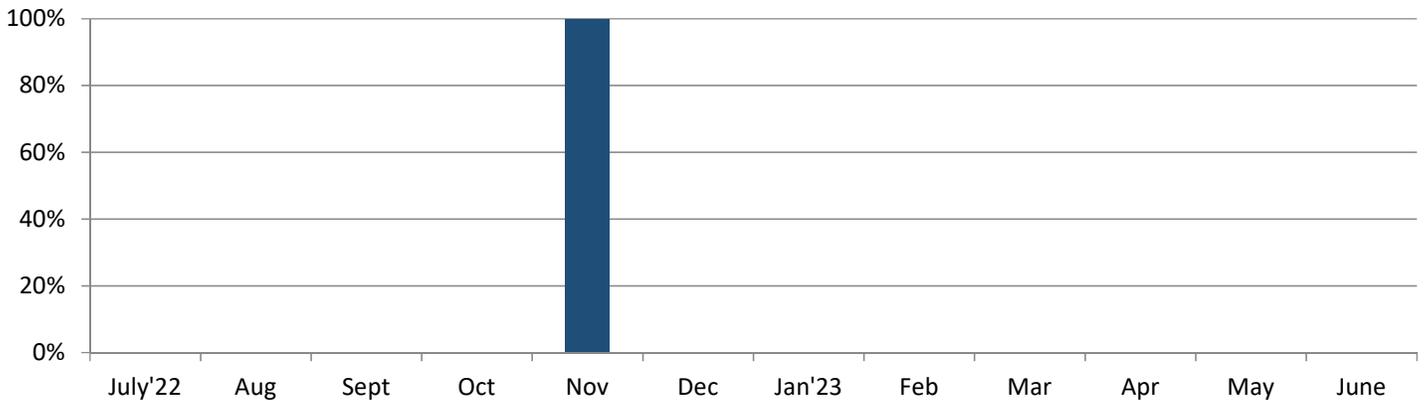
In-House Stroke Alert Dashboard

Alert to thrombolytic time



ED Patients: TJC expectation is that IV thrombolytics are given within 60 minutes to eligible patients who present for stroke care at least 50% of the time. In-House Stroke alerts: KDH expectation is that IV thrombolytics are given within 60 minutes to eligible patients who have been identified with new or worsening stroke symptoms. In-house thrombolytic administration rarely occurs; however it is tracked to ensure compliance throughout the continuum of care.

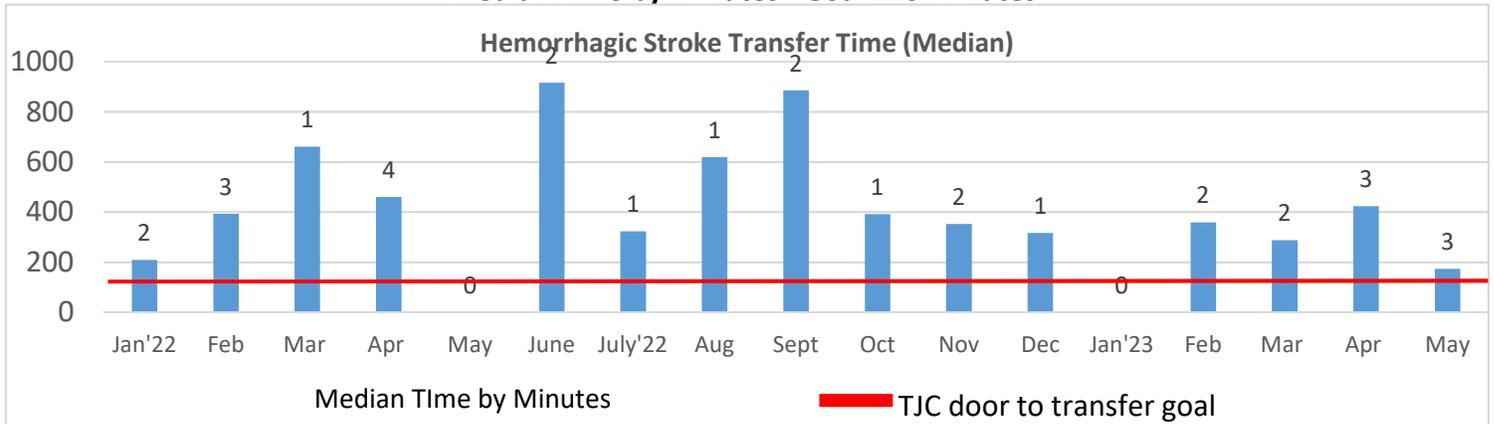
Thrombolytic flowsheet completed



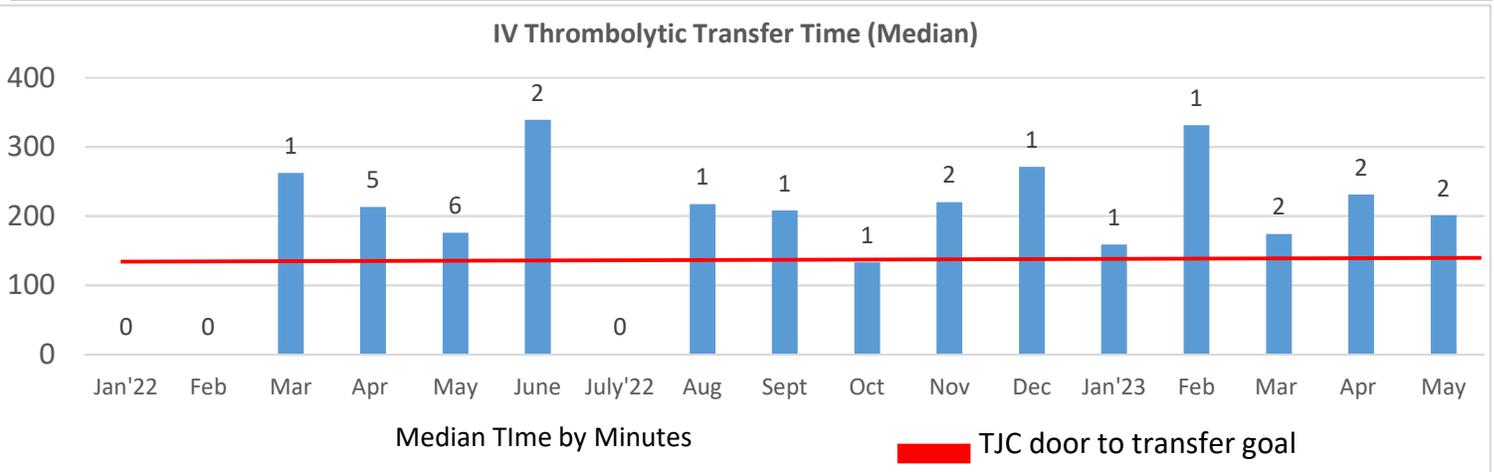
KH expectation is that post thrombolytic monitoring is in compliance with our standardized protocol. All key elements must be completed to be determined as compliant.

2022-2023 TRANSFERS FROM ED TO ANOTHER ACUTE CARE FACILITY

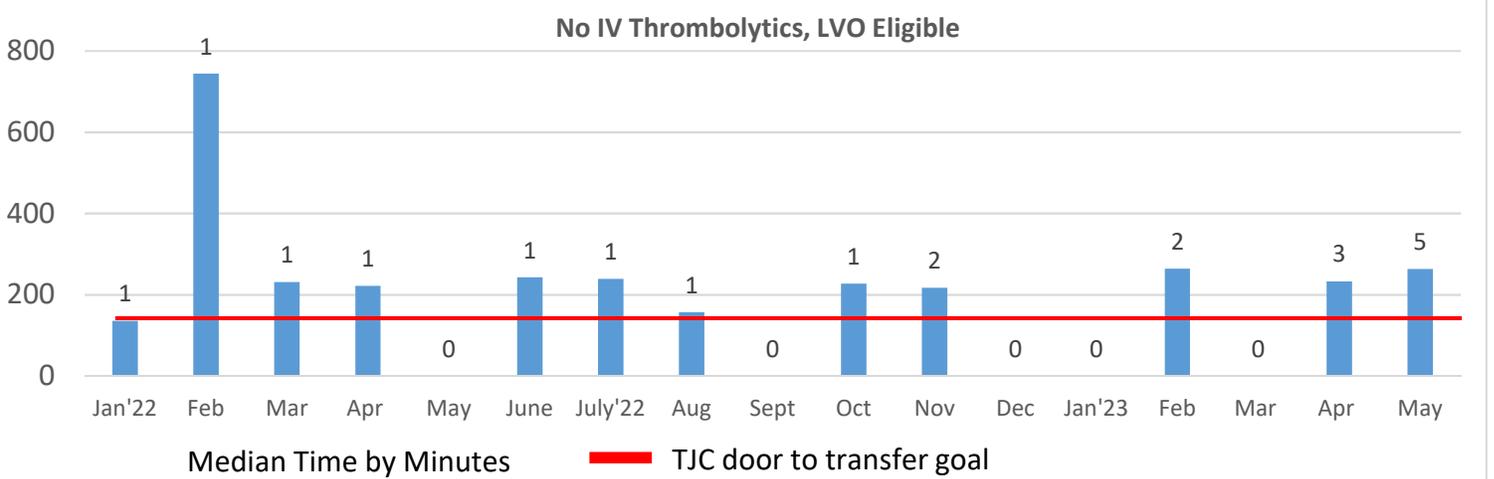
Median Time by Minutes - Goal 120 Minutes



Hemorrhagic patients are transferred out for other procedures not done at KH, specifically coiling/clipping of aneurysms or bleeds. The ED Stroke Alert Committee reviews the process on an ongoing basis to help streamline the process, all action items are captured in PDSA document. The Covid 19 pandemic had caused delays in transfer times in 2021 with continued adverse effects due to staffing/resource availability in 2022.



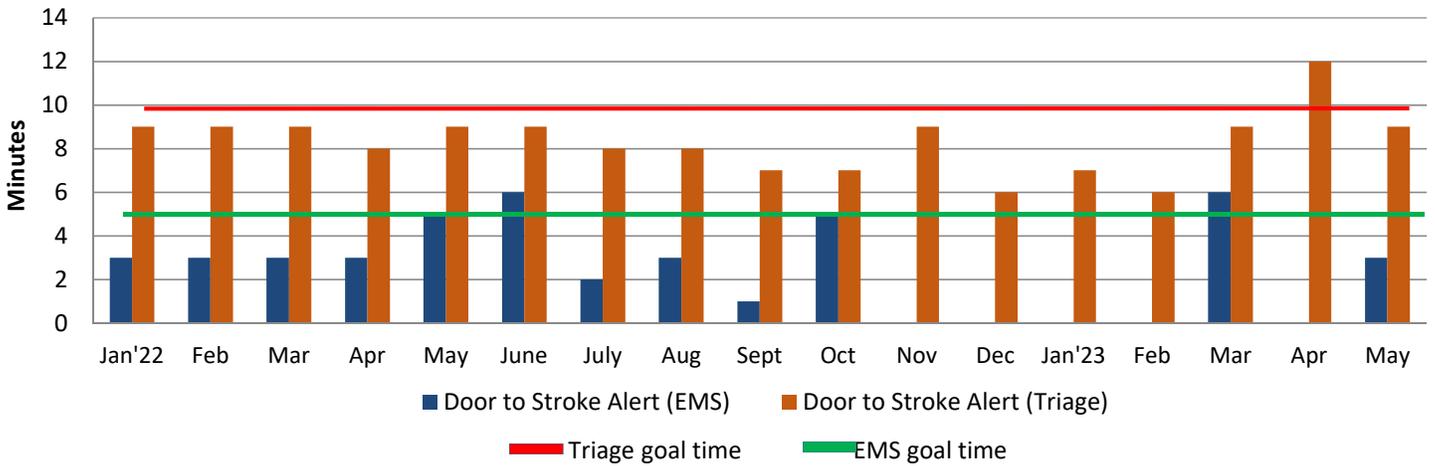
Transfers for ischemic strokes occur primarily if a large vessel occlusion is noted and would be eligible for endovascular treatment. As a result of the efforts made by the ED Stroke Alert Committee door to transfer times have improved; however Covid 19 pandemic had caused delays in transfer times in 2021 with continued adverse effects due to staffing/resource availability in 2022.



This cohort of patients have a large vessel occlusion that would be eligible for endovascular treatment and do not meet criteria for thrombolytic administration. The Covid 19 pandemic had caused delays in transfer times in 2021 with continued adverse effects due to staffing/resource availability in 2022.

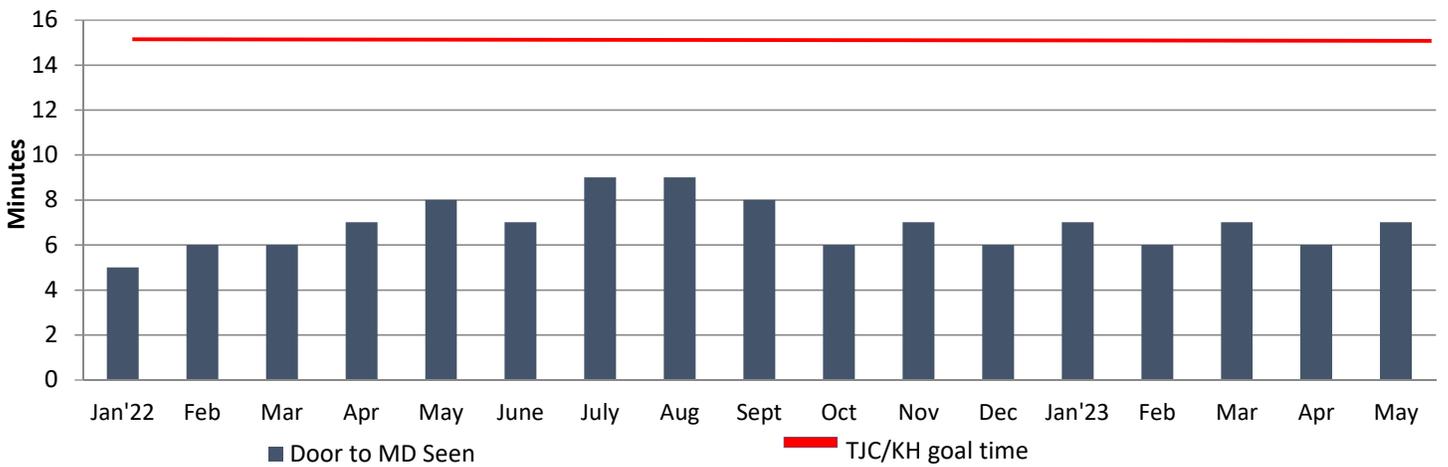
2021-2022 Stroke Alert Dashboard

Door to Stroke Alert (median times)



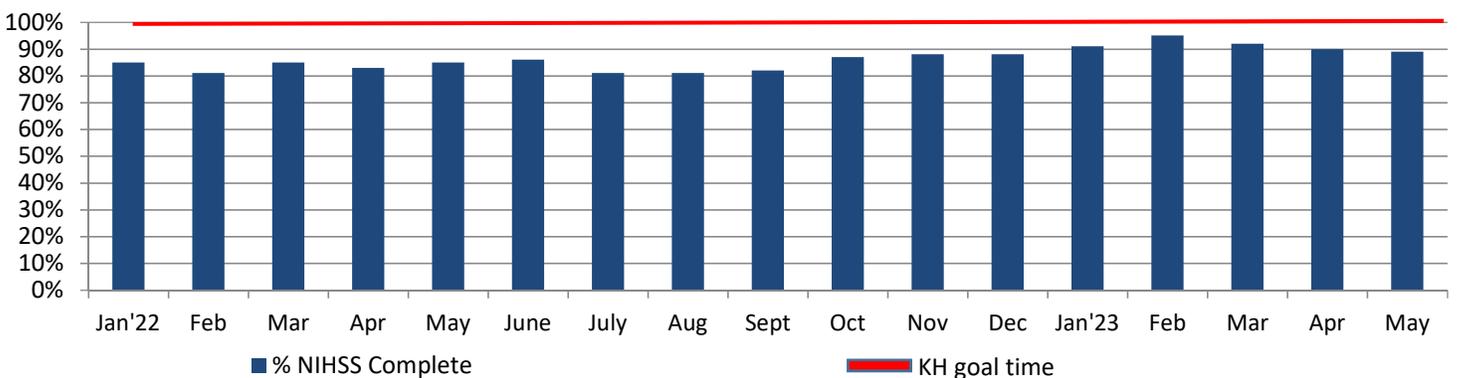
Per KH ED Stroke Alert process; stroke alerts to be called within 5 min for EMS and 10 min for Triage. Since the opening of the new Triage/zone 5 areas (summer of 2021), significant improvements have been noted in the Triage process.

Door to MD Seen (median time)



The expectation is that the physician will see the stroke alert patient within 15 minutes of arrival. Improvements made throughout the past year include: early notification from EMS, MD meets the pt at the door upon arrival, scribe documents first seen time in the record.

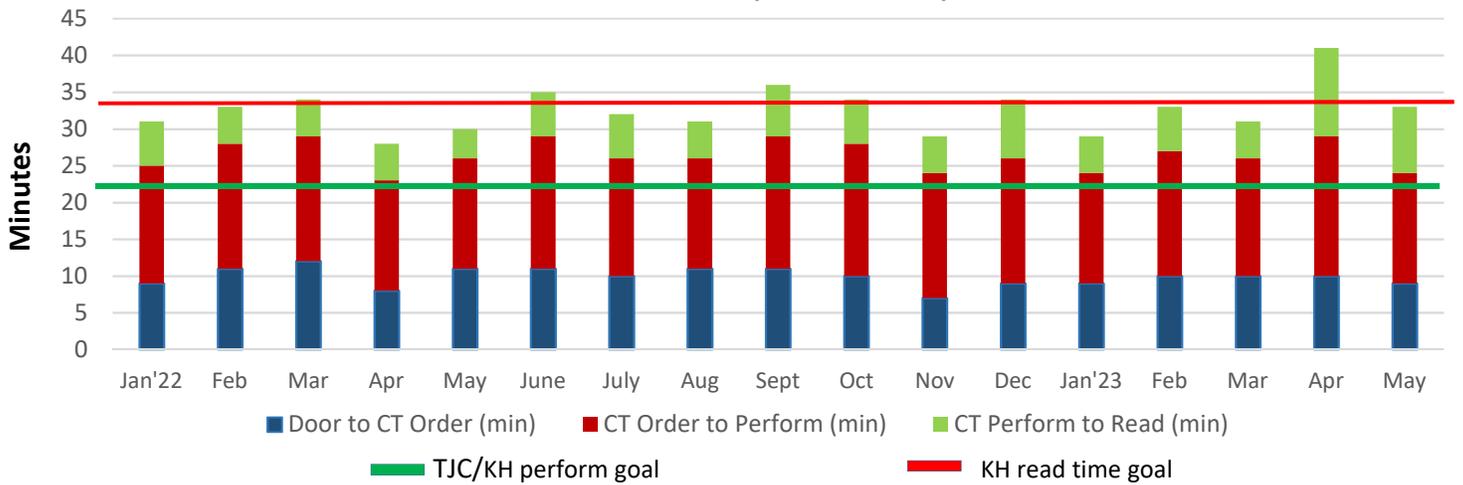
% NIHSS Complete



The expectation is that all stroke alert patients will have a NIHSS completed by a certified ED staff member and/or the attending physician; the primary responsible person is the attending/resident physician. This audit ONLY tracks if attending/resident physician have completed a full NIHSS in the ED record.

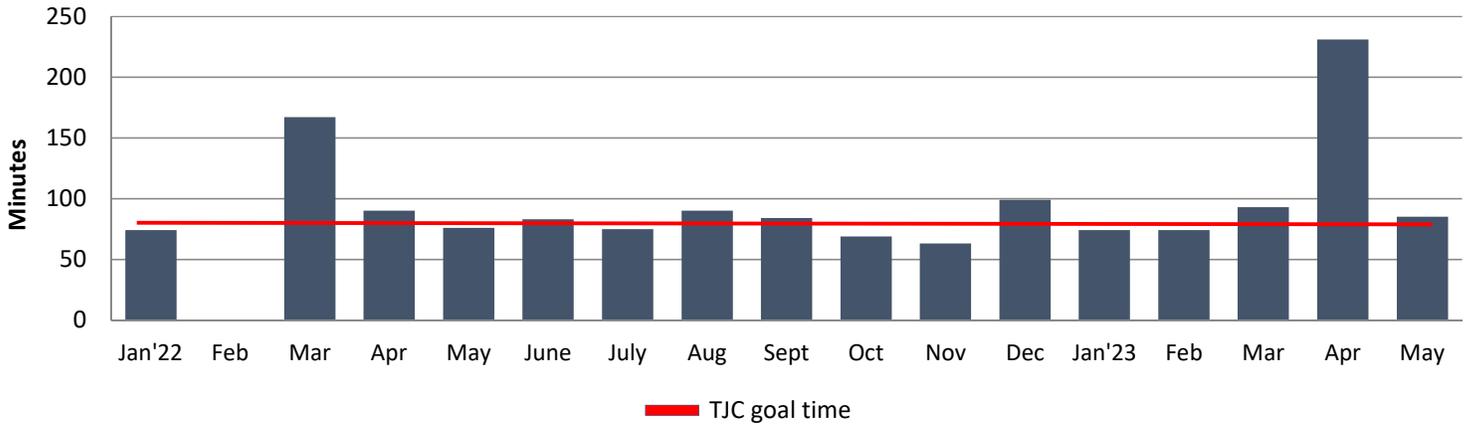
2021-2022 Stroke Alert Dashboard

Door to CT Times (median times)



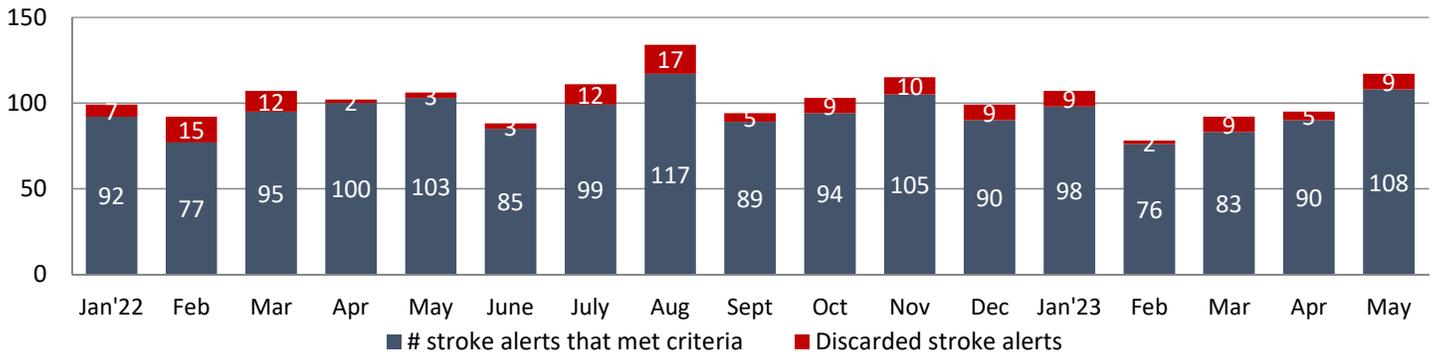
CMS and TJC expectation is that the CT will be performed by 20 minutes and read by 45 minutes of arrival. KH's CT read time goal is 30 minutes

Door to IV Thrombolytics (median time)



The data in this graph includes all thrombolytic patients which differs from the TJC rate because exclusion criteria is not used. TJC expectation is that IV thrombolytics are given within 60 minutes to eligible patients who present for stroke care. AHA/ASA GWTG expectations were update in 2019 with new IV thrombolytic goal time to 45 minutes at least 75% of the time (when applicable). To meet this goal, continued changes to the stroke alert process have been made.

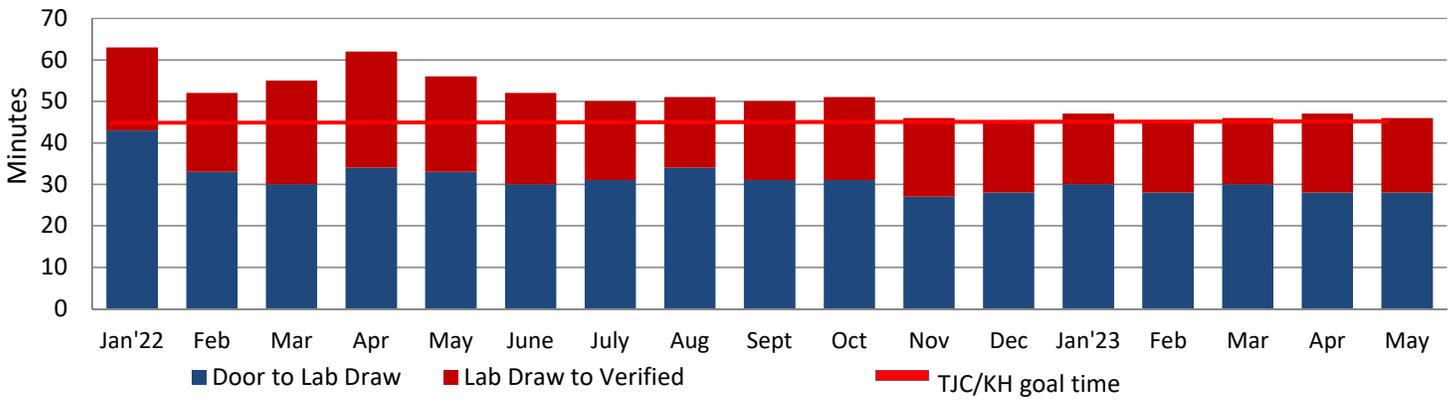
ED Stroke Alert Volume



Stroke alert criteria includes: pt presenting with stroke like symptoms +BE FAST screen, stroke alerts called prior to arrival and up to 1 hour after arrival. Excluded cases: >1 after arrival or if stroke alert was cancelled.

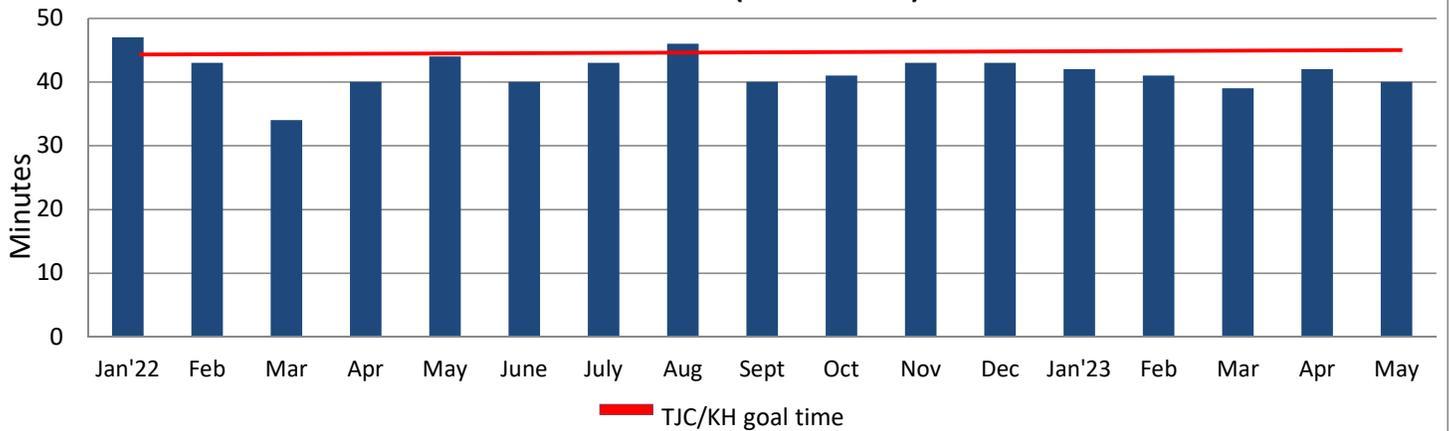
2021-2022 Stroke Alert Dashboard

Door to Lab Time (median times)



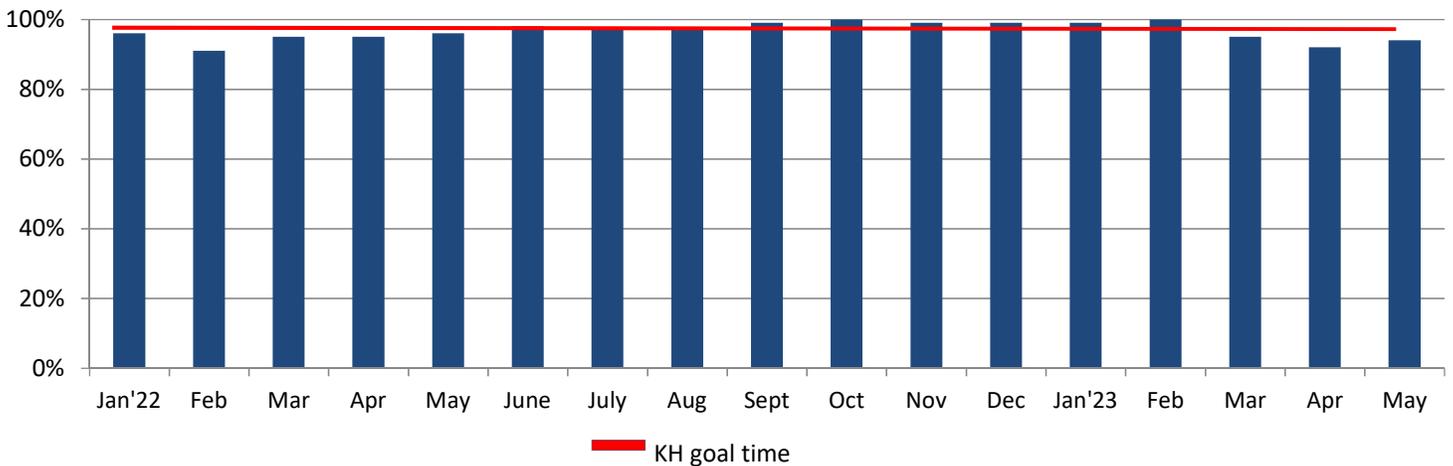
TJC expectation is that laboratory tests are completed within 45 minutes of arrival. Changes in stroke alert process has been made early 2019 to improve lab verified times. Action items taken: IV start kits in CT rooms with lab tubes, lab label makers in both CT rooms and specimens taken immediately down to lab.

Door to EKG Time (median time)



TJC expectation is that EKGs are completed within 45 minutes of arrival.

% Dysphagia screen completed when ordered



Dysphagia screening should be completed by the RN on all stroke alert patients prior to any po intake, including meds. Dysphagia screening is part of the ED stroke alert order sets. Goal is 100% compliance.

Sepsis Quality Focus Team Report

July 2023



Acronyms

- ALOS - Average Length of Stay
- BC - Blood Culture lab test
- Dx - Diagnosis
- ED - Emergency Department
- EM - Emergency Medicine GME Program
- FM - Family Medicine GME Program
- GMLOS - Geometric Length of Stay
- ICD10 - Billing Codes
- LA - Lactic Acid Lab Test
- RRT - Rapid Response Team
- SEP-1 - CMS Sepsis Bundle Measure
- VBG - Venous Blood Gas lab test
- VS - Vital Signs
- HR - Heart Rate
- PPR - Peripheral Pulse Rate
- APR - Apical Pulse Rate
- IBW - Ideal Body Weight
- PNF - Provider Notification Form
- OFI - Opportunity for Improvement

SEP-1 Early Management Bundle Compliance

CA State Compliance 63% ~ National Compliance 57% ~ Top Performing Hospitals 78%

Percent of patients with sepsis that received “perfect care.” Perfect care is the right treatment at the right time.

Goal for FY23 =

Sepsis Quality Focus Team DASHBOARD

CMS SEP-1 Bundle Compliance

	Goal	FY2020	FY2021	FY2022	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	YTD
SEP-1 CMS % bundle compliance	77%	66.9%	74.6%	75.0%	78%	84%	82%	75%	76%	62%	66%	60%	100%	63%			74%
Number of CMS compliant cases (n)	n/a	198	206	300	25	26	27	18	16	21	21	18	20	15			207
Total number CMS cases abstracted (d)	n/a	296	276	400	32	31	33	24	21	34	32	30	20	24			281
% Concurrent bundle compliant cases	75%	78%	77%	79%	78%	87%	83%	83%	84%	87%	87%	81%	91%	84%			85%
Number of concurrent compliant cases (n)	n/a	646	785	656	45	33	38	54	41	33	33	38	50	37			402
Number of concurrent cases abstracted (d)	n/a	829	1013	835	52	38	46	65	49	38	38	47	55	44			472
Number of Non-Compliant CMS cases <i>with</i> coordinator	n/a				0	0	0	0	0	1	1	1	0	0			3
Number of Non-Compliant CMS cases <i>without</i> coordinator	n/a				7	5	6	6	7	13	12	12	0	9			77
% of Non-Compliant CMS cases <i>with</i> coordinator	n/a				0%	0%	0%	0%	0%	8%	8%	8%	0%	0%			2%
% of Non-Compliant CMS cases <i>without</i> coordinator	n/a				100%	100%	100%	100%	100%	92%	92%	92%	0%	100%			88%
KEY		>10% away from goal				Within 10% of goal			Within 5% of goal				Outperforming/meeting goal				

SEP-1 Early Management Bundle Compliance

CA State Compliance 63% ~ National Compliance 57% ~ Top Performing Hospitals 78%

Percent of patients with sepsis that received “perfect care.” Perfect care is the right treatment at the right time.

Sepsis Quality Focus Team DASHBOARD

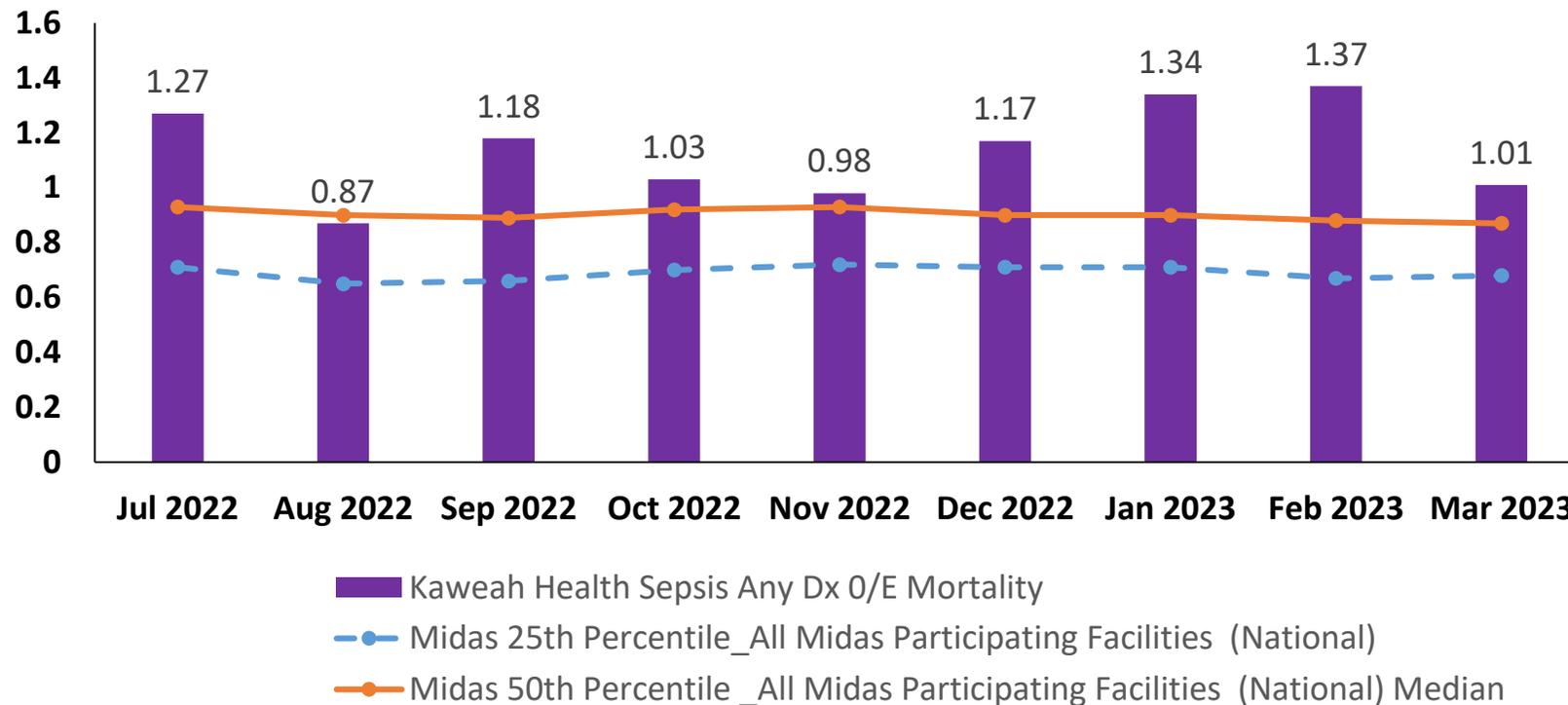
	Goal	FY2020	FY2021	FY2022	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	YTD
SEP-1 Bundle Elements																	
3 hr SEP-1 Bundle % Compliance	95%	76.0%	78.6%	88.0%	81%	87%	82%	79%	86%	68%	75%	70%	100%	67%			79%
3hr SEP-1 BundleTotal Patients abstracted (d)	n/a	296	276	401	32	31	33	24	21	34	32	30	20	24			281
% Antibiotics administered	95%	97.3%	95.7%	93.0%	91%	100%	97%	96%	90%	85%	97%	83%	100%	100%			94%
% Blood Cultures drawn	95%	93.8%	92.0%	93.0%	97%	97%	91%	100%	100%	83%	94%	96%	100%	83%			94%
% Lactic Acid drawn	95%	95.6%	97.9%	98.0%	97%	100%	100%	100%	100%	96%	93%	100%	100%	100%			99%
% Fluid Resuscitation completed	95%	88.3%	90.7%	92.0%	88%	79%	89%	75%	86%	100%	84%	75%	100%	56%			83%
6 hr bundle % Compliance																	
6hr SEP-1 BundleTotal Patients abstracted (d)	95%	85.4%	93.5%	90.0%	95%	95%	100%	94%	87%	86%	86%	80%	100%	94%			92%
% Repeat LA drawn	n/a	186	170	250	21	20	18	17	15	14	21	15	16	16			173
% Reassessment completed	95%	89.6%	94.0%	92.0%	100%	95%	100%	94%	87%	86%	86%	80%	100%	94%			92%
% Vasopressors initiated when indicated	95%	92.9%	98.5%	91.0%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%			99%
Sepsis Alert Measures																	
Total Number of Coordinator-Involved Alerts					470	480	473	734	623	472	482	534	504	429			5201
% of alerts that resulted in a time zero					11%	8%	10%	9%	8%	8%	8%	9%	11%	10%			9%

KEY	>10% away from goal	Within 10% of goal	Within 5% of goal	Outperforming/meeting goal
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Sepsis Any Diagnosis – Outcomes

Observed/Expected (o/e) Mortality

SEPSIS ANY DIAGNOSIS o/e MORTALITY
FY 2023 (July 2022 - March 2023)

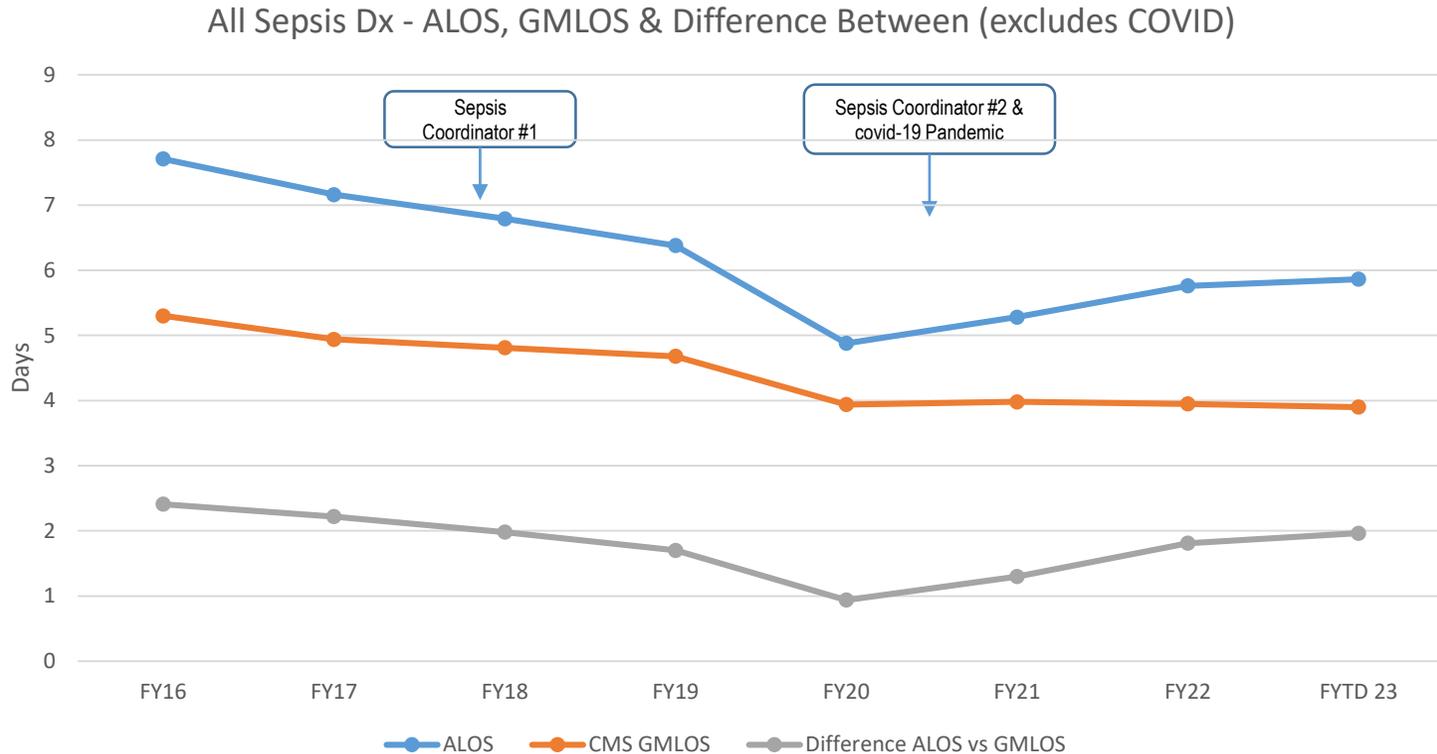


- Ratio < 1.0 indicates that at least expected deaths do not exceed actual (Lower ratio is better)
- Best performing facilities have o/e ratios significantly lower than 1.0 (i.e. 0.6)

**Midas Risk Adjusted Model v5
comparison analysis (582-624 sites)**

Sepsis Any Diagnosis - Outcomes

Length of Stay



- 24% decrease in ALOS from FY16 (ALOS=7.71) to FY23 (ALOS=5.85)
- *FYTD23 Kaweah Health ALOS 5.85 days vs. CMS GMLOS 3.88 Difference of 1.96 days > GMLOS.
- COVID-19 cases removed in FY20-23. SEP-1 bundle does not apply to COVID-19 patients.

*FYTD23: July 2022 – Jan 2023

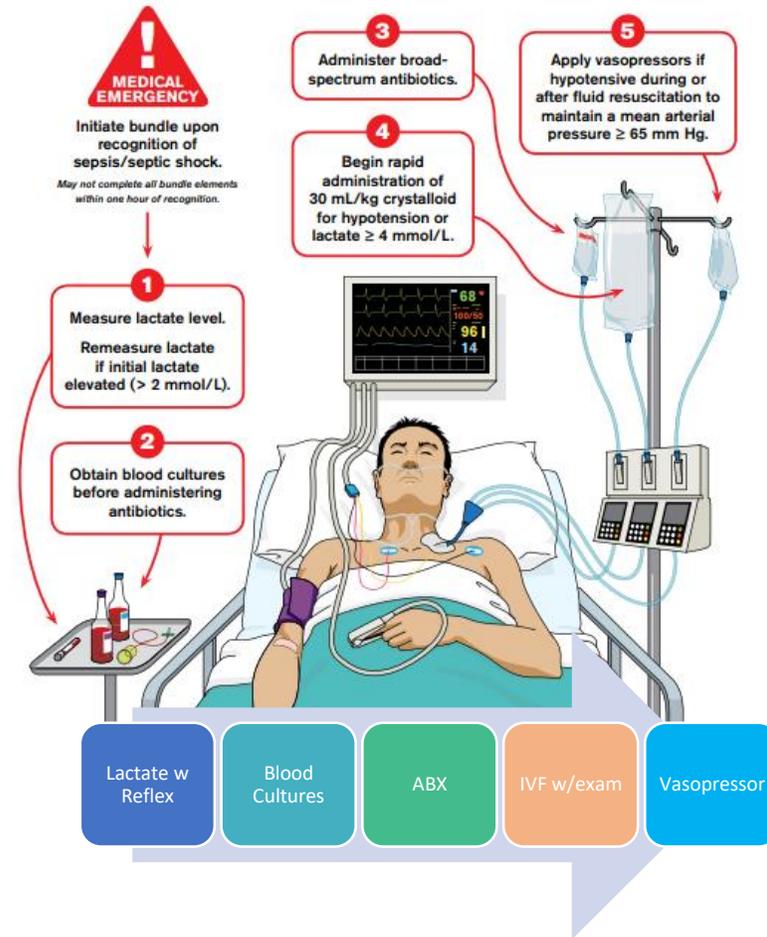
Sepsis 1-Hour to Treatment Implementation to Reduce Morbidity and Morality

- Research suggests that early recognition of sepsis followed by prompt treatment are key factors for reducing sepsis-related mortality
- Kumar et al. identified a 7.6% increase in mortality for every hour sepsis is left untreated
- At Kaweah Health, recent sepsis-related mortality trends reflect an uptick in mortality
- ED physicians/residents/educators, ISS, pharmacy, and the Quality Sepsis Team are collaborating to identify new strategies to reduce sepsis-related mortality with strong support from BOD/Executive Leadership
- Implementation of a standard ED 1-hour sepsis bundle is being rolled out in the ED with goal of Early Goal-Directed Therapy for suspicion of sepsis
- The proposed 1-hour bundle includes pre-selected orders for blood cultures and serial lactate collection, minimal broad-spectrum antibiotic option, and one crystalloid option

Hour-1 Bundle

Initial Resuscitation for Sepsis and Septic Shock

Surviving Sepsis Campaign



Sepsis QFT Actions & Next Steps

- Key Improvement strategies in process:
 1. Educational activity for Hospitalist on understanding Sepsis from a CMS Perspective & one hr. bundle to decrease mortality (5/18/23). Follow up meeting planned for July, 2023
 2. Educational activity for Intensivist on understanding Sepsis from a CMS Perspective & one hr. bundle to decrease mortality (6/22/23).
 3. Secure resident engagement & Support (Sepsis team ongoing communication with chief residents)
 4. ED providers education by Dr. Tu & Dr. Pho
 5. Ongoing education activities by Clinical Education in partnership with Sepsis Team
 6. Healthy Analytics Sepsis Data retrieval tool being developed to track 1-hr. bundle
 7. Standing educational activities for GME residency: Sepsis SIM and Sepsis didactic every 18 months
 8. Development of a Sepsis 1- hour bundle power plan

Concerned About Sepsis?

B VOCAL!

- Blood culture collection (before antibiotics)
- Vasopressors*
- Oxygen supplementation*
- Crystalloids / colloids*
- Antibiotics (broad-spectrum, parental)
- Lactic acid monitoring (serial collection)
- *When appropriate

TIME IS TISSUE

Kaweah
MORE THAN

Kaweah Health Clinical Education May 19, 2023

Process Change/New Knowledge

Sepsis: One Hour Bundle
Go-live in ED: June

The 3-hour Sepsis bundle is changing to the 1-hour Sepsis bundle. Early broad-spectrum antibiotic and fluid administration after blood culture collection stands as the pinnacle of sepsis management. By completing these elements into a 1-hour bundle, we can provide better care and save lives.

B VOCAL. If you are suspicious of sepsis, notify the Provider!

B is for Blood Culture collection (these need to be drawn prior to antibiotic administration)
This will help future Providers (inpatient) alter plan of care with proper identification of the bacterial source

V is for Vasopressors (when appropriate)
Did fluid resuscitation fix hypotension? If not, consider norepinephrine

O is for Oxygen therapy (when appropriate)
Does the patient show signs of altered mentation? Are they complaining of SOB? Are they tachypneic? If so, include oxygen supplementation.

C is for Crystalloids/Colloids (when appropriate)
Is the patient hypotensive? Do they have a lactic acid > or = 4? Do they respond to a passive leg raise? If so, consider fluid therapy (blood products work too!!)
NS, LR, PRBC's, Albumin, Plasma, etc.

A is for Antibiotics (intravenous, broad-spectrum)
Administer as soon as blood cultures are drawn (be mindful to print and scan all lab labels before scanning meds)

L is for Lactic Acid (draw the first one with the blood cultures)
Is the initial lactic acid >2? If so, we need to draw another one after antibiotic administration. If not, a repeat LA is not needed (double check with Provider if they want another one)

The 1-Hour Sepsis Challenge

Draw Blood Cultures and Lactic Acid

Give Crystalloids/Colloids

Give Antibiotics

Remember: Time is Tissue.

Process Change/New Knowledge Kaweah Health

Sepsis QFT Actions & Next Steps

- Key Improvement strategies in process:
 1. Collaborating with California Quality Improvement Organization HSAG & Best performing facility to mirror best practices
 2. Streamlined definition for suspicion of Sepsis to trigger the 1-hour bundle
 3. Eliminate Sepsis 1A power plan
 4. Continue education/follow-up with providers during concurrent review of cases
 5. Improve communication regarding blood culture collection between nurse, phlebotomist etc.
 6. Developed paper Sepsis checklist for assisting in 1-hour bundle task completion and handoff
 7. Exploring the use of Sepsis intervention tracker/Sepsis checklist with ISS partners
 8. Ongoing weekly Kanban sepsis meetings with ISS partners
 9. Acronym developed to assist as cognitive aid to remember SEP-1 Bundle elements: **B VOCAL!**
 10. Exploring development of SIRS Sepsis Alert for ED

Concerned About Sepsis?

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The 1-Hour Sepsis Challenge

Draw Blood Cultures and Lactic Acid
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 Give Antibiotics

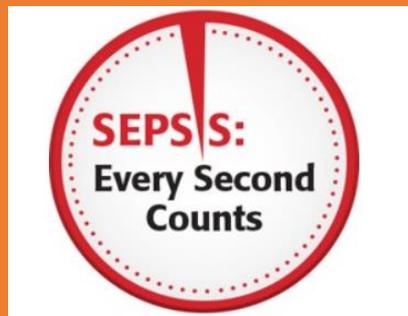
Remember: Time is Tissue.

Process Change/New Knowledge Kaweah Health

Sepsis QFT Actions & Next Steps

Next Steps:

- One-Hour Bundle power form planned go live date 6/20/23
- Review suggested improvement strategies with complete stakeholder group, and solicit input to expand list & update as needed
- Prioritize and execute improvement strategies
- Ongoing evaluation for the “One-Hour” Sepsis bundle to reduce Sepsis mortality
- Track & Trend Sepsis Mortality



Dr. LaMar Mack, Medical Director, Quality and Patient Safety
Sandy Volchko, RN-Director, Quality and Patient Safety. Ext. 2169
Erika Pineda, RN-Manager, Quality and Patient Safety. Ext. 2876
Ryan Smith, RN-Sepsis Coordinator. Ext. 5905
Jared Cauthen, RN-Sepsis Coordinator. Ext. 6903



Methicillin-Resistant Staphylococcus Aureus (MRSA)

Quality Focus Team Report

July 2023

Quality Focus Team Members

- *Jag Batth - Chief Operating Officer (ET)*
- *Kylie Jarrell – Admin Assistant Environmental Services, Laundry/Linen, & Patient Transport Service (Recorder)*
- *Tendai Zinyemba - Director of Environmental Services. Laundry/Linen, & Patient Transport Service (Chair)*
- *Shane Reynolds - Assistant Nurse Manager 4N (Co-Chair)*
- *Justin Ma – Infectious Disease Pharmacist*
- *Amy Baker – Director of Renal Services*
- *Sandy Volchko - Director of Quality & Patient Safety*
- *Shawn Elkin – Infection Prevention & Control Manager*
- *Joetta Denny – Infection Prevention*
- *Gloria Dickerson – Clinical Educator*
- *Johnny Mata – Respiratory Care Manager*



MRSA- FY23 Goals

Healthcare onset MRSA bloodstream infection rate that does not exceed a standardized infection ratio of 0.726 or (<0.5 cases a month/1.5 cases a quarter/6 cases a year)

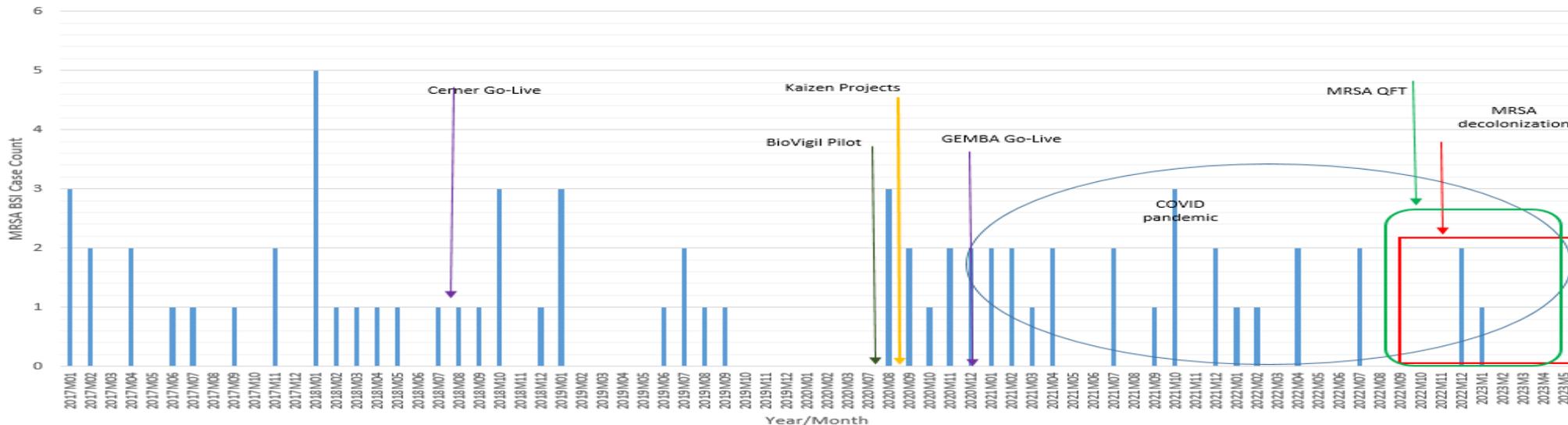
We reported 5 MRSA BSI events July 2022 – May 2023. (Only 1 was related to COVID-19 during FY)

***based on July-August 2022 NHSN predicted**

****Standardized Infection Ratio (SIR) is the number of patients with a healthcare acquired infection (HAI) divided by the number of patients who were predicted to have an HAI. MRSA Bloodstream Infection is impacted by the number of inpatient days for a given time period.**

Background Data – MRSA Bloodstream Infection Events

Number of MRSA Bloodstream Infection events at Kaweah Health from over calendar years 2017 through May 2023 with emphasis on implementation of MRSA Quality Focus Team and MRSA Nasal Decolonization Pilot Study.

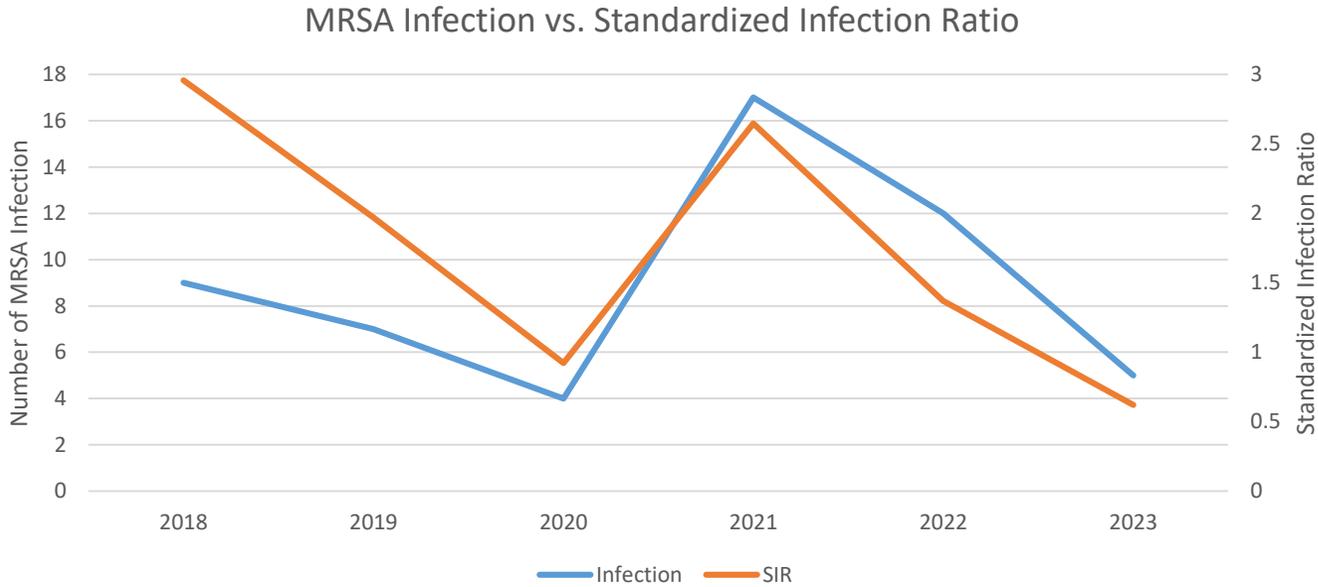


Number of MRSA BSI events dipped during November 2019 through March of 2020 in part due to the electronic hand hygiene system pilot on 4N, and ICU and the added attention given to healthcare associated infections (e.g. CLABSI/CAUTI) with Kaizen Projects and initiation of GEMBA Rounds. The increase in MRSA BSI events after March 2019 was associated with the COVID-19 pandemic, extended lengths of stays, blood culturing practices, and source control of the primary infection site. FY2023 has demonstrated a significant decrease in MRSA BSI events proximal to the time automated orders for Mupirocin decolonization treatment went live for 4N and ICU.

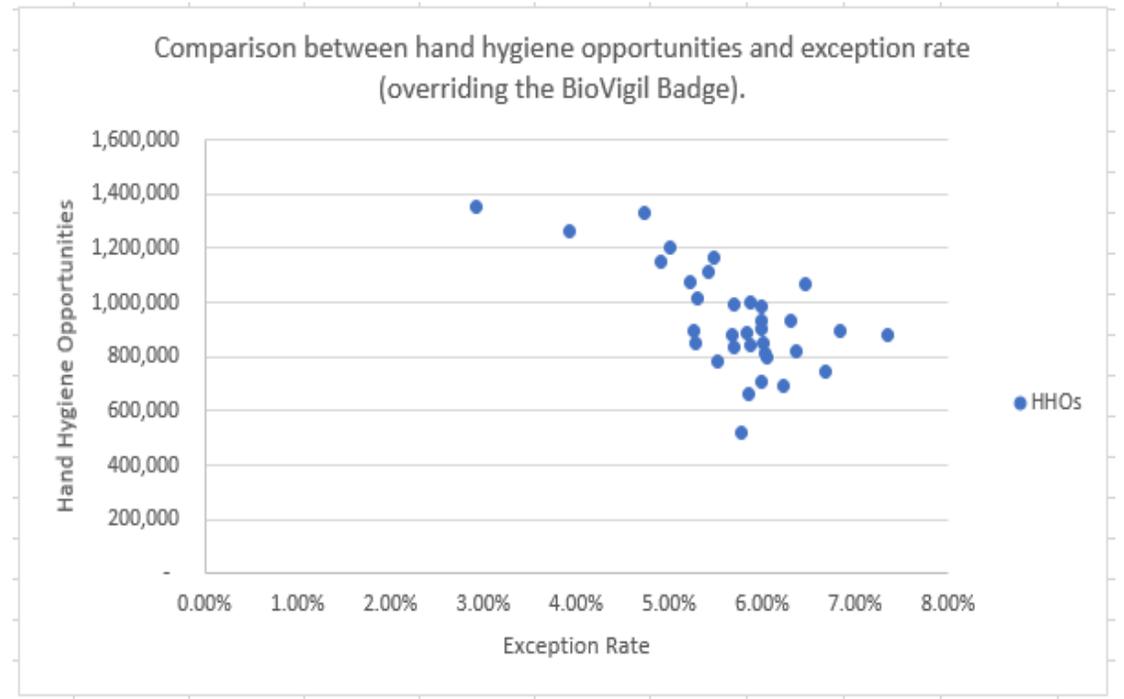
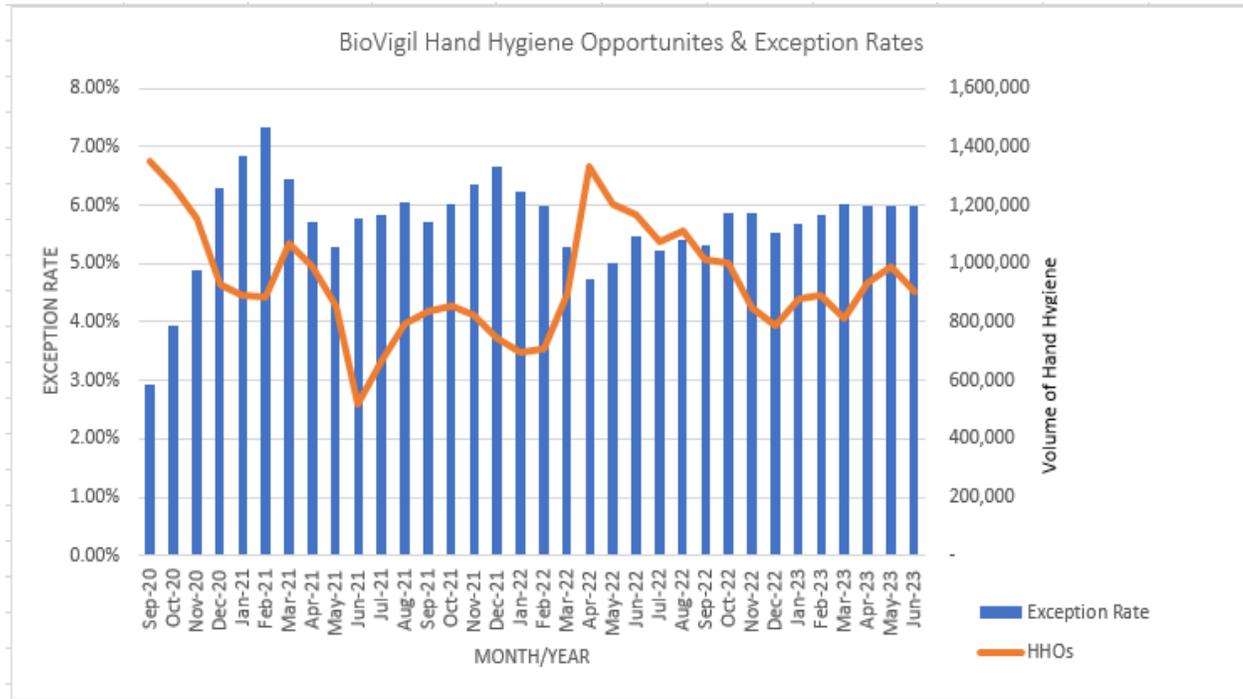
Fiscal Year	Infection	SIR
2018	9	2.958
2019	7	1.97
2020	4	0.923
2021	17	2.648
2022	12	1.371
2023	5	0.620

Background Data – MRSA Bloodstream Infections & Standardized Infection Ratio Trend

Fiscal Year	Infection	SIR
2018	9	2.958
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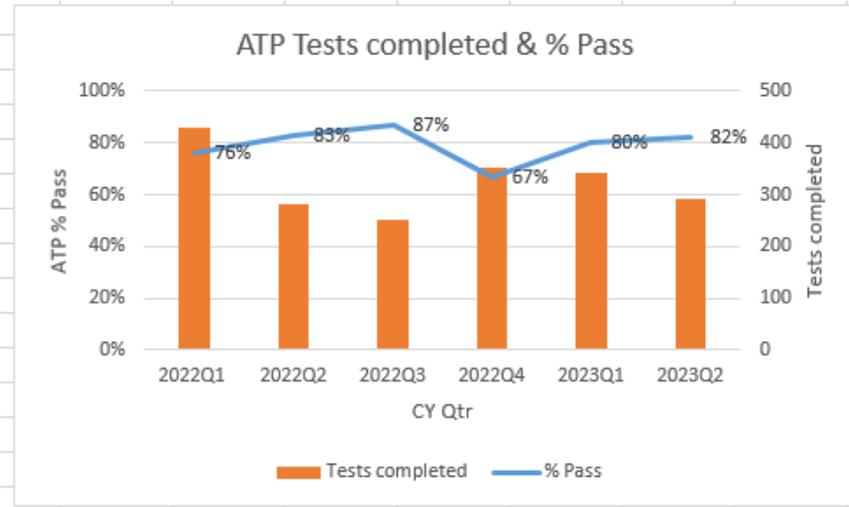


BioVigil Data - Hand Hygiene Opportunities



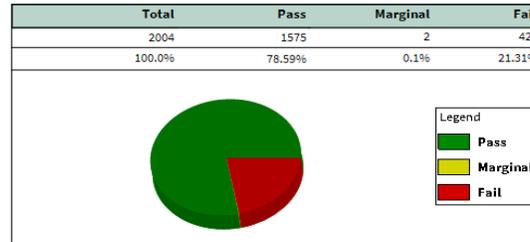
ATP Data

Filter: Area = '5T,Cath Lab,CVICU,CVOR,ICU,Main OR,OB OR,OR', Date Collected Between 2022-01-01 and 2023-06-30



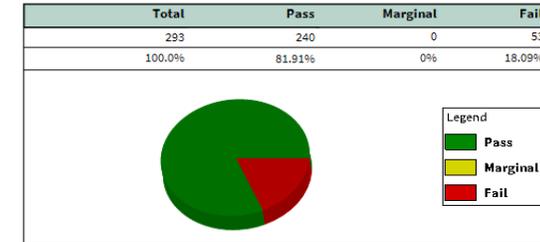
Summary Report

Filter: Area = '5T,Cath Lab,CVICU,CVOR,ICU,Main OR,OB OR,OR', Date Collected Between 2022-01-01 and 2023-06-30



Summary Report

Filter: Area = '5T,Cath Lab,CVICU,CVOR,ICU,Main OR,OB OR,OR', Date Collected Between 2023-04-01 and 2023-06-30



Rank Report By Site

Filter: Area = '5T,Cath Lab,CVICU,CVOR,ICU,Main OR,OB OR,OR', Date Collected Between 2022-01-01 and 2023-06-30

Site	Pass		Marginal		Fail		Total
	#	%	#	%	#	%	
Call Button	5	31.25%	0	0.0%	11	68.75%	16
Overbed TBL	3	33.33%	0	0.0%	6	66.67%	9
Telephone	5	45.45%	0	0.0%	6	54.55%	11
RM Sink	6	46.15%	0	0.0%	7	53.85%	13
Bedside TBL	13	50.0%	0	0.0%	13	50.0%	26
Bedrail	53	53.54%	0	0.0%	46	46.46%	99
Chair	24	63.16%	0	0.0%	14	36.84%	38
IV Pole	30	66.67%	0	0.0%	15	33.33%	45
RM Light SW	2	66.67%	0	0.0%	1	33.33%	3
RR Sink	18	72.0%	0	0.0%	7	28.0%	25
ORBedControl	102	73.91%	0	0.0%	36	26.09%	138
OR Table	216	80.3%	0	0.0%	53	19.7%	269
Miscellaneous	225	80.65%	1	0.36%	53	19.0%	279
Counter	242	81.48%	0	0.0%	55	18.52%	297
Anes Cart	179	83.64%	1	0.47%	34	15.89%	214
Back Table	128	85.91%	0	0.0%	21	14.09%	149
OR Light	306	86.44%	0	0.0%	48	13.56%	354
Handrail	8	88.89%	0	0.0%	1	11.11%	9
Flush Handle	10	100.0%	0	0.0%	0	0.0%	10

Qtr	% Pass	Tests completed
2022Q1	76%	429
2022Q2	83%	283
2022Q3	87%	252
2022Q4	67%	351
2023Q1	80%	343
2023Q2	82%	293
Avg	79%	

ATP Data - Plan for sustainable improvement

- Determined our World-class goal to be 90% moving forward – no industry benchmark.
- Hired EVS Coordinator for standardized training – complete (Julian Medrano currently in training).
- Retraining of all EVS leaders to include certification from ATP reader manufacturer (Neogen) - 100% complete.
 - Streamlined timing and communication on conducting ATP tests.
- Annual competency validation of staff – work in progress.
- Track & trend data, to include high touch areas of focus and align needs to analyzed trend.

Root Causes Identified

Culturing Practices

- Late blood cultures eliminating present-on admission designation.
- Serial blood cultures that exceed 14-day repeat infection timeframe (RIT).
- Positive MRSA serial blood cultures that exceed 14 days are considered a new event and healthcare acquired.
- Serial positive cultures across patient room assignments.

Source Control

- Endocarditis
(Life-threatening inflammation of the inner lining of heart chambers and valves)
- Osteomyelitis
(Inflammation or swelling that occurs in the bone)
maybe a contributing factors to seeding of the bloodstream.
- Delayed consultations, incomplete diagnostic studies, or avoidance of obtaining a specimen from the likely source of infection.
- Without addressing the primary source of infection there will be continued seeding of the bloodstream.

MRSA QFT: Key Strategies

- Automated Mupirocin MRSA nasal decolonization treatment (house-wide go-live scheduled for 7/17/2023)
- Improved utilization of the BioVigil electronic hand hygiene surveillance system
- Clinic based 'Patient as observer' hand hygiene program using NRC Picker Survey tool
- Do You Disinfect Every time (D.U.D.E.) Campaign
- Environmental cleaning – quality metrics Adenosine Triphosphate (ATP) monitoring
- Targeted use of Electrostatic Disinfectant Sprayer that produces an electrical charge so that disinfectant attaches to surfaces directly and indirectly facing the sprayer, ensuring thorough coverage over surfaces

MRSA QFT: Recommendations

1. Provider involvement needed to help:

- Process to effectively order/perform blood cultures
 - Prostaff will be reviewing/approving an evidence-based decision flow map for blood culturing practices
 - Decision flow map addresses source control monitoring (i.e. endocarditis, osteomyelitis, and device related sources)

2. Double down on MRSA Key strategies shared on prior slide (Decolonization; Hand hygiene; Patient care environment cleaning & disinfection etc...)



The pursuit of healthiness



Outstanding Health Outcomes Update

Sandy Volchko DNP, RN, CPHQ, CLSSBB
Director Quality & Patient Safety

July 2023



FY23 Clinical Quality Goals

Our Mission
 Health is our passion.
 Excellence is our focus.
 Compassion is our promise.

Our Vision
 To be your world-class
 healthcare choice, for life

July 22 – May 23

Higher is Better

FY23 Goal

FY22

FY22 Goal

SEP-1 (% Bundle Compliance)	74%	≥ 77%	76%	≥ 75%
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Percent of patients with this serious infection complication that received “perfect care”. Perfect care is the right treatment at the right time for our sepsis patients.

	July 2022	Aug 2022	Sept 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	Estimated Annual Number Not to Exceed to Achieve Goal*	FYTD SIR** (number of actual/number expected)	FY23 Goal (VBP 2024; National Mean 2019)	FY22 FY21 FY20
CAUTI Catheter Associated Urinary Tract Infection Excluding COVID <small>INCLUDING COVID-19 PATIENTS</small>	1 0	1 0	2 0	0 1	2 0	3 0	0 0	0 0	0 0	1 0	2 0	0 0	14 (23 predicted over 12 months)	0.55 0.596 Including COVID	≤0.650	1.092 0.54 1.12
CLABSI Central Line Associated Blood Stream Infection Excluding COVID <small>INCLUDING COVID-19 PATIENTS</small>	2 1	0 0	0 0	1 0	1 0	2 1	1 0	1 0	1 0	2 0	0 0	3 0	10 (17 predicted over 12 months)	0.98 1.034 Including COVID	≤0.589	1.132 0.75 1.20
MRSA Methicillin-Resistant Staphylococcus Aureus Excluding COVID <small>INCLUDING COVID-19 PATIENTS</small>	2 0	0 0	0 0	0 0	0 0	2 0	0 1	0 0	0 0	0 0	0 0	2 1	5 (8 predicted over 12 months)	0.63 0.676 Including COVID	≤0.726	1.585 2.78 1.02

*based on July 2021-June 2022 NHSN predicted

**Standardized Infection Ratio is the number of patients who acquired one of these infections (excluding COVID patients) while in the hospital divided by the number of patients who were expected.