May 9, 2024

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, May 16, 2024, in the Kaweah Health Lifestyle Fitness Center Conference Room, 5105 W. Cypress Avenue, Visalia, CA 93277.
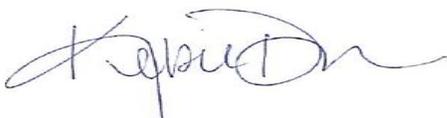
The Board of Directors of the Kaweah Delta Health Care District will meet in a Closed Quality Council Committee at 7:31AM on Thursday, May 16, 2024, in the Kaweah Health Lifestyle Fitness Center Conference Room, 5105 W. Cypress Avenue, Visalia, CA 93277, pursuant to Health and Safety Code 32155 & 1461.

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, May 16, 2024, 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
David Francis, Secretary/Treasurer

Kelsie Davis
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, May 16, 2024
5105 W. Cypress Avenue
Kaweah Health Lifestyle Fitness Center Conference Room

ATTENDING: Board Members: Michael Olmos (Chair), Dean Levitan, MD; Gary Herbst, CEO; Keri Noeske, Chief Nursing Officer; Tom Gray CMO/CQO; Julianne Randolph, OD, Vice Chief of Staff and Quality Committee Chair; LaMar Mack, MD, Quality and Patient Safety Medical Director; Sandy Volchko, Director of Quality and Patient Safety; Ben Cripps, Chief Compliance and Risk Management Officer; Evelyn McEntire, Director of Risk Management; and Kyndra Licon, Recording.

OPEN MEETING – 7:30AM

1. **Call to order** – *Mike Olmos, 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 (Kelsie Davis 559-624-2330) or kedavis@kaweahhealth.org to make arrangements to address the Board.

3. **Approval of Quality Council Closed Meeting Agenda** – 7:31AM
   o **Quality Assurance** pursuant to Health and Safety Code 32155 and 1461 – *Julianne Randolph, DO, Vice Chief of Staff and Quality Committee Chair.*
   o **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** – *Mike Olmos, Committee Chair*

CLOSED MEETING – 7:31AM

1. **Call to order** – *Mike Olmos, Committee Chair*

2. **Approval of April Quality Council Closed Session Minutes –** Mike Olmos, Mike Olmos; Dean Levitan, Board Member

3. **Quality Assurance** pursuant to Health and Safety Code 32155 and 1461 – *Julianne Randolph, DO, Vice Chief of Staff and Quality Committee Chair; Mara Miller, PharmD BCPS, Medication Safety Coordinator*

4. [**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.*

5. **Adjourn Closed Meeting** – *Mike Olmos, Committee Chair*

OPEN MEETING – 8:00AM

1. **Call to order** – *Mike Olmos, 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. [**Approval of April Quality Council Open Session Minutes**](#) **–** Mike Olmos, Committee Chair; Dean Levitan, Board Member

4. **Written Quality Reports –** A review of key quality metrics and actions associated with the following improvement initiatives:
   4.1. [**Healthcare Acquired Infection Quality Focus Team**](#)
   4.2. [**Surgical Quality Improvement Program Quality Report**](#)

5. [**Cardiac Surgery Society of Thoracic Surgery (STS) Quality Report –**](#) Christine Aleman, MSN, RN, Director of Cardiac/Surgical Services; Tracy Salsa, Director of Cardiovascular Service Line; Dr. Fredrick Mayer, Medical Director of Cardiac Surgery Program.

6. [**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.*

7. **Adjourn Open Meeting** – *Mike Olmos, 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.

Mike Olmos – Zone 1 President	Lynn Havard Mirviss – Zone 2 Vice President	Dean Levitan, M.D. – Zone 3 Board Member	David Francis – Zone 4 Secretary/Treasurer	Ambar Rodriguez – Zone 5 Board Member

5/9/2024 1:06:02 PM   3/72

Agenda item intentionally omitted

Attending: Board Members: Mike Olmos (Chair) & Dr. Dean Levitan; Gary Herbst, Chief Executive Officer; Mark Mertz, Chief Strategy Officer; Sandy Volchko, Director of Quality & Patient Safety; Jag Batth, Chief Operating Officer; Shawn Elkin, Infection Prevention Manager; Erika Pineda, Quality Improvement Manager; Dr. Lori Winston, Chief Medical Education Officer Department; Tracy Salsa, Director of Cardiovascular Service Line; Christine Aleman, Director of Cardiac/Surgical Services; Dr. Ashok Verma, MD, Medical Director – Cath Lab; Kyndra Licon, Program Coordinator – Recording.

Mike Olmos called to order at 7:30 am.

Approval of Closed Session Agenda: Dean Levitan MD made a motion to approve the closed agenda, there were no objections.

Mike Olmos adjourned the meeting at 7:31 am.

Mike Olmos called to order at 8:28 am.

Written Quality Reports – A review of key quality metrics and actions associated with the following improvement initiatives: Recognition of Diabetes Quality Report. Reviewed, no discussion.
    3.1. Diabetes Committee Report
    3.2. Rapid Response Team & Code Blue Quality Report
    3.3. Home Health Quality Report
    3.4. Hospice Quality Report
    3.5. Mental Health Quality Report

4. Health Equity Quality Report – A review of completed and planned initiatives to identify and address health equity. *Sonia Duran-Aguilar, MSN, MPH, RN, PHN, CNL, CRHCP, Director of Population Health Management; Ryan Gates, PharmD, CRHCP, Chief Population Health Officer.*
  - *Will be reporting to QC next meeting, May 16, 2024.*

5. Sepsis Quality Focus Team Report - A review of key quality measures and action plans focused on the care of the sepsis patient population. *Erika Pineda, BSN, RN, PHN, CPHQ, Quality Improvement Manager; LaMar Mack, MD, MHA, Medical Director of Quality and Patient Safety.*
  - Sepsis Heroes recognition and how they are selected. 85-90% of sepsis patients start in ED. We saved 3 lives. Reviewed 3hour bundle and 6hour bundle.
    o 3 Hour Bundle –74%, ABX – 89% (34/38), BC –88% (30/34), LA –100% (30/30), Fluids – 93% (25/27), 6 Hour Bundle –96%, Repeat LA –100% (23/23), Reassessment –94% (17/18), Vasopressors –100% (18/18)
  - Reviewed Sepsis One hour Bundle Dashboard CMS SEP 1 Population and One Hour Bundle Dashboard CMS SEP1 Midas Mortality Population

6. 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.*

Utilization rate is green for all central lines throughout the whole organization; .66 for the month of March. Our FYTD 24 goal is .77. One of the high risk areas is the ICU and there has been a decrease/downward trend on utilization since Sound Physician started/disciplinary rounds in January. CAUTI and MRSA had 0 events for the month of March. CAUTI SIR is .34 which we are meeting goal of .40. There have been too many near misses. And areas we can work on is over utilizing and leaving central line in to long but we are managing well. Update verbiage on dashboard.

7. Adjourn Open Meeting – *Mike Olmos, Committee Chair*

Mike Olmos adjourned the meeting at 9:16 am.

Committee minutes were approved for distribution to the Board by the Committee Chair on

Quality Council Report
Healthcare Acquired Infection (HAI) Quality Focus Team (QFT) Report
May 2024

Committee Purpose
The multidisciplinary **HAI Quality Focus Team** works collaboratively to reduce healthcare acquired infections through best practices throughout Kaweah Health Medical Center.

Accomplishments
The HAI QFT was first convened Oct 19, 2023 as the result of combining 3 QFTs into this one large "brain trust" for HAI prevention. FYTD Nov 2023 MRSA and CAUTI rates are nearing the top 30% in the country (FY24 goal), due to the efforts from past committee leaders and members, and will be continued through this new QFT, excellent work by all involved in keeping our patients safe.

Top Priority Quality Improvement & Patient Safety Initiatives
The following report summarizes the Quality Improvement work underway by the committee and includes the committee dashboard. There are 6 quality improvement initiatives:

1. Reducing Line Utilization through Multidisciplinary Rounds in ICU
2. Reducing Line Utilization through a Standardized Procedure to remove Indwelling Urinary Catheters
3. Reducing MRSA and HAIs Through CHG Skin Decolonization
4. Reducing MRSA and HAIs Through Nasal Decolonization (Mupirocin treatment)
5. Reducing MRSA and HAIs Through Effective Cleaning Practices
6. Reducing MRSA and HAIS Though Hand Hygiene

Acronyms
ATP - Adenosine Triphosphate
CAUTI - Catheter Associated Urinary Tract Infection
CHG - Chlorhexidine gluconate
CLABSI - Central Line Associated Bloodstream Infection
DMAIC – Define, Measure, Analyze, Improve, Control (6 sigma model for improvement)
ER – Emergency Room
ET – Executive Team
EVS – Environmental Services Department
FDA – Federal Drug Administration
HAI – Healthcare Acquired Infection
HHO – Hand Hygiene Opportunities
IUC – Indwelling Urinary Catheter
IP – Infection Prevention Department
MAK – Medication Administration Check
MRSA - Methicillin-resistant Staphylococcus aureus
SIR – Standardized Infection Ratio
SUR – Standardized Utilization Ratio
SNF – Skilled Nursing Facility

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Healthcare Acquired Infection (HAI) Quality Focus Team Dashboard

Central Line Associated Blood Stream Infection (CLABSI)	FY 2024 Target	FY 2022	FY 2023	23-Jul	23-Aug	23-Sep	23-Oct	23-Nov	23-Dec	24-Jan	24-Feb	24-Mar	24-Apr	24-May	24-Jun	FYTD 24
CLABSI Events		20 / 18 Ex COVID	16 / 14 Ex COVID	1	2	3	0	3	0	2	3	1	2			17
CLABSI Predicted Events		17.735	15.02	1.21	1.37	1.35	1	1.141	1.585	1.547	1.967	1.165				12.335
CLABSI SIR	0.486	1.01 Ex COVID	0.93 Ex COVID	0.83	1.16	2.22	0	2.629	0	1.293	2.314	0.859				1.38

Central Line Standard Utilization Ratio(SUR)	FY 2024 Target	FY 2022	FY 2023	23-Jul	23-Aug	23-Sep	23-Oct	23-Nov	23-Dec	24-Jan	24-Feb	24-Mar	24-Apr	24-May	24-Jun	FYTD 24
All Units	0.663	0.758	0.667	0.749	0.791	0.828	0.774	0.685	0.876	0.822	0.799	0.66				0.77
ICU		1.017	0.877	0.683	0.921	0.963	0.644	0.783	1.153	1.098	0.85	0.757				0.87

Catheter Associated Blood Stream Infection (CAUTI)	FY 2024 Target	FY 2022	FY 2023	23-Jul	23-Aug	23-Sep	23-Oct	23-Nov	23-Dec	24-Jan	24-Feb	24-Mar	24-Apr	24-May	24-Jun	FYTD 24
CAUTI Events		25 / 23 Ex COVID	13 / 12 Ex COVID	0	0	2	0	2	1	1	0	0	2			8
CAUTI Predicted Events		22.9	21.89	1.53	1.75	1.89	2	2.053	2.197	2.173	1.969	1.955				17.52
CAUTI SIR	0.401	1.09 Ex COVID	0.55 Ex COVID	0	0	1.06	0	0.974	0.455	0.46	0	0				0.46

Indwelling Uninary Catheter (IUC) Utilization Ratio (SUR)	FY 2024 Target	FY 2022	FY 2023	23-Jul	23-Aug	23-Sep	23-Oct	23-Nov	23-Dec	24-Jan	24-Feb	24-Mar	24-Apr	24-May	24-Jun	FYTD 24
All Units	0.672	0.848	0.869	0.869	0.925	1.040	1.080	1.10	1.077	1.025	1.07	0.98				1.02
ICU		1.183	1.221	1.148	1.205	1.08	1.287	1.408	1.3	1.265	1.146	1.134				1.22

Methicillin-Resistant Staphylococcus Aureus (MRSA)	FY 2024 Target	FY 2022	FY 2023	23-Jul	23-Aug	23-Sep	23-Oct	23-Nov	23-Dec	24-Jan	24-Feb	24-Mar	24-Apr	24-May	24-Jun	FYTD 24
MRSA Events		12 / 10 Ex COVID	7 / 6 Ex COVID	0	0	1	0	1	3	2	0	0				7
MRSA Predicted Events		9	9	0.68	0.68	0.68	0.68	0.76	0.999	0.885	0.885	0				6.25
MRSA SIR	0.51	1.11 Ex COVID	0.66 Ex COVID	0	0	1.47	0	1.32	3	2.26	0	0				1.12
% of screened patients Nasal MRSA+ with Decolonization	100%	26%	36%	73%	84%	87%	86%	100%	91%	100%	100%	100%	100%			92%
% of ACTVE BioVigil Users Achieving target Badge Hours (>80hrs/month)	50% (10% increase annually FY25+)	38%	31%	43%	47%	45%	49%	47%	50%	51%	68%	56%	55%			51%
Volume of Hand Hygiene Opportunities Captured in BioVgil		10,744,821	11,524,456	973,203	1,118,593	1,118,422	1,170,286	1,080,382	1,137,064	1,215,520	1,186,136	1,328,812	1,368,882			11,697,300
ATP Tests in High Risk Areas ≤399 RLU	80%	72%	66%	74%	81%	67%	68%	62%	69%	75%	93%	90%				75%
Number of ATP Test	≥1,400 (1/24)	588	1994	275	293	433	278	`83	141	80	70	60				1630

KEY

Does not meet goal/benchmark	Within 10% of goal/benchmark	Outperforming/ meeting goal/benchmark

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DMAIC Project Summary: Multidisciplinary Rounds (MDR) - Line Utilization Reduction

Reports to: Healthcare Acquired Infection (HAI) QFT	Project Leader: Dr. L Mack, Dr. Javed, Shannon Cauthen	Start Date: 10/19/21
Team members/ Subject experts: Dr. T. Gray (ET Sponsor), leaders from involved disciplines including: Dietary, Case Management, Infection Prevention, Therapies		Revision (date): 1/8/24
		Revision #: 4

DEFINE

Background/Problem Statement:

The quantity of device related healthcare acquired infection events such as Central Line (CL) Associated Bloodstream Infection (CLABSI), Catheter Associated Urinary Tract Infection (CAUTI) events at Kaweah Health exceed predicted values assigned to the healthcare organization based on specific risk adjustments given attributes defined by the National Healthcare Safety Network (NHSN) through use of logistical regression analyses. Removing central lines and Indwelling Urinary Catheters (IUC) when they are no longer indicated is an evidenced-based practice recommended by the CDC as a strategy to reduce CAUTI and CLABSI rates.

Current Condition:	Kaweah Health SIR/SUR FY23	KH SUR FYTD 24 July – Nov 2023	FY24 Goal
SUR All Locations – Central Lines	0.667	0.77	≤0.663
SUR All location– IUCs	0.869	1.00	≤0.672
SUR ICU location – Central Lines	0.87	0.80	n/a
SUR ICU location– IUCs	1.22	1.23	n/a
Unit Gemba Rounds – % IUCs with order & indication	94% (CY22)	93%	100%
Unit Gemba Rounds – % of CL with valid rationale order	96% (CY22)	94%	100%

MEASURE

SMART Target / Goal:

SUR Central Line – reduce SUR to ≤0.663 by 6/30/24; SUR IUC – reduce SUR to ≤0.672 by 6/30/24

ANALYZE

Problem Analysis / Root Cause, Gap:

Data analysis of utilization rates by unit indicate critical care and step down units make up 4/5 units with higher utilization rates than expected; 4N (renal unit) is the 5th unit, related to patient population. With newly engaged intensivist group with MDR to start in ICU and spread once established.

Pareto Chart - IUC Utilization Rates by Adult Unit (July-Nov 2023)

Pareto Chart - CL Utilization Rates by Adult Unit (July-Nov 2023)

IMPROVE

Countermeasure / Action Plan / Solutions:

1. Obtain Sound group HAI standard work, evaluate line liberation rounds in ICU. To discuss with Sound group at weekly meeting, Dr. Mack meeting with Dr. Javed 11/8/23. Dr. Javed planning to move forward with multidisciplinary rounds (includes "highly aggressive line liberation"). Potential barrier is limited PICC team resources (these are heavily utilized by Sound in other organizations)

2. Plan to initiate ICU rounds starting January 2024; multidisciplinary members notified and reviewing round format

3. MDRs in ICU Rounds initiated week of 1/1/24

4. Reach out to surgical services regarding participation in MDR to include surgical patients in rounding process; plan to spread to CVICU and step down units following Intensivist-hospitalist transition

Results / Metrics:

ICU Indwelling Urinary Catheter (IUC) & Central Line (CL) Utilization Ratio (SUR)

CONTROL

Follow-Up / Sustainability:

Rounding template developed to be used during rounds to standardize and sustain practice and improvements

DMAIC Project Summary: Standardized Procedure - Line Utilization Reduction

Reports to: Healthcare Acquired Infection (HAI) QFT	Project Leader: Dr. L Mack	Start Date: 10/19/21
Team members/ Subject experts: Kari Knudsen, Dr. Mack, Dr. T. Gray (ET Sponsor)		Revision (date): 5/7/24
		Revision #: 5

DEFINE

Background/Problem Statement:

The quantity of device related healthcare acquired infection events such as Catheter Associated Urinary Tract Infection (CAUTI) events at Kaweah Health exceed predicted values assigned to the healthcare organization based on specific risk adjustments given attributes defined by the National Healthcare Safety Network (NHSN) through use of logistical regression analyses. Removing Indwelling Urinary Catheters (IUC) when they are no longer indicated is an evidenced-based practice recommended by the CDC as a strategy to reduce CAUTI rates. Nursing standardized procedures to remove IUCs based on physician approved criteria has been a successful strategy in other healthcare organizations

Current Condition:

	Kaweah Health SUR FY23	KH SUR FYTD 24 July – Nov 2023	FY 24 Goal
All location IUC SUR	0.869	1.00	≤0.672
SUR ICU location– IUCs	1.22	1.23	n/a

MEASURE

SMART Target / Goal:

SUR – reduce SUR all locations to ≤0.672 by 6/30/24

ANALYZE

Problem Analysis / Root Cause, Gap:

Inappropriate use of IUCs for a variety of reasons:
- Failure of adoption and support of nurse driven IUC removal protocol
  - Resistance to remove IUC
  - Failure to clarify rationale for IUC when patient condition changes
  - High use in critical care

IMPROVE

Countermeasure / Action Plan / Solutions:

1. 11/6/23 Standardized procedure to remove IUCs approved and currently moving through additional committee approval; will need a strong role out and trust that push back will not occur. Standardized procedure allows RN to remove ordered IUC based on criteria (reviewed with Drs Betre, Rosenburg, Mack)
2. Review of SP by QComm on 12/6/23, MEC approval Apriil 2024.
3. Kari Knudsen convened a taskforce to develop roll out plan to include key medical staff leaders
4. Nursing education under development, roll out planned for July 2024; competing with other education/competency planned for spring
5. EMR workflow decisions made with Dr.Tedaldi as stakeholder for discontinuing orders. Tickets in progress.

Results / Metrics:

See HAI QFT Dashboard

CONTROL

Follow-Up / Sustainability:

Control Plan: 1) Standardized procedure ensures same process is applied for all patients meeting criteria. 2) Sharing data and results with stakeholders

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DMAIC Project Summary: MRSA Reduction - Chlorhexidine Gluconate (CHG) Decolonization

Reports to: Healthcare Acquired Infection (HAI) QFT	Project Leader: Amy Baker	Start Date: 11/2/23
Team members/ Subject experts: Amy Baker, Dr. Mack (MD champion), Dr Gray (ET Sponsor)		Revision (date): 5/7/24
		Revision #: 3

DEFINE	IMPROVE
Background/Problem Statement: The quantity of device and non-device related healthcare acquired infections events at Kaweah Health exceed predicted values assigned to the healthcare organization based on specific risk adjustments given attributes defined by the National Healthcare Safety Network (NHSN) through use of logistical regression analyses. This includes HAIs Central Line Associated Bloodstream Infection (CLABSI), Catheter Associated Urinary Tract Infection (CAUTI), and Methicillin-resistant Staphylococcus aureus (MRSA) bloodstream infection (BSI). Chlorhexidine gluconate (CHG) is an antiseptic that is widely used in healthcare due to its excellent safety profile and wide spectrum of activity. Daily bathing with CHG has proven to be effective in the prevention of healthcare-associated infections and multidrug-resistant pathogen decolonization.	**Countermeasure / Action Plan / Solutions**: 1. Connect with CDPH IP to obtain clarification, investigated FDA guidance 11/15/23 2. Nursing Leadership evaluating the process of unlicensed personnel applying CHG via a wipe at Kaweah Health. Unlicensed personnel will be required to demonstrate competency if approval is granted at Kaweah Health for unlicensed personnel to use CHG wipes. 3/1/24 3. ET approved unlicensed personal to apply CHG bathing wipes 2/1/24 4. Met with stakeholders on 3/12 to draft policy. Tickets have been sent to ISS to start an order to task CNA on CHG bathing wipes through central line care bundle order set. CNA will be able to pull CHG wipes from the med room to the floor. Clinical Education is working on competency through CBL for CNA's and there will be a demonstration that will be performed, date tbd
Current Condition: Current process at Kaweah is that patients with a central line are (inconsistently) ordered CHG bathing wipes either through the RN contacting the patient's provider, or IP will enter a phone order through Medical Director of Infection Prevention. The CHG bathing wipes are profiled in pharmacy, and RN MACs the CHG bathing wipes and performs the bath. MRSA SIR (Standardized Infection Ratio) 1.12 July 2023-March 2024	
MEASURE	**Results / Metrics:** Wil be reported post implementation (refer to HAI QFT dashboard)
SMART Target / Goal: Reduce MRSA SIR to 0.51 by 6/30/24	
ANALYZE	
Problem Analysis / Root Cause, Gap: • Process to MAK and store CHG bathing wipes very complex, creating difficult and time intensive workflow • Confusion from regulatory bodies on CHG bathing products FDA status	
• CHG bathing wipes require knowledge to execute safely/effectively	**CONTROL**
No current process to educate/competency Certified Nursing Assistants (CNAs) to provide CHG bathing	**Follow-Up / Sustainability:** Wil be reported post implementation

Name of Project & Committee: **MRSA Mupirocin Nasal Decolonization**	Date Initiated: 11/2/23
Reports to: Healthcare Acquired Infection (HAI) Quality Focus Team	Updated date: 5/4/24
Team Members: Shawn Elkin, Amy Baker, Dr. Mack (MD champion), Dr T. Gray (ET Sponsor)	

DEFINE

The quantity of non-device related healthcare acquired Methicillin-resistant Staphylococcus aureus (MRSA) bloodstream infection (BSI) events at Kaweah Health exceed predicted values assigned to the healthcare organization based on specific risk adjustments given attributes defined by the National Healthcare Safety Network (NHSN) through use of logistical regression analyses. The Centers for Disease Control indicate that to reduce MRSA BSI organizations need to focus on 3 areas: Hand Hygiene, environmental cleaning, & targeted decolonization (removal of MRSA for patients who are screened per criteria and test positive for nasal MRSA). Current process at Kaweah is that once screening is completed there is an automated order for Mupirocin (nasal ointment) to decolonize. This automatic process is dependent on the completion of the screening. Auto decolonization tested in 4N and ICU in FY23, went medical center-side in June 2023.

MEASURE

Current/Baseline Condition:
Decolonization rate for _screened_ patients: FY23 32%
Nasal Screening Rates for Targeted Populations:
Admitted from SNF – FY23= 8%
Readmitted within 30 days – FY23 = 22%
Chronic Dialysis Patients – FY23 = 33%
Identifying Patients Admitted from SNF
9/25 (36%) admitted from SNF patients identified correctly in EMR upon admission (sample from Jan-Aug 2023)

SMART GOAL

100% of at-risk targeted populations for decolonization nasal screened by 6/30/24
100% of patient screened decolonized by 6/30/24
100% of admitted from SNF, readmitted within 30 days, and chronic dialysis patients (per ICD-10 code) identified & nasal screened (add joint and Cardiovascular (CV) surgery patient populations) by 6/30/24

ANALYZE

- Need to add targeted screening/testing/decolonization rates for joint and CV surgery population
When we screen patients we are 100% at treating with mupirocin for patients that test positive for nasal MRSA, due to the automatic ordering process.
5 Why's - Nasal Screening Rates for Target Populations (what are we not screening who should be screened 100% of time):
- Current process: patient access enters admitting source in EMR, admitting RN needs to verify admission source when completing screening (EMR does not trigger RN that admit from SNF was entered by registrar)
Not populating screening with known admission source:
- RN does not verify admitted source consistently
- Screening is long (all screenings required, not just MRSA)
- Documentation is difficult (can't find admitting source from registrar), or past admissions
- Lack of time
- Patient poor historian
- RN does not understand significance of positive screenings
- There is no electronic trigger for screening patients admitted to the ICU (this is just an expectation).
Documentation of admission source not always accurate
- Need to fact find to further understand processes. Data sources could be from the ED physician or on an EMS run sheet, direct admission with information from the transfer center or bed coordinator, but it isn't getting into the medical record accurately.

Root Causes that Analysis Identified

Issue/Root Cause #1- Admitting RN cannot find admission source easily

Issue/Root Cause #2- Poor accuracy of admission source

Issue/Root Cause #3- Lack of auto-population (ie. 30-day readmission, ICU admission, Dialysis admission)

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Name of Project & Committee: **MRSA Mupirocin Nasal Decolonization**		Date Initiated: 11/2/23
Reports to: Healthcare Acquired Infection (HAI) Quality Focus Team		Updated date: 5/4/24
Team Members: Shawn Elkin, Amy Baker, Dr. Mack (MD champion), Dr T. Gray (ET Sponsor)		

IMPROVE		
Activity	Who is Responsible	Completion Date
Evaluate standardizing swabbing for all plan to admit patients from ER; Inquire with lab on cost of swabbing & testing at plan to admit patients in ED. Obtained total lab processing costs for MRSA swabbing and C. auris swabbing, respectively (see Results/Metrics below).	Shawn Elkin	12/31/23
Fall outs may be occurring because the auto order does not profile the medication until the next day. Investigate with pharmacy the workflow of the medication profiling timing. Modifications have been made to the MRSA decolonization dashboard to better identify decolonization fallouts. The duration from positive result/Mupirocin ordered to date/time of discharge was updated. This has provided better data capture of those patients who should have been treated with a decolonizing agent.	Shawn Elkin	2/1/24
ICU admission. Shawn to set up task force to look at automating process to screen all ICU patients. Scheduled a taskforce to hardwire auto-order MRSA swab for all ICU inpatient encounters. Taskforce will also work towards a solution for identifying MRSA target patient populations.	Shawn Elkin	4/1/24
Upon review of the fallouts, MRSA nasal swabs are tested using Chrome Agar which can take up to 48 hrs to result, as opposed to PCR which would result in 2 hrs. Discussion with lab on options.	Shawn Elkin	1/19/24
Explore ROI on other products that would not cause Abx resistant (ie. Nosyn) that could be provided to all patients.	Shawn Elkin	5/11/21
Three taskforce meetings have occurred to address accuracy of admission source information and methods to make admission source information available to frontline staff completing triage/admission intake data. Current activities: (1) Modify Powerforms for admission to ICU with a preselected action to test for MRSA and C. auris colonization (2) Use 'Chart-Open' as a pop-up for patients admitted to acute care from at Kaweah Health SNF setting. (3) Modify Powerforms for Hemodialysis with a preselected action to test for MRSA and C. auris colonization (4) Build in Cerner Millennium Bedrock a calculator that will determine duration between hospital admissions for 30-day readmits (5) Working Bed Coordinator and Transfer Center and ISS to modify CareWare for electronic capture about patient MDRO status and source location.	Shawn Elkin	2/1/24

![Kaweah Health logo]

Name of Project & Committee: **MRSA Mupirocin Nasal Decolonization**	Date Initiated: 11/2/23
Reports to: Healthcare Acquired Infection (HAI) Quality Focus Team	Updated date: 5/4/24
Team Members: Shawn Elkin, Amy Baker, Dr. Mack (MD champion), Dr T. Gray (ET Sponsor)	

RESULTS/METRICS

Decolonization Dashboard	2023						2024			
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Decolonization Rate patients with Mupirocin Order and Administration	81%	100%	100%	93%	100%	100%	100%	100%	100%	100%
# Pts with Mupirocin Order and Administration	18	19	16	18	21	16	17	14	25	13
% Pts Admitted from SNF who had MRSA nasal screen (lab result)	6%	9%	7%	7%	7%	9%	10%	8%	7%	14%
# Pts Admitted from SNF who had MRSA nasal screen (lab result)	23	32	24	24	24	32	33	30	27	33
% Pts re-admitted (30 d) who had MRSA nasal screen (lab result)	23%	20%	26%	21%	24%	20%	22%	23%	18%	16%
# Pts re-admitted (30 d) who had MRSA nasal screen (lab result)	82	72	85	73	83	73	74	84	72	39
% Pts on chronic dialysis who had MRSA nasal screen (lab result)	33%	35%	34%	33%	32%	33%	38%	33%	33%	38%
# Pts on Chronic dialysis who had MRSA nasal screen (lab result)	119	126	112	115	109	120	128	117	129	92

CONTROL PLAN

EMR auto functionality to order Mupirocin for patients who are screened positive, test positive

8

Name of Project & Committee: Effective Cleaning Processes (MRSA Reduction)	Date Initiated: 11/16/23
Reports to: Healthcare Acquired Infection (HAI) Quality Focus Team	Updated date: 5/8/24
Team Members: Tendai Zinyemba, Dr T. Gray (ET Sponsor)	

DEFINE

The quantity of non-device related healthcare acquired Methicillin-resistant Staphylococcus aureus (MRSA) bloodstream infection (BSI) events at Kaweah Health exceed predicted values assigned to the healthcare organization based on specific risk adjustments given attributes defined by the National Healthcare Safety Network (NHSN) through use of logistical regression analyses. The Centers for Disease Control indicate that to reduce MRSA BSI organizations need to focus on 3 areas which include environmental cleaning. Timely detection of cleaning failure is critical for quality assurance. Adenosine Triphosphate (ATP) testing is a secondary quality assurance process that provides a real time and quantitative indication of cellular contaminants, when used to measure surface cleanliness.

MEASURE

Current Condition: ATP Testing is currently occurring in high-risk locations ICU, CVICU, All ORs (main OR, CVOR, OBOR) Cath Lab and Endo). Real-time re-education and recleaning is completed for the area(s) that do not initially pass ATP Testing.

SMART GOAL

Sustained improvement and reach ATP pass rate of 80% by 6/30/24, ultimately contributing to reducing MRSA SIR to 0.51 by 6/30/24

ANALYZE

Based on the monthly Rank reports by site and Rank report by area, ICUs have been failing the most (2W, 5T & 3W). The surfaces that failed the most include: overhead table; call button; & bedrail

<div align="center">Root Causes that Analysis Identified</div>

Issue/Root Cause #1- ATP testing process structure: comprehensive assessment of skill for all staff

Issue/Root Cause #2- ATP testing timing: Ensure that testing occurs real-time to mitigate false negatives from other variables such as room set-ups etc, which could result in added touching of the high touch areas pre-testing.

Issue/Root Cause #3- Continuous education by the Leadership team and EVS Coordinator: More structure around cause and effect of sustained cleaning outcomes.

IMPROVE

Activity	Who is Responsible	Completion Date
Root Cause #1- ATP testing process structure: comprehensive assessment of skill for all staff **Improvement strategy** EVS Leadership will commence ATP testing for all new hires during onboarding and also for all EVS staff during annual competency validation, In addition to the 80 ATP tests/month in ORs.	EVS Managers	**Work in progress**
Root Cause #2- ATP testing timing: Ensure that testing occurs real-time to mitigate false negatives from other variables such as room set-ups etc, which could result in added touching of the high touch areas pre-testing. **Improvement strategy** Share plan with Nursing leadership for ICUs, and then implement onboarding training and annual competency assessments. **5.8.24 update**: ORs ATP pass % is on target (80% +) tests completed have been under the target of 80 tests due to 2 vacancies. We will continue to monitor to ensure that completed tests are at least 80 for ORs. As new hires start, and competencies are being completed, ATP tests will be done in ICUs. We'll continue to track and trend data.	EVS Managers & EVS Director	**Communicate to ICUs Director by 1/19/24 Implement onboarding ATP assessment: Work in progress**

<div align="center">9</div>

DMAIC Quality Improvement Project Tracker

Name of Project & Committee: Effective Cleaning Processes (MRSA Reduction)	Date Initiated: 11/16/23
Reports to: Healthcare Acquired Infection (HAI) Quality Focus Team	Updated date: 5/8/24
Team Members: Tendai Zinyemba, Dr T. Gray (ET Sponsor)	

Root Cause #3- Continuous education by the Leadership team and EVS Coordinator: More structure around cause and effect of sustained cleaning outcomes **Improvement strategy** Share data with staff real-time post testing and also trends bi-monthly in staff meetings, to ensure that staff continue to be aware of their impact on HAIs reduction.	EVS Managers; EVS Coordinator; & EVS Director	Ongoing
RESULTS/METRICS		
See HAI QFT Dashboard		
CONTROL		
Departmental procedure will be modified around onboarding and annual training will be modified to ensure it aligns with the new process outlined. Routine follow up with the Leadership team and staff will occur thereafter.		

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DMAIC Project Summary: Reducing Infections Through Hand Hygiene

Reports to: Healthcare Acquired Infection (HAI) QFT	Project Leader: Shawn Elkin	Start Date: 11/2/23
Team members/ Subject experts: HAI QFT Members – Kari Knudsen, Tendai Zinyemba, Amy Baker, Dr. Gray, Dr. Mack, Sandy Volchko		Revision (date): 5/8/24
		Revision #: 4

DEFINE	IMPROVE
Background/Problem Statement: The quantity of device and non-device related healthcare acquired infections events at Kaweah Health exceed predicted values assigned by the National Healthcare Safety Network (NHSN). This includes HAIs Central Line Associated Bloodstream Infection (CLABSI), Catheter Associated Urinary Tract Infection (CAUTI), and Methicillin-resistant Staphylococcus aureus (MRSA) bloodstream infection (BSI) The Centers for Disease Control indicate that one of the most effective ways to reduce HAIs is through Hand Hygiene. Hand hygiene is currently monitored primarily through the electronic surveillance system "BioVigil" and through manual observations or patient reported feedback in KH locations that do not use BioVigil. Use of the BioVigil system has been inconsistent	**Countermeasure / Action Plan / Solutions**: 1. Use of BioVigil added to HR Progressive Discipline policy (HR216) June 2023 2. Leaders receive scheduled hand hygiene reports from Biovigil for the healthcare personnel they oversee and will reinforce improved usage of the Biovigil hand hygiene monitoring system. Reports completed, ongoing. 3. New report for leadership focused on badge hours so it is easier for them to hold staff accountable and is aligned with goal completed 2/15/24 4. Infection Prevention sending manual observation outcomes/fallouts with leaders, completed, ongoing 5. Changing from virtual/manager-lead orientation to In-person New Employee Orientation lead by Infection Prevention – standardizes messaging with BioVigil; consider using 4N pilot data to illustrate effectiveness/results. 2/1/24 6. Received support of piloting Biovigil usage amongst Intensivist Group of Providers, spearheaded by Dr. Javed, ICU Medical Director, timeline in progress 7. Recognition program "High five award" monthly for departments with highest badge hours, started March 2024, ongoing
MEASURE	
Baseline: % of ACTVE BioVigil Users Achieving target Badge Hours (>80hrs/month) FY 2023 =36% Target of 80 badge hours (aka. staff are "paired" with a BioVigil badge) per month was derived from using a 50% and 75% usage goal based on most full time staff work approximately 160 hours a month [Nursing staff work 144 hours a month]. An employee would have exceptional use if the badge hours increase to greater than 30 hours/wk. An employee working a 36 hr./wk. could potentially meet target badge hours by pairing with it for 18 hours/wk. He or she would have exceptional use if the badge hours increase to greater than 27 hours/wk.	
	Results / Metrics: Goal achieved FYTD March 2024 – 51%
SMART Target/Goal: Increase % of active BioVigil Users achieving >80hrs/month badge hours from 36% to 50% by 6/30/24	
ANALYZE	
Problem Analysis / Root Cause, Gap: 1. Accountability - Tools for leaders to hold staff accountable for system use 2. Knowledge deficit related to importance and use of system 3. Lack of buy-in from providers	**CONTROL**
	Follow-Up / Sustainability: Standardized leadership reports

11

Surgical Quality Improvement Program (SQIP) Report

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Surgical Quality Improvement Program

- Is a program designed to help improve quality across the surgical patients care.

- It assesses structures to enable quality data to drive our improvement processes.

- Utilize MIDAS automated electronic surgical quality and the National Healthcare Safety Network (NHSN) surgical site infection data to populate an overall dashboard to track and trend.

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Enhanced Recovery After Surgery (ERAS)

Evidence-based

Change in Hospital Culture

Patient

Team-approach

Planned Patient Pathways

Decreases the patients surgical stress response

Improve physical function

Expedites recovery
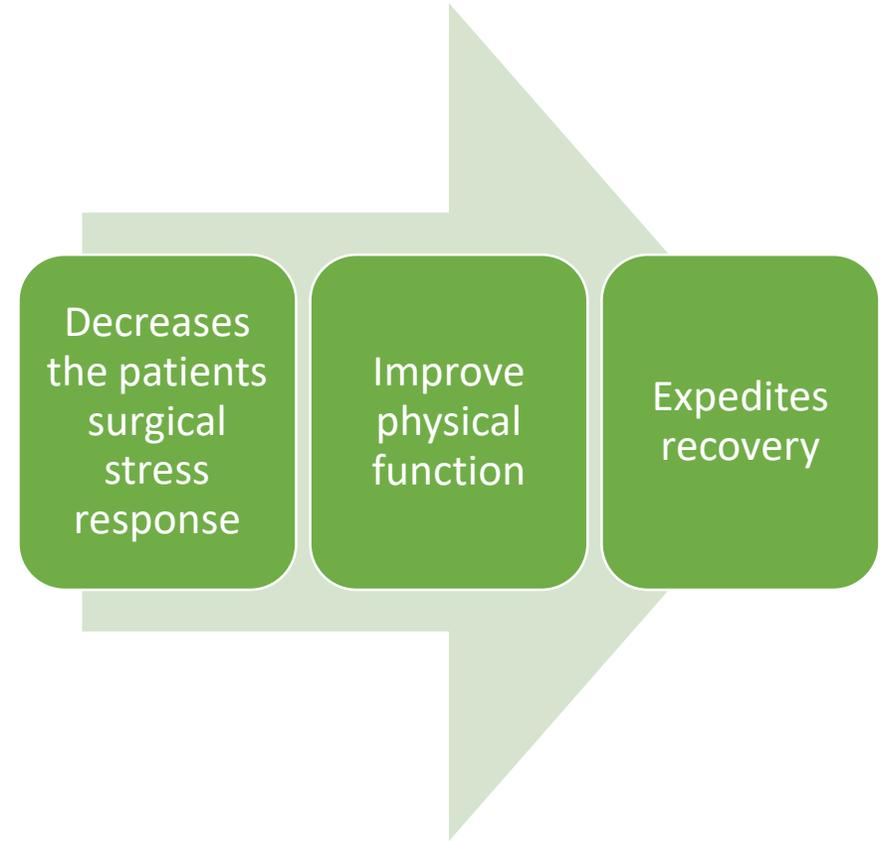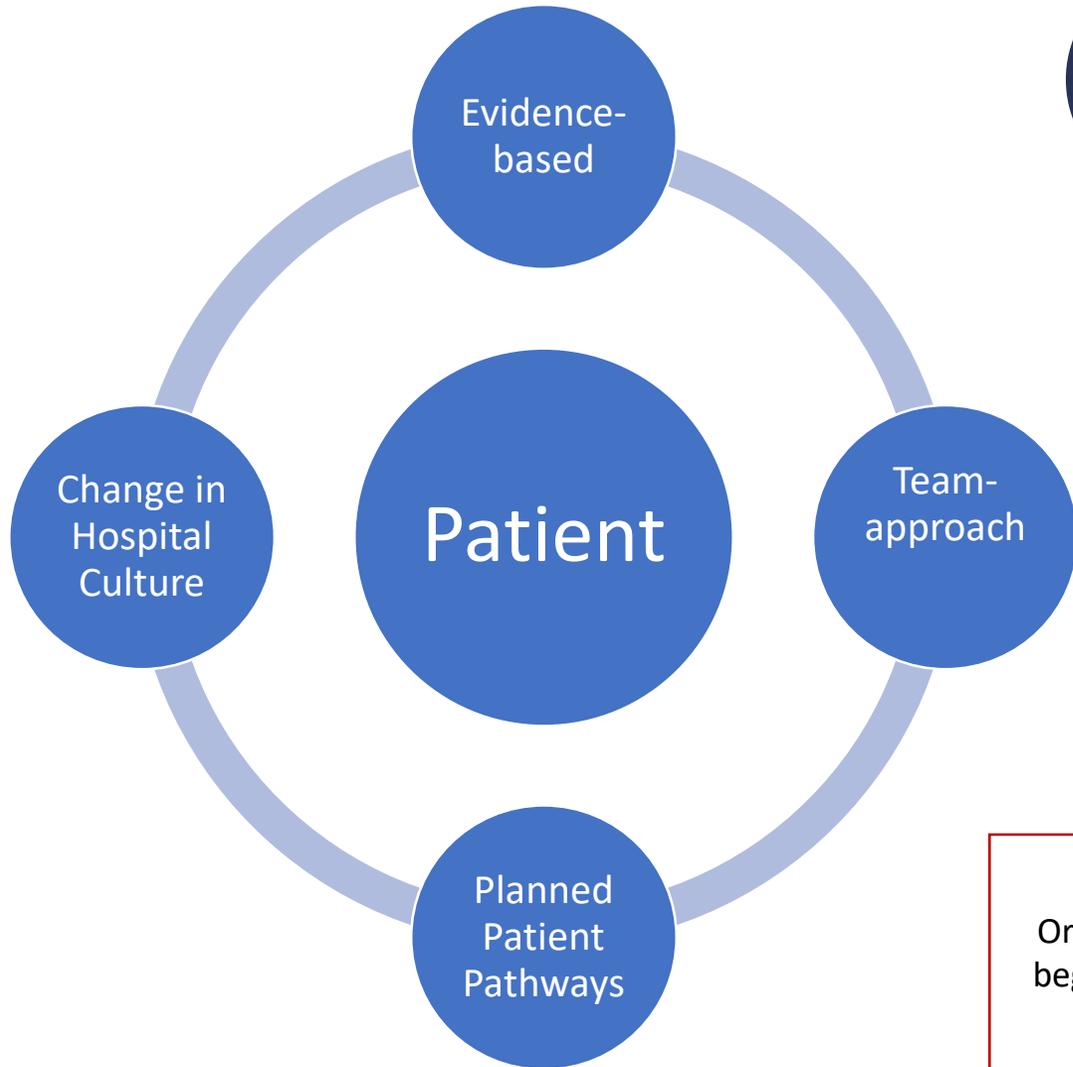
Colorectal Surgery, Orthopedic Surgery, and beginning phases of GYN Surgery

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Surgical Quality Dashboard

	ISCR Benchmark	2022	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	YTD Total
ERAS Elective Colorectal (n=)	ISCR Benchmark	57	2	5	5	10	5	8	7	7	5	7	7	7	75
Preop Oral Antibiotics	68.68%	85%	50% 1/2	50% 1/2	50% 2/4	57% 4/7	33% 1/3	0% 0/4	67% 2/3	33% 1/3	50% 1/2	100% 6/6	83% 5/6	67% 4/6	58% 28/48
Multi-modal Pain Management	84.12%	100% 2/2	100% 2/2	100% 5/5	100% 5/5	90% 9/10	100% 5/5	100% 8/8	86% 6/7	86% 6/7	80% 4/5	100% 7/7	86% 6/7	100% 7/7	93% 70/75
Postop VTE Chemoprophylaxis	75.16%	79%	N/C	100% 3/3	100% 3/3	N/C	100% 1/1	75% 3/4	100% 3/3	100% 3/3	100% 2/2	100% 3/3	100% 2/2	75% 3/4	93% 26/28
Postop Mobilization	63.82%	92%	100% 2/2	100% 4/4	100% 5/5	100% 9/9	100% 5/5	100% 7/7	100% 6/6	100% 7/7	80% 4/5	100% 7/7	67% 4/6	100% 7/7	96% 67/70
Postop Intake of Liquids	86.15%	95%	100% 2/2	100% 5/5	100% 5/5	100% 10/10	100% 5/5	100% 8/8	100% 7/7	100% 7/7	80% 4/5	100% 7/7	100% 7/7	100% 5/5	99% 72/73
Foley Removal	95.77%	89%	N/C	100% 4/4	100% 3/3	100% 4/4	100% 1/1	100% 3/3	100% 1/1	100% 3/3	67% 2/3	100% 3/3	100% 3/3	67% 2/3	94% 29/31

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Surgical Quality Dashboard
CMS Patient Safety Indicators (PSIs)-Perioperative Complications of Care
(per 1,000 discharges)

	CMS Benchmark	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23*	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Total
PSI 4 - Death with serious treatable complication	161.73 / 143.04*	307.69 4/13	76.92 1/13	238.10 5/21	250 3/12	454.55 5/11	111.11 2/18	318.18 7/22	71.43 1/14	214.27 3/14	333.33 4/12	0.00 0/9	200 2/10	250 4/16	221.62 41/185
PSI 5- Retained surgical item	0.03	0.00 0/1311	0.00 0/1235	0.00 1157	0.00 0/1382	0.00 0/1218	0.00 0/1300	0.00 0/1302	0.00 0/1285	0.00 0/1315	0.82 1/1223	0.00 0/1252	0.00 0/1229	0.00 0/1262	0.06 1/16469
PSI 9** - Perioperative Hemorrhage or Hematoma	2.60 / 2.39*	0.00 0/292	3.85 1/260	0.00 0/281	0.00 0/327	0.00 0/298	16.34 5/306	3.35 1/298	3.31 1/302	0.00 0/294	3.62 1/277	3.75 1/267	0.00 0/245	4.53 1/221	2.99 11/3669
PSI 10** - Postoperative Kidney Injury	1.32 / 0.92*	0.00 0/86	26.32 2/76	0.00 0/73	0.00 0/101	0.00 0/97	0.00 0/91	0.00 0/97	0.00 0/81	0.00 0/81	11.77 1/85	0.00 0/96	0.00 0/77	0.00 0/70	2.70 3/1111
PSI 11**-Postoperative Respiratory Failure	7.88 / 6.47*	0.00 0/94	27.40 2/73	0.00 0/73	0.00 0/100	0.00 0/95	0.00 0/92	0.00 0/97	10.87 1/92	0.00 0/97	12.05 1/83	10.20 1/98	12.35 1/81	0.00 0/69	6.21 7/1127
PSI 12**- Perioperative PE/VTE	3.86 / 3.41*	0.00 0/305	3.66 1/271	6.87 2/291	0.00 0/339	3.21 1/311	0.00 0/317	3.12 1/320	6.33 2/315	0.00 0/319	0.00 0/292	3.61 1/277	7.72 2/259	8.58 2/233	3.12 12/3844
PSI 13**- Postoperative Sepsis	5.23 / 4.09*	0.00 0/90	13.33 1/75	0.00 0/68	0.00 0/102	0.00 0/92	0.00 0/90	0.00 0/94	0.00 0/82	0.00 0/81	0.00 0/82	0.00 0/91	0.00 0/71	0.00 0/68	0.92 1/1089
PSI 14**- Postoperative Wound Dehiscence	0.86 / 0.82*	0.00 0/58	19.23 1/52	0.00 0/50	0.00 0/66	0.00 0/70	0.00 0/51	0.00 0/53	0.00 0/79	0.00 0/81	0.00 0/45	0.00 0/69	17.86 1/56	0.00 0/46	2.57 2/777
PSI 15** - Accidental Puncture or Laceration	1.29 / 1.04*	0.00 0/219	0.00 0/213	0.00 0/201	3.88 1/258	0.00 0/238	0.00 0/202	4.55 1/220	3.73 1/268	0.00 0/256	4.53 1/221	0.00 0/242	0.00 0/226	0.00 0/235	1.33 4/3001
PSI 90 -Adverse Events Compsite	1.00	0.65 0.25/0.38	3.62 1.1/0.30	1.07 0.38/0.36	0.05 0.02/0.48	0.42 0.17/0.42	0.98 0.43/0.44	0.57 0.24/0.42	2.08 0.65/0.31	0.00 0/0.42	1.05 0.35/0.33	1.72 0.63/0.37	2.28 0.82/0.36	1.28 0.42/0.33	1.11 5.43/4.91
Complication elective THA/TKA	2.30 / 3.2*	0.00 0/5	0.00 0/8	0.00 0/6	11.11 1/9	0.00 0/9	0.00 0/5	0.00 0/13	0.00 0/7	100 1/1	0.00 0/7	0.00 0/3	0.00 0/3	0.00 0/1	2.63 2/76

** included in PSI 90, along with other metrics not listed

*updated benchmark effective June-23

Patient Safety Indicators (PSI's)

- Claims-based quality measures (ICD-10 Billing Codes)

- Provides information on potentially avoidable safety events that represent opportunities for improvement in the delivery of care. More specifically, they focus on potential in-hospital complications and adverse events following surgeries and procedures.

- SQIP is in partnership with the Quality Department and the PSI Committee to monitor Patient Safety Indicator events and trends. **Currently monitoring nine (9) indicators** along with Surgical Site Infections.
  - PSI cases reviewed for coding and documentation accuracy and clinical quality opportunities.

- Current priority work in **Pulmonary Embolism/Deep Vein Thrombosis (PE/DVT)** prevention processes.

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Surgical Site Infections (SSIs)

		Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Total
SSI Colon	Actual	0	0	2	0	0	2	0	0	0	2	1	0	0	7
	Predicted (benchmark)	0.755	1.497	1.448	0.53	1.06	0.702	0.512	0.758	0.851	1.279	N/A	0	0	9.392
SSI Abdominal Hysterectomy	Actual	0	0	0	1	0	1	0	1	0	0	0	0	0	3
	Predicted (benchmark)	0.05	0.096	0.116	0.203	0.187	0.702	0.512	0.702	0.164	0.125	0	0	0	2.857
Ht/Wt Documented	99%	99% 422/428	98% 432/443	99% 405/410	97% 423/438	99% 390/392	99% 450/454	98% 430/439	98% 457/468	98% 417/424	99% 423/427	97% 428/440	98% 432/442	99% 418/424	99% 5553/5603

*Some surgical site infection events are identified up to 90 days post procedure which might result in lower than actual number of monthly SSI events reported compared to year-end results.

- **Surgical Site Infection data:**
  - SSI Colon:
    - We are better than predicted with 7 cases within the last calendar year, March 2022-March 2023.

  - SSI Abdominal Hysterectomy:
    - We have had 1 within the same time frame and none in the last 7 months.

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CARDIAC SURGERY DATA QUALITY ANALYSIS

Q1 2020 → Q3 2023

RISK-ADJUSTED DATA

BLUE = RISK-ADJUSTED DATA

GREEN = STS AVERAGE

GRAY = NON-RISK ADJUSTED VALUE (FOR REFERENCE ONLY)

DATA ANALYSIS BY THE SOCIETY OF THORACIC SURGEONS NATIONAL ADULT CARDIAC SURGERY DATABASE

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STAR RATINGS 2023
ISOLATED CORONARY ARTERY BYPASS GRAFTING

STAR RATINGS ARE ONLY CALCULATED ENDING Q2 & Q4 EACH YEAR

The Society of Thoracic Surgeons

STS CABG Composite Quality Rating
Participant: 30045
STS Period Ending Jun 2023

Domain	Rating	Participant		STS				
		Score	95% CI	Score	Min - Max	10th	50th	90th
Overall	★★	97.11%	(96.28-97.78)	96.78%	(88.29-99.10)	95.25%	96.97%	98.10%
Absence of Mortality	★★	97.87%	(96.85-98.65)	97.41%	(90.63-99.33)	96.04%	97.59%	98.56%
Absence of Morbidity	★★	89.99%	(87.60-92.13)	90.10%	(67.96-96.66)	86.02%	90.50%	93.71%
Use of IMA	★	98.42%	(97.17-99.29)	99.57%	(89.31-99.99)	99.03%	99.78%	99.95%
Medications	★★★	98.53%	(97.33-99.37)	94.91%	(36.96-99.98)	87.34%	97.49%	99.62%

★ Worse than Expected. Participant's performance is significantly worse than expected for their specific case-mix.

★★ As Expected. Participant's performance is not statistically different than expected for their specific case-mix.

★★★ Better than Expected. Participant's performance is significantly better than expected for their specific case-mix.

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STAR RATINGS 2023
AORTIC VALVE REPLACEMENT

STAR RATINGS ARE ONLY CALCULATED ENDING Q2 & Q4 EACH YEAR

The Society of Thoracic Surgeons

STS AVR Composite Quality Rating
Participant: 30045
STS Period Ending Jun 2023

Domain	Rating	Participant		STS				
		Score	95% CI	Score	Min - Max	10th	50th	90th
Overall	★ ★	94.73%	(91.42-97.02)	95.29%	(84.59-98.63)	92.96%	95.61%	97.25%
Absence of Mortality	★ ★	97.72%	(95.65-99.00)	97.69%	(91.94-99.40)	96.45%	97.87%	98.72%
Absence of Morbidity	★ ★	88.70%	(82.98-93.00)	89.98%	(77.57-96.09)	86.33%	90.30%	93.21%

★ Worse than Expected. Participant's performance is significantly worse than expected for their specific case-mix.

★ ★ As Expected. Participant's performance is not statistically different than expected for their specific case-mix.

★ ★ ★ Better than Expected. Participant's performance is significantly better than expected for their specific case-mix.

Kaweah Health

STAR RATINGS 2023
CABG W/ AORTIC VALVE REPLACEMENT

STAR RATINGS ARE ONLY CALCULATED ENDING Q2 & Q4 EACH YEAR

STS AVR + CABG Composite Quality Rating
Participant: 30045
STS Period Ending Jun 2023

Domain	Rating	Participant		STS				
		Score	95% CI	Score	Min - Max	10th	50th	90th
Overall	★★	89.74%	(85.17-93.29)	91.67%	(78.49-97.26)	87.93%	92.08%	94.86%
Absence of Mortality	★★	95.59%	(92.30-97.81)	95.69%	(87.04-98.81)	93.46%	95.98%	97.54%
Absence of Morbidity	★★	79.98%	(72.46-86.22)	83.65%	(67.73-92.92)	78.35%	84.04%	88.43%

★ Worse than Expected. Participant's performance is significantly worse than expected for their specific case-mix.

★★ As Expected. Participant's performance is not statistically different than expected for their specific case-mix.

★★★ Better than Expected. Participant's performance is significantly better than expected for their specific case-mix.

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Healthgrades

Specialty Clinical Quality Awards & Ratings

Hospital Quality Awards

America's 100 Best Hospitals Award™ (2023)
Top 2% in the nation for consistently delivering clinical quality year over year

America's 250 Best Hospitals Award™ (2023, 2022, 2021)
Top 5% in the nation for consistently delivering clinical quality

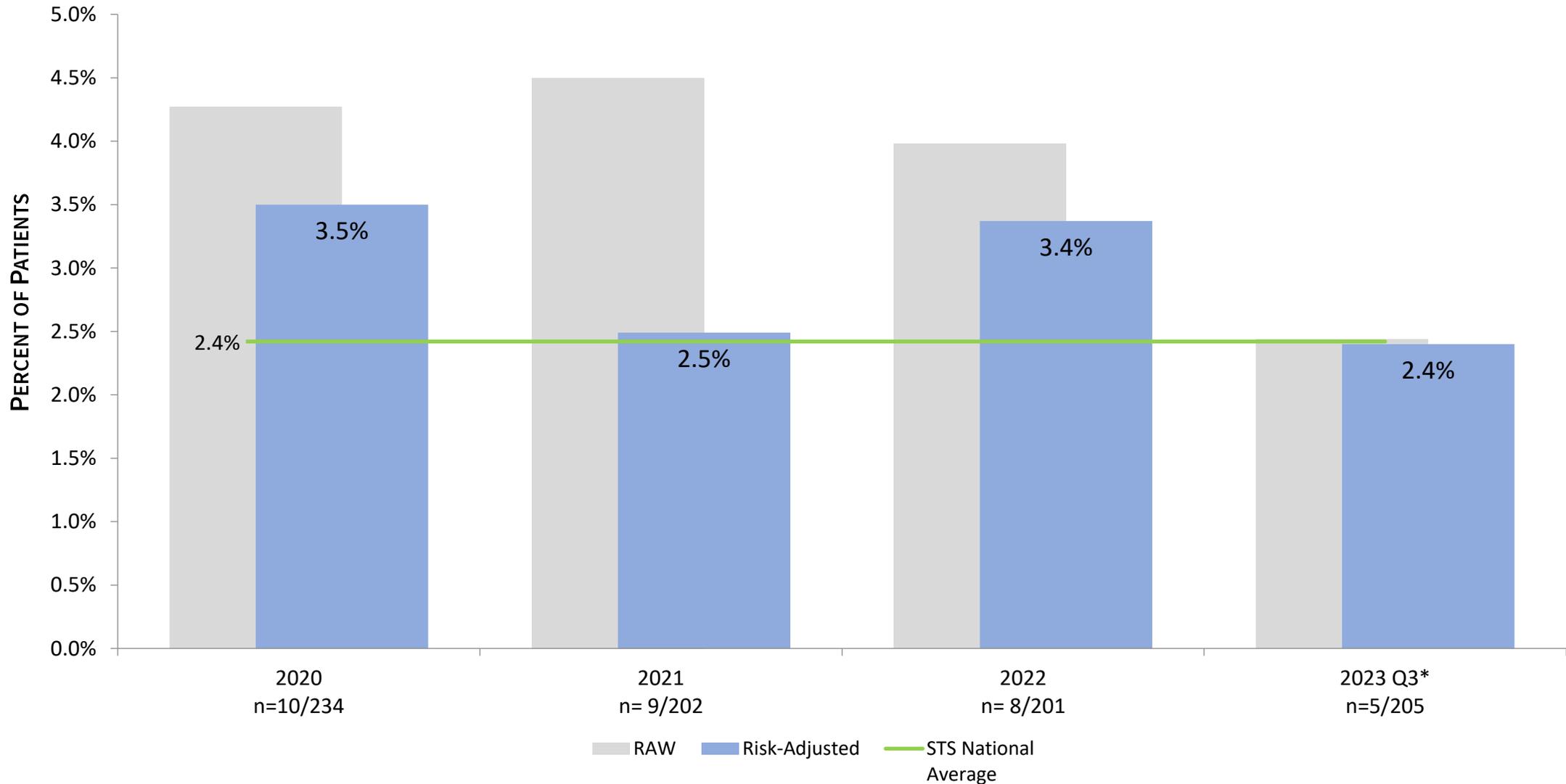Specialty Clinical Quality Awards

America's 50 Best Hospitals for Cardiac Surgery Award™ (2023, 2022, 2021)
Superior clinical outcomes in heart bypass surgery and heart valve surgery

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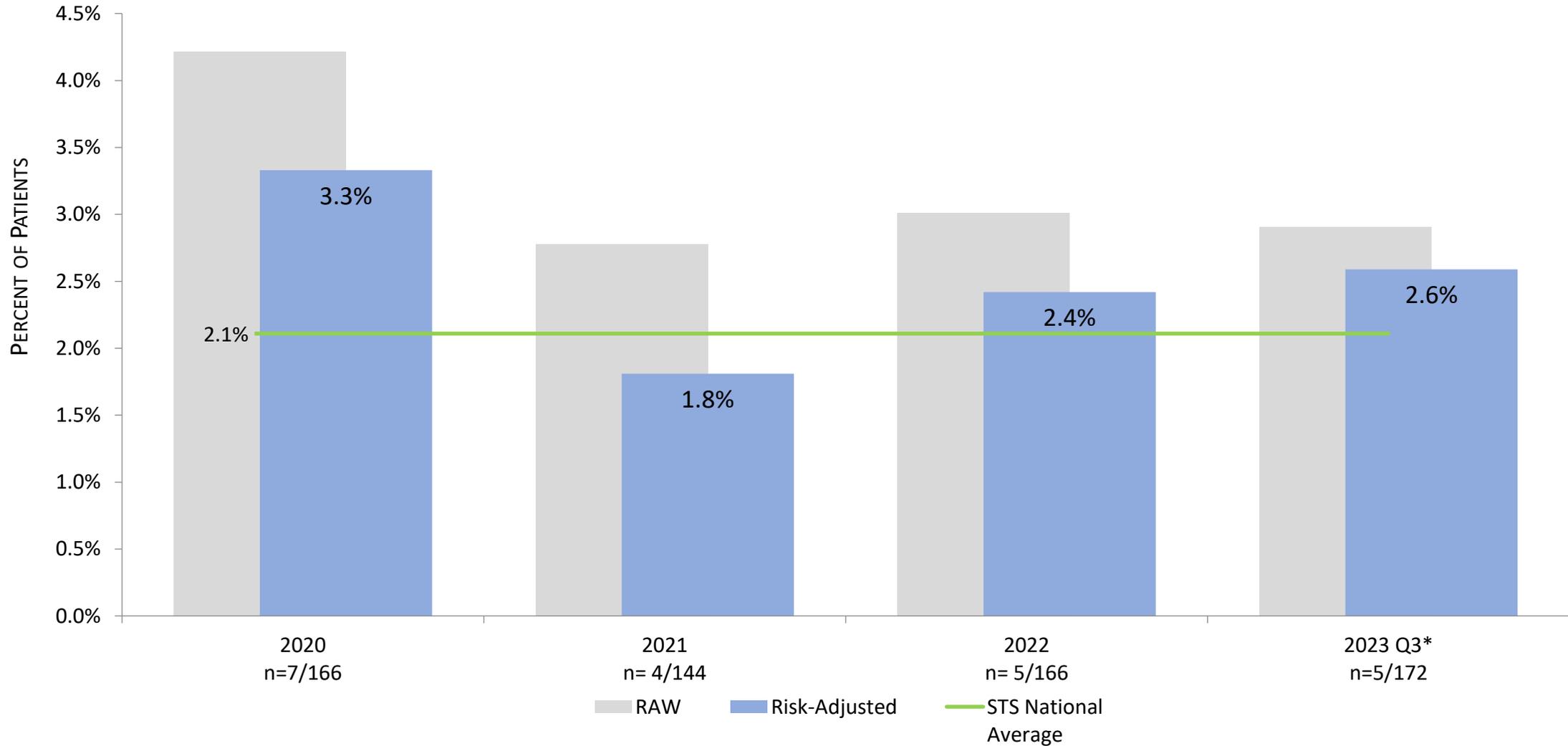**Kaweah Health**

ALL OPERATIVE MORTALITY[1]

2023 Risk-Adjusted O/E = 1.0
*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023
[1] Includes all 7 Major Procedure Categories (CABG, AVR, AVR+CABG, MVR, MVR+CABG, MVP, MVP+CABG)
Excludes Other category procedures, 2020Q3 -2021 COVID+ pt.'s Excluded.

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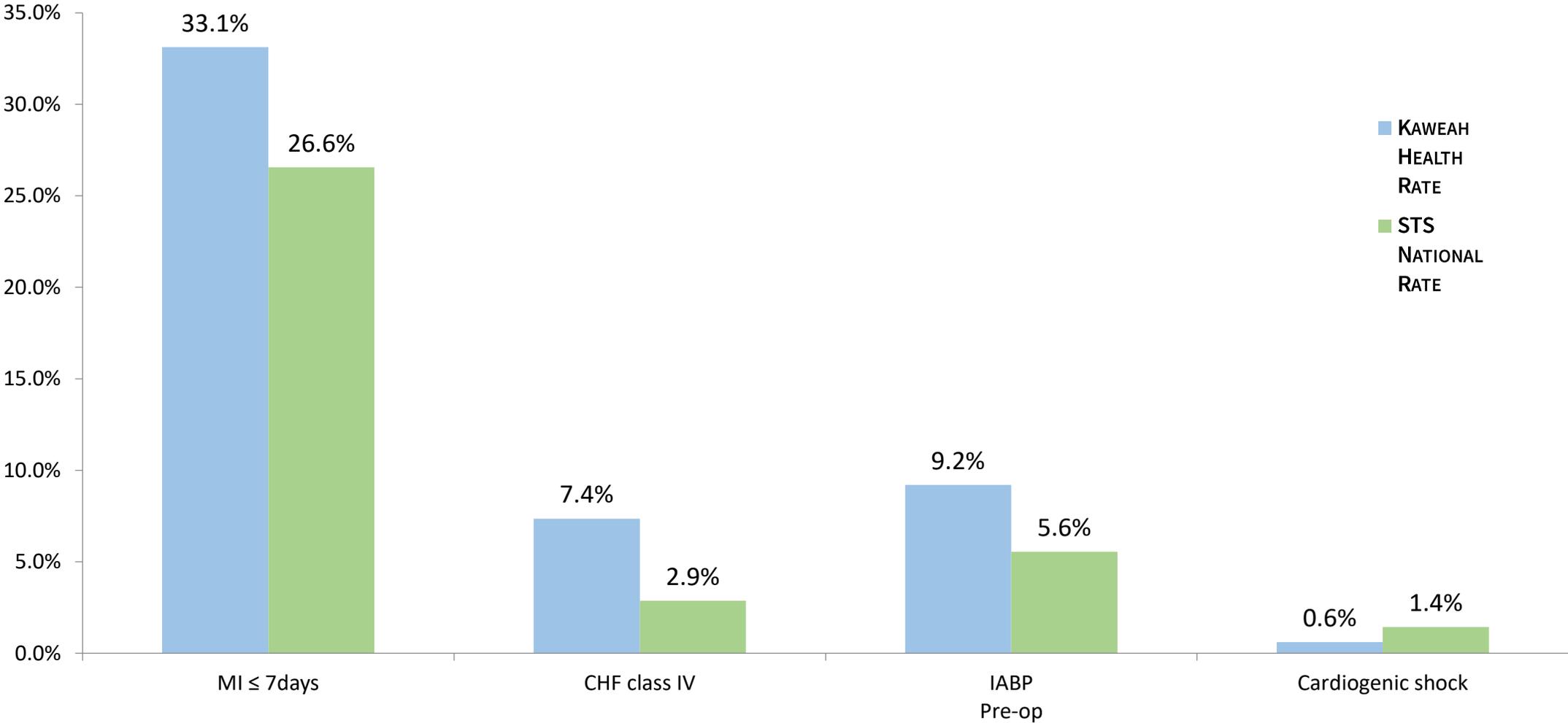
CABG Operative Mortality

*2023 Risk-Adjusted O/E = 1.22
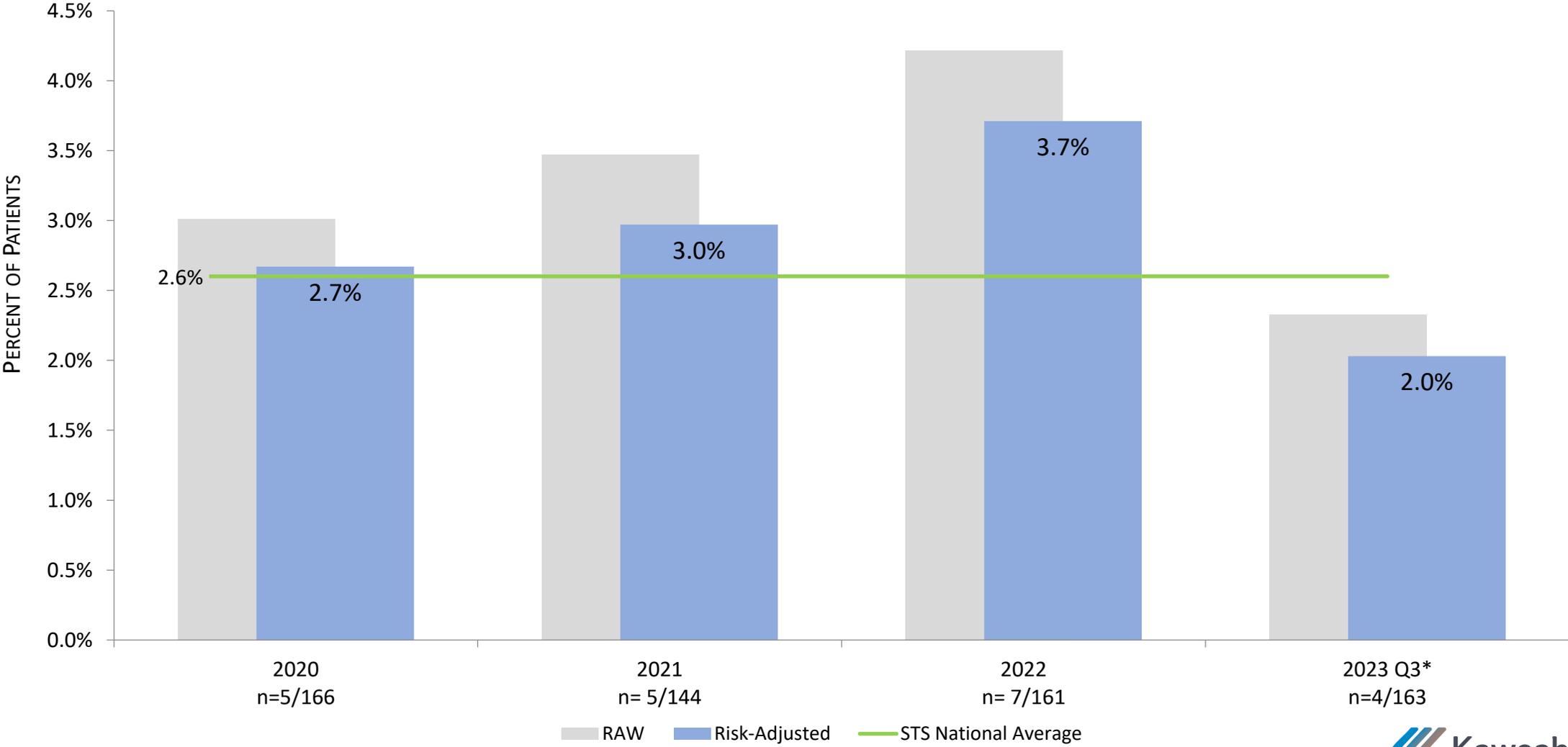*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023
2020Q3-2021 COVID+ pt.'s Excluded.

KAWEAH HEALTH PT. POPULATIONS

Chart legend:
- Blue: KAWEAH HEALTH RATE
- Green: STS NATIONAL RATE

Category	Kaweah Health Rate	STS National Rate
MI ≤ 7days	33.1%	26.6%
CHF class IV	7.4%	2.9%
IABP Pre-op	9.2%	5.6%
Cardiogenic shock	0.6%	1.4%

CABG Re-Operation[1]

PERCENT OF PATIENTS

| | RAW | Risk-Adjusted | STS National Average |

2020
n=5/166

2021
n= 5/144

2022
n= 7/161

2023 Q3*
n=4/163

2.6%

2.7%

3.0%

3.7%

2.0%

2023 Risk-Adjusted O/E = 0.8
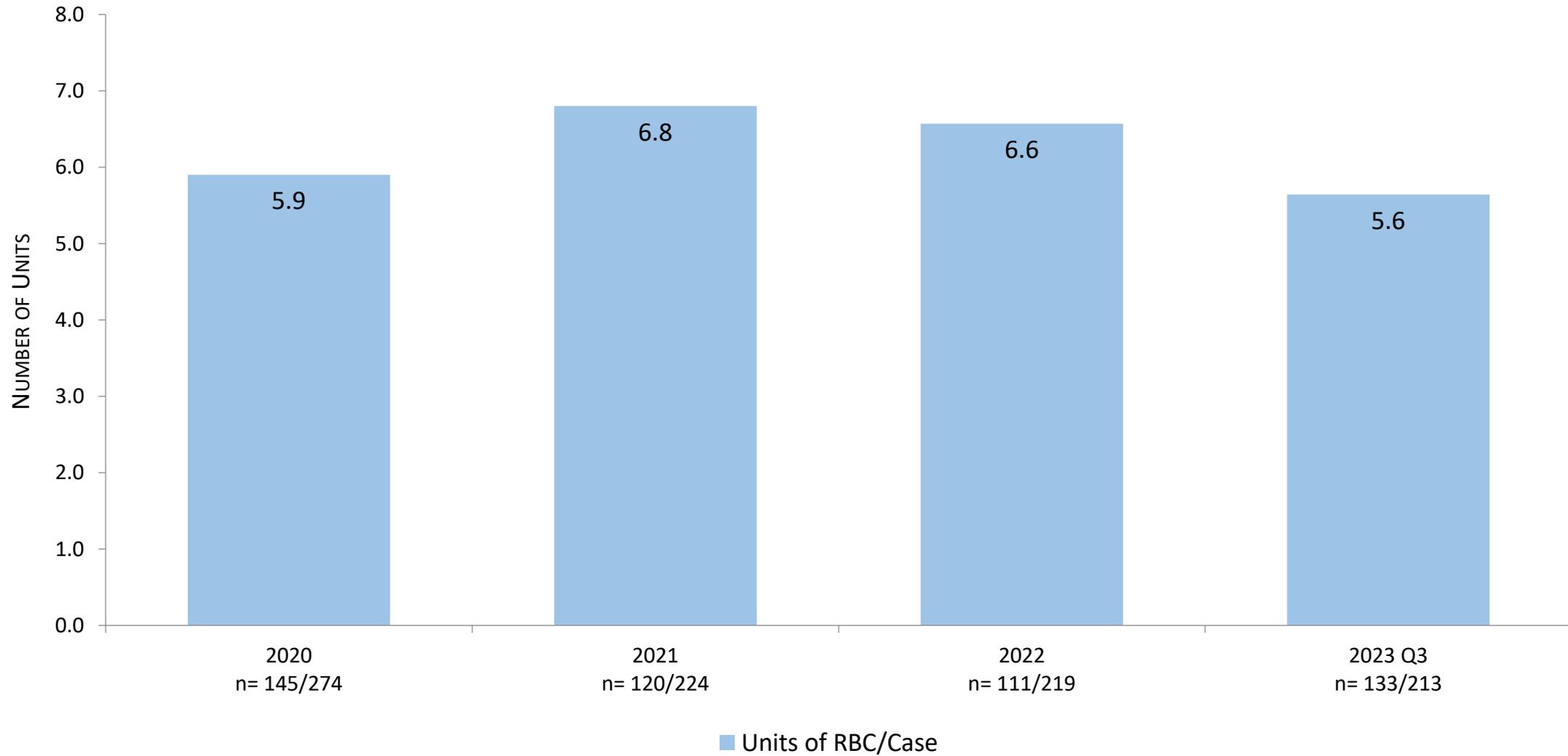*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023
[1]Surgeries include Reoperation for bleeding/tamponade, valvular dysfunction, unplanned coronary artery intervention, aortic reintervention or other cardiac reason, 2020Q3-2021 COVID+ pt.'s Excluded.

QUALITY INITIATIVE:
INTRA-OPERATIVE PATIENT SAFETY

❖ Time Out performed with entire surgical team (Surgeon, Anesthesia, RN, Techs and Perfusion)
❖ Surgeon led briefing on procedure expectations with entire surgical team after each Time Out
❖ Perfusion check list completed prior to each case
❖ Minimize trips to the Sterile Core by Nursing staff
❖ Minimize OR traffic (i.e.: coordinated switching of staff for breaks)
❖ Noise reduction implemented during cases:
  ➢ Discussions about current surgical case only
  ➢ Avoid conversations about other issues
  ➢ Music to be calming and at a lower volume
 ➢ All phones & beepers at the Nurses desk

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RED BLOOD CELL USAGE - AVERAGE UNITS / PT. RECEIVING RBC[1]

Number of Units

- 2020
  n= 145/274 : 5.9
- 2021
  n= 120/224 : 6.8
- 2022
  n= 111/219 : 6.6
- 2023 Q3
  n= 133/213 : 5.6

■ Units of RBC/Case

[1] All STS surgeries – Includes any blood given Intra-op and Post-op (Excludes patients that did not receive any blood from Average; excludes pre-op Hgb<8, Emergent/Salvage, COVID+ patients Q3 2020-2021)
Comparison Data is not reported on the STS National Outcomes Report

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CABG Intra & Post-Op Blood Product Usage[1]
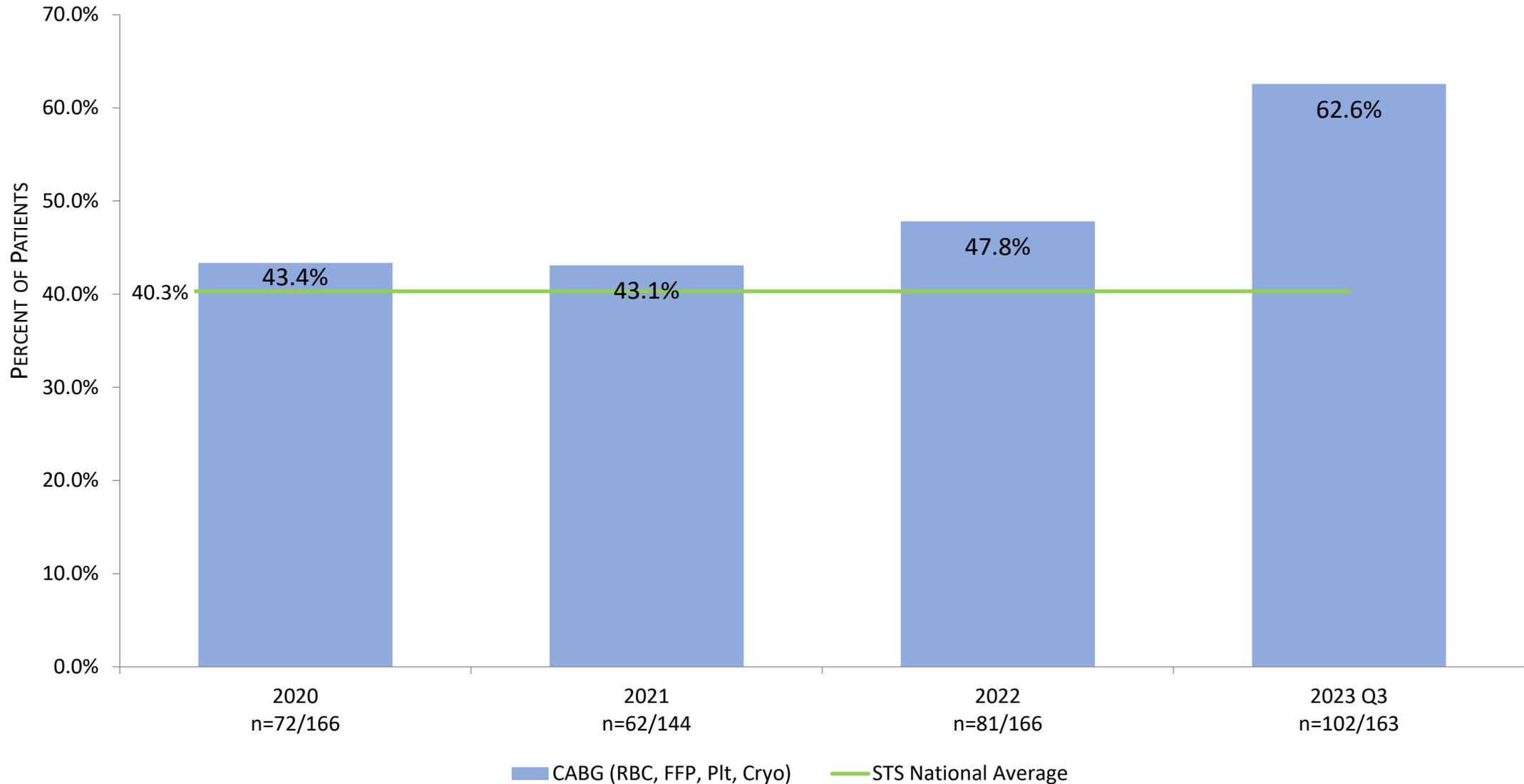
2023 Q3 O/E = 1.6
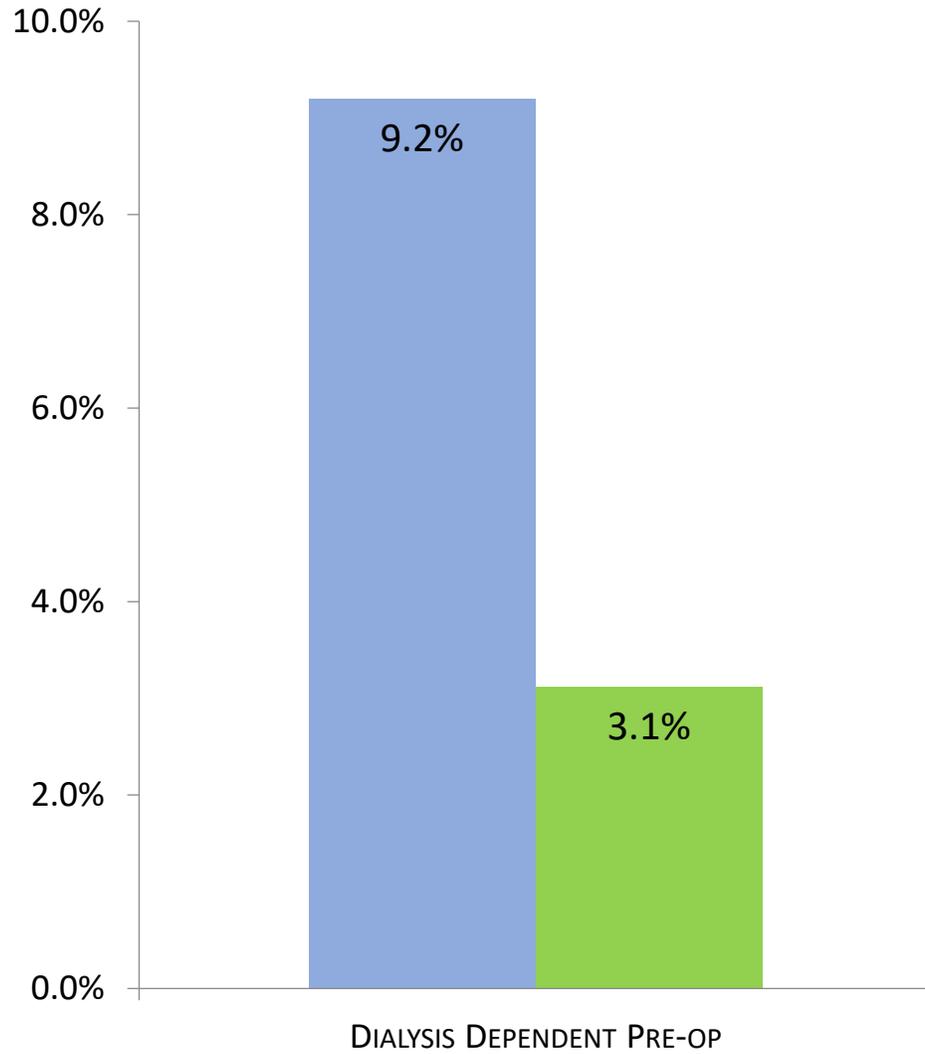***STS National Average Comparison reporting period 01/01/2023 through 09/30/2023**
[1]Surgeries where at least one unit of Red Blood Cells, Fresh Frozen Plasma, Platelets or Cryoprecipitate was given Intra-and/or Post-operatively. 2020Q3-2021 COVID+ pt.'s Excluded.

QUALITY INITIATIVE:

BLEEDING EVENT & BLOOD PRODUCT USAGE

❖ Quarterly review of blood usage throughout Pt. stay

❖ TEG coagulation monitoring

❖ Antifibrinolytic agents

❖ Heparin monitoring

❖ Heparin coated circuits

❖ Hemostasis achieved during procedure

❖ Cell saver utilized during surgery

❖ Restrictive transfusion criteria

❖ Surgeon approval of each transfusion

❖ Treatment of pre-operative anemia or transfusion as needed

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KAWEAH HEALTH PT. POPULATIONS

Left chart — axis labels: 10.0%, 8.0%, 6.0%, 4.0%, 2.0%, 0.0%

- Kaweah Health Rate: 9.2%
- STS National Rate: 3.1%

DIALYSIS DEPENDENT PRE-OP

Right chart — axis labels: 70.0%, 60.0%, 50.0%, 40.0%, 30.0%, 20.0%, 10.0%, 0.0%

- Kaweah Health Rate: 63.8%
- STS National Rate: 50.3%

DIABETIC PATIENTS

Legend: ■ KAWEAH HEALTH RATE   ■ STS NATIONAL RATE

*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023- Isolated CABG cases ONLY

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CABG Post-Op Renal Failure[1]

RAW ■ **Risk-Adjusted** ── **STS National Average**

- 2020 n=7/151 — RAW ~4.6%, Risk-Adjusted 4.9%
- 2021 n=6/133 — RAW ~4.5%, Risk-Adjusted 3.3%
- 2022 n=7/149 — RAW ~4.7%, Risk-Adjusted 4.6%
- 2023 Q3 n=8/148 — RAW ~5.4%, Risk-Adjusted 5.1%
- STS National Average 1.9%

2023 Risk-adjusted O/E = 2.62
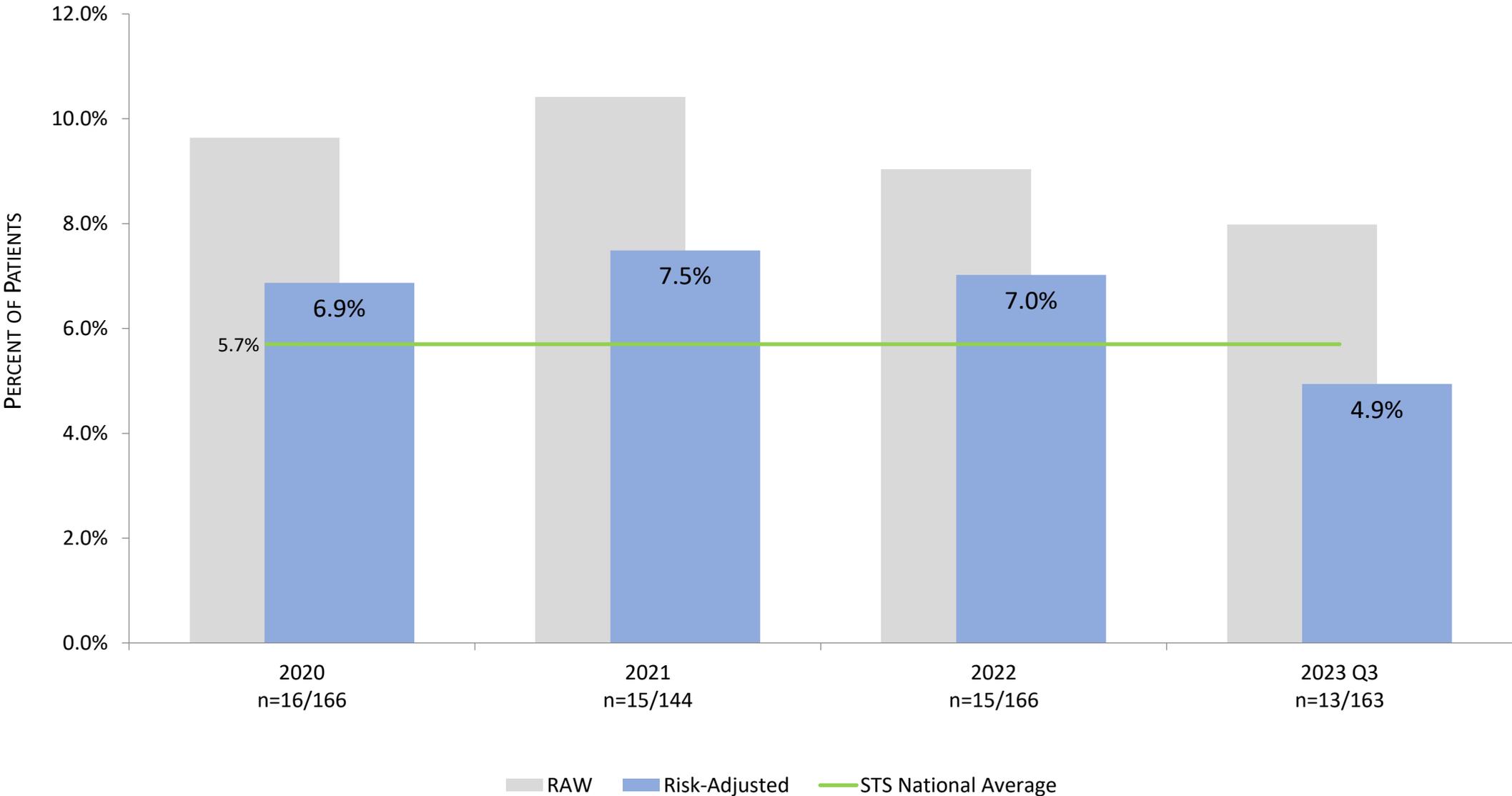***STS National Average Comparison reporting period 01/01/2023 through 09/30/2023**
[1] Excludes patients with preoperative dialysis or preoperative Creatinine ≥ 4, 2020Q3-2021 COVID+ pt.'s Excluded.

QUALITY INITIATIVE:

RENAL FAILURE

❖ Risk factor evaluation pre-operatively
❖ Timing of surgery considered
❖ Diabetes control
❖ Liberal hydration
❖ Intra-operative blood flow & pressure controlled by perfusion and anesthesia
❖ Blood pressure management peri-operatively

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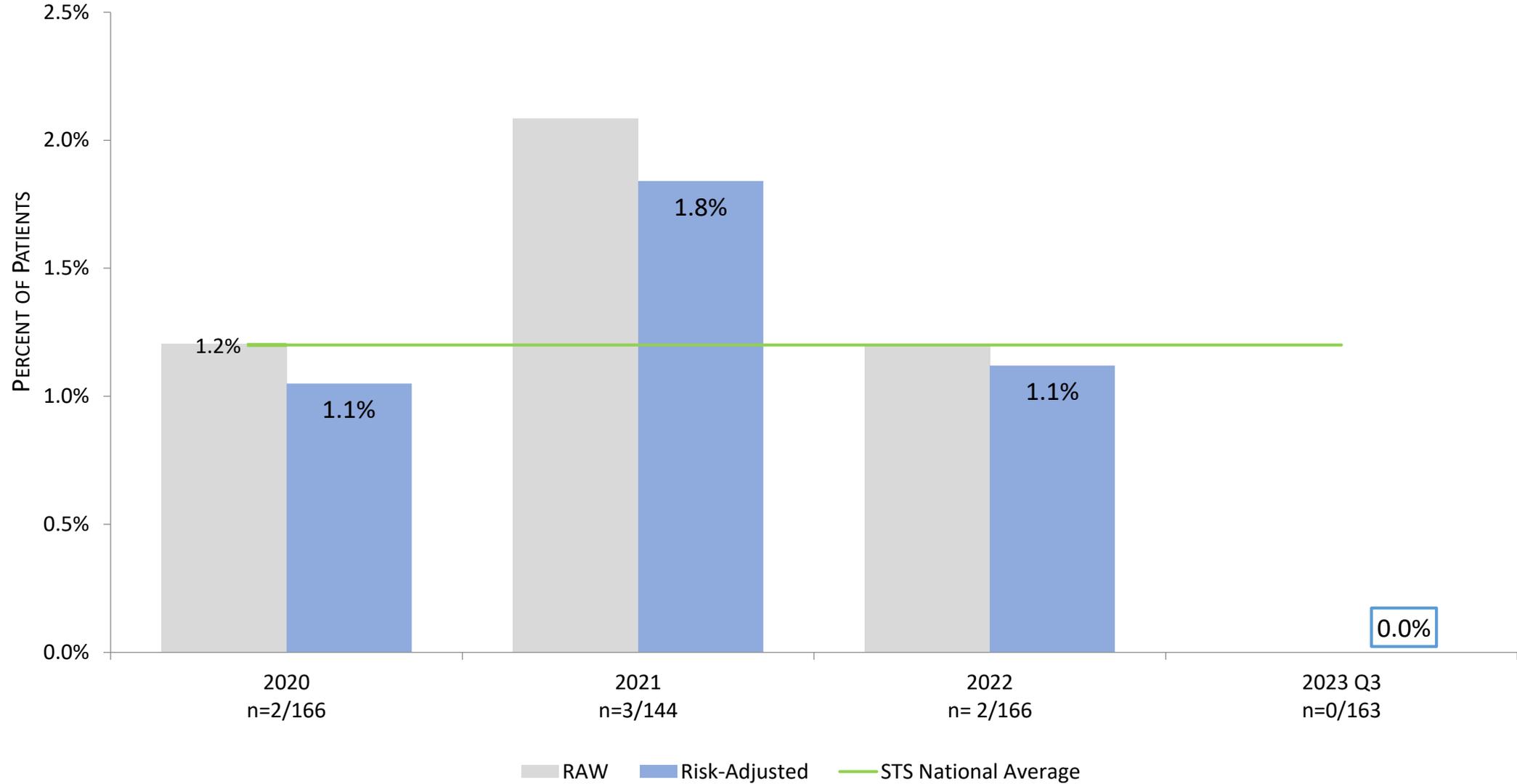# CABG Prolonged Ventilation

2023 Risk-adjusted O/E = 0.87
*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023
2020Q3-2021 COVID+ pt.'s Excluded.

QUALITY INITIATIVE:

PROLONGED VENTILATION

- ❖ Monthly audit & analysis of prolonged ventilation times and delayed Extubation due to medical necessity
- ❖ Action Plan for 100% completion of Cardiac Extubation Tool ~ monitored by CVICU nurse manager
- ❖ Sedation and Analgesia to be used in an appropriate and conservative manner
- ❖ Avoid Benzodiazepines and narcotic drips
- ❖ To illicit calm awakening utilize Propofol & Precedex drips when medically necessary
- ❖ Train nursing, medical and ancillary staff on the Fast Track Extubation Protocol available in PolicyTech
- ❖ Address ventilation time of each Pt. in rounds and shift reports by RN, RT & MD
- ❖ Promote Respiratory Therapy Education Tool for patients
- ❖ Review of Anesthesia Protocols
- ❖ Positive Base excess or > -2.0 on CVICU arrival
- ❖ Core Temperature > 36.0°C on CVICU arrival

CABG Post Op Permanent Stroke

PERCENT OF PATIENTS

- 2020 n=2/166 — RAW: 1.2%, Risk-Adjusted: 1.1%
- 2021 n=3/144 — Risk-Adjusted: 1.8%
- 2022 n= 2/166 — Risk-Adjusted: 1.1%
- 2023 Q3 n=0/163 — 0.0%

Legend: RAW | Risk-Adjusted | STS National Average

2023Q3 Risk-adjusted O/E = 0.0
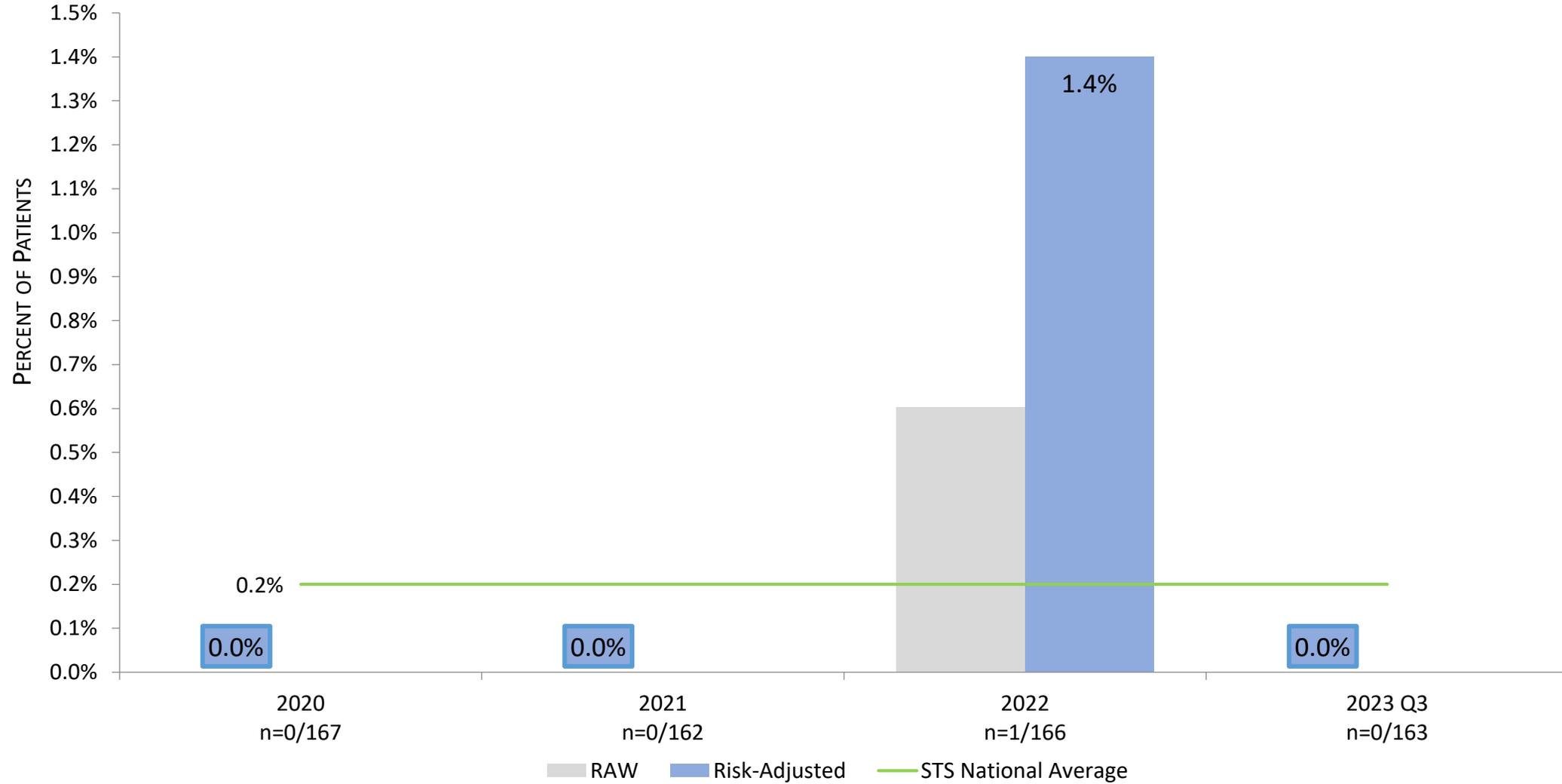***STS National Average Comparison reporting period 01/01/2023 through 09/30/2023**
2020Q3 - 2021 COVID+ pt.'s Excluded.

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QUALITY INITIATIVE:

STROKE PREVENTION

❖ Risk factor, neurological evaluation
❖ TEE, CT of the aorta with evaluation as needed
❖ Carotid Doppler ~ Ultrasound
❖ Invox cortical brain monitoring
❖ Intraoperative blood flow & pressure control by perfusion and anesthesia
❖ Intraoperative temperature control

CABG Post Op Deep Sternal Wound Infection

2023 Risk-adjusted O/E = 0
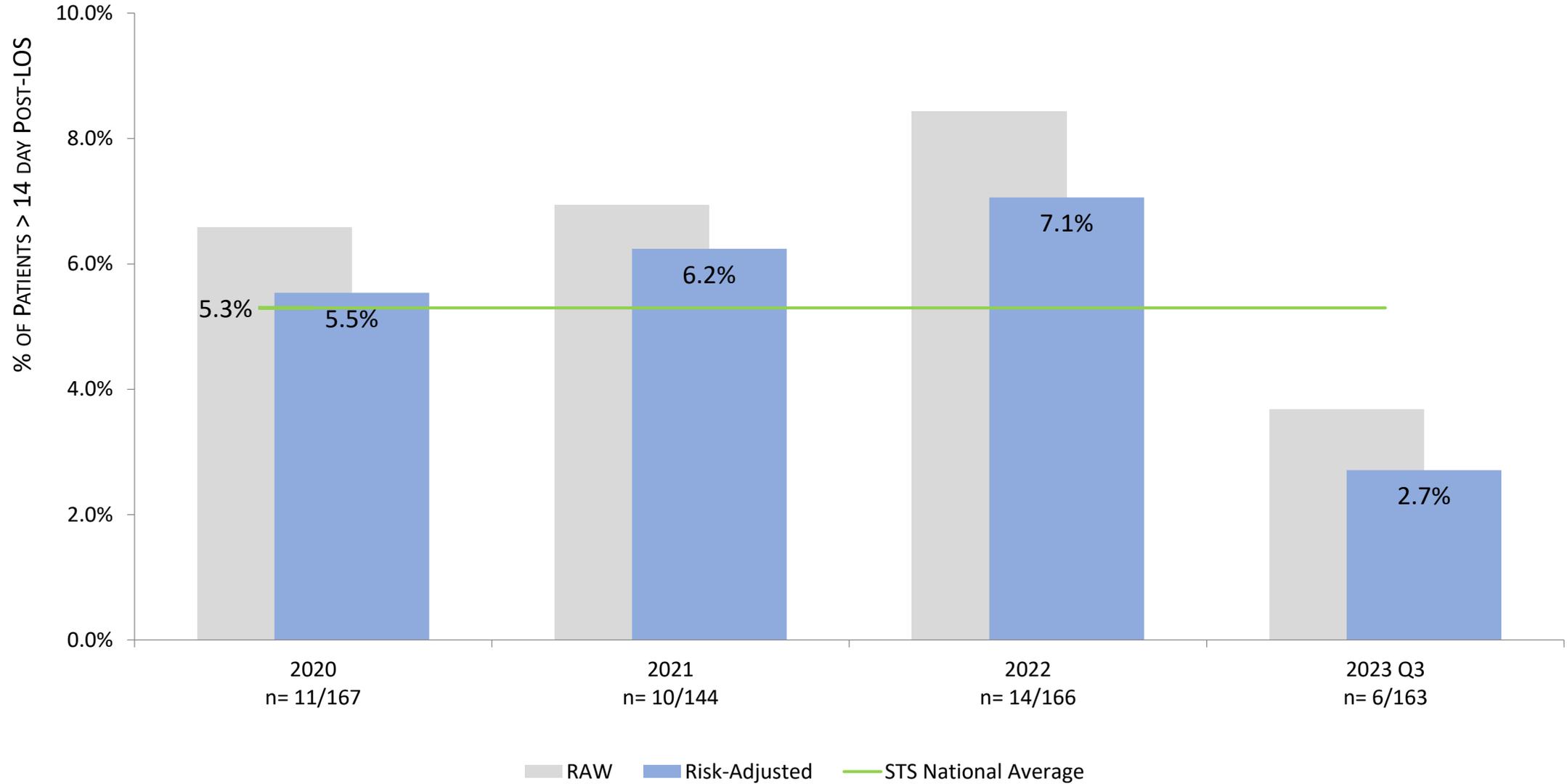*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023
2020Q3 - 2021 COVID+ pt.'s Excluded.

QUALITY INITIATIVE:

INFECTION PREVENTION

- ❖ Glucose control w/ Glucommander – insulin drip or subcutaneous
- ❖ Two Chlorhexidine baths prior to surgery
- ❖ Chlorhexidine mouth wash used morning of surgery
- ❖ MRSA screening of each patient
- ❖ Terminal cleaning of operating rooms monitored daily
- ❖ Disposable ECG monitoring cables on each patient
- ❖ Use of Early closure technique for vein harvest incisions
- ❖ Vancomycin paste for sternal application
- ❖ Silver Nitrate or Prevena suction dressing applied to sternum
- ❖ Prophylactic antibiotic treatment for 48 hours
- ❖ Early removal of central lines and Foley catheter

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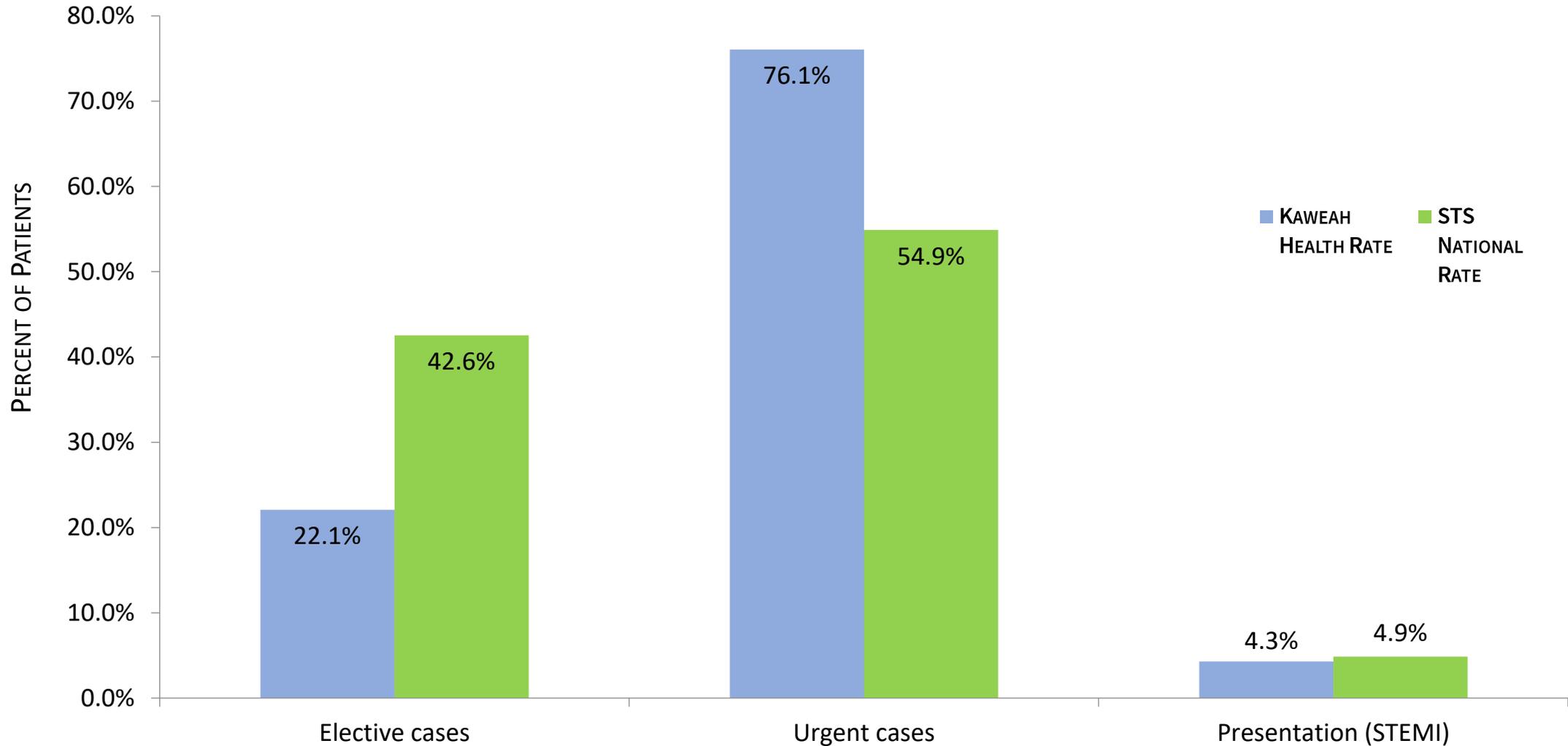Kaweah Health.

CABG POST OP LENGTH OF STAY >14 DAYS

2023 Risk-adjusted O/E = 0.51
*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023
Post-operative Length of Stay: Long Stay is greater than 14 days (PLOS > 14 Days), 2020Q3 - 2021 COVID+ pt.'s Excluded.

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Kaweah Health Pt. Populations

Percent of Patients

- ■ Kaweah Health Rate
- ■ STS National Rate

Elective cases: 22.1% / 42.6%
Urgent cases: 76.1% / 54.9%
Presentation (STEMI): 4.3% / 4.9%

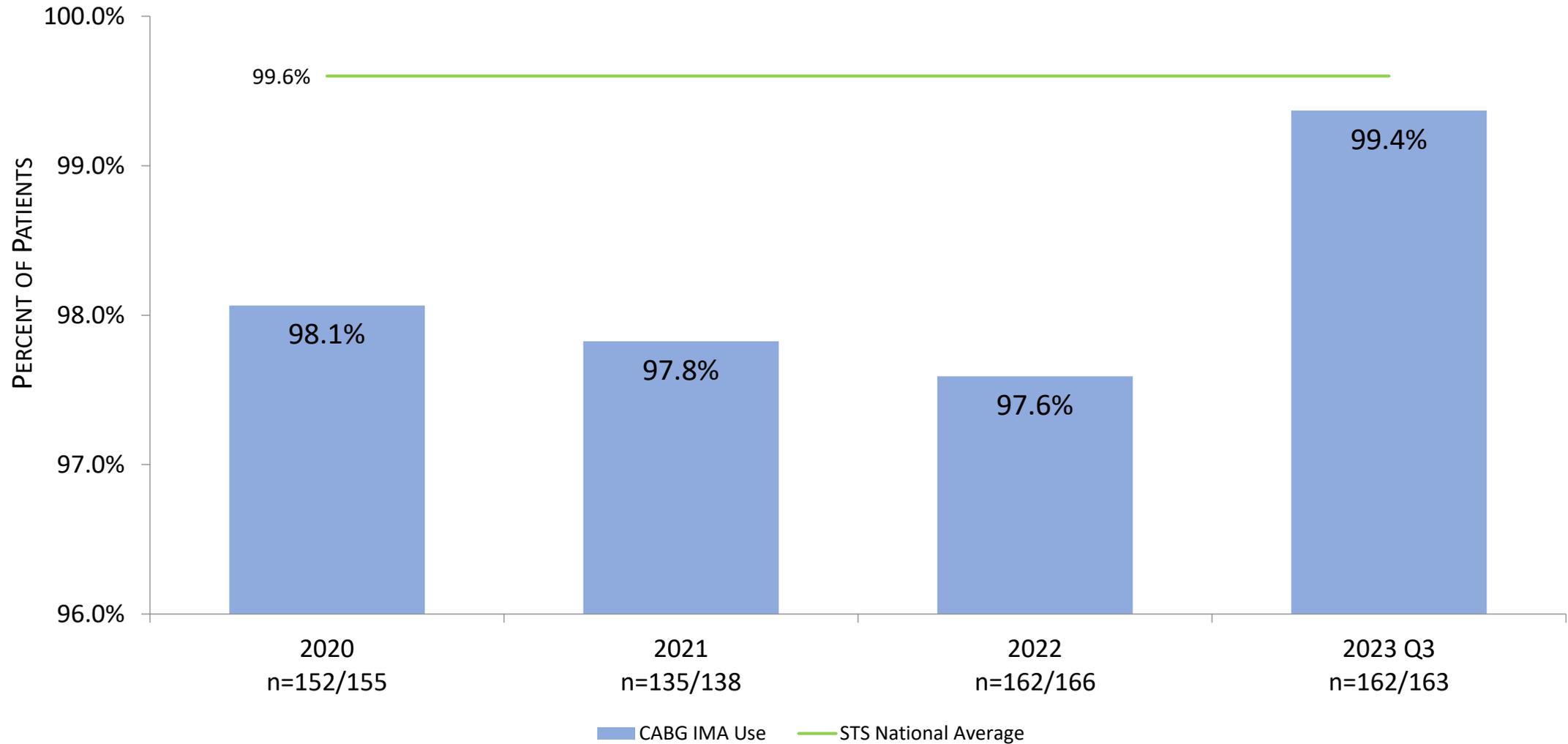***STS National Average Comparison reporting period 01/01/2023 through 09/30/2023– Isolated CABG cases ONLY**

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Kaweah Health Radial Artery Usage
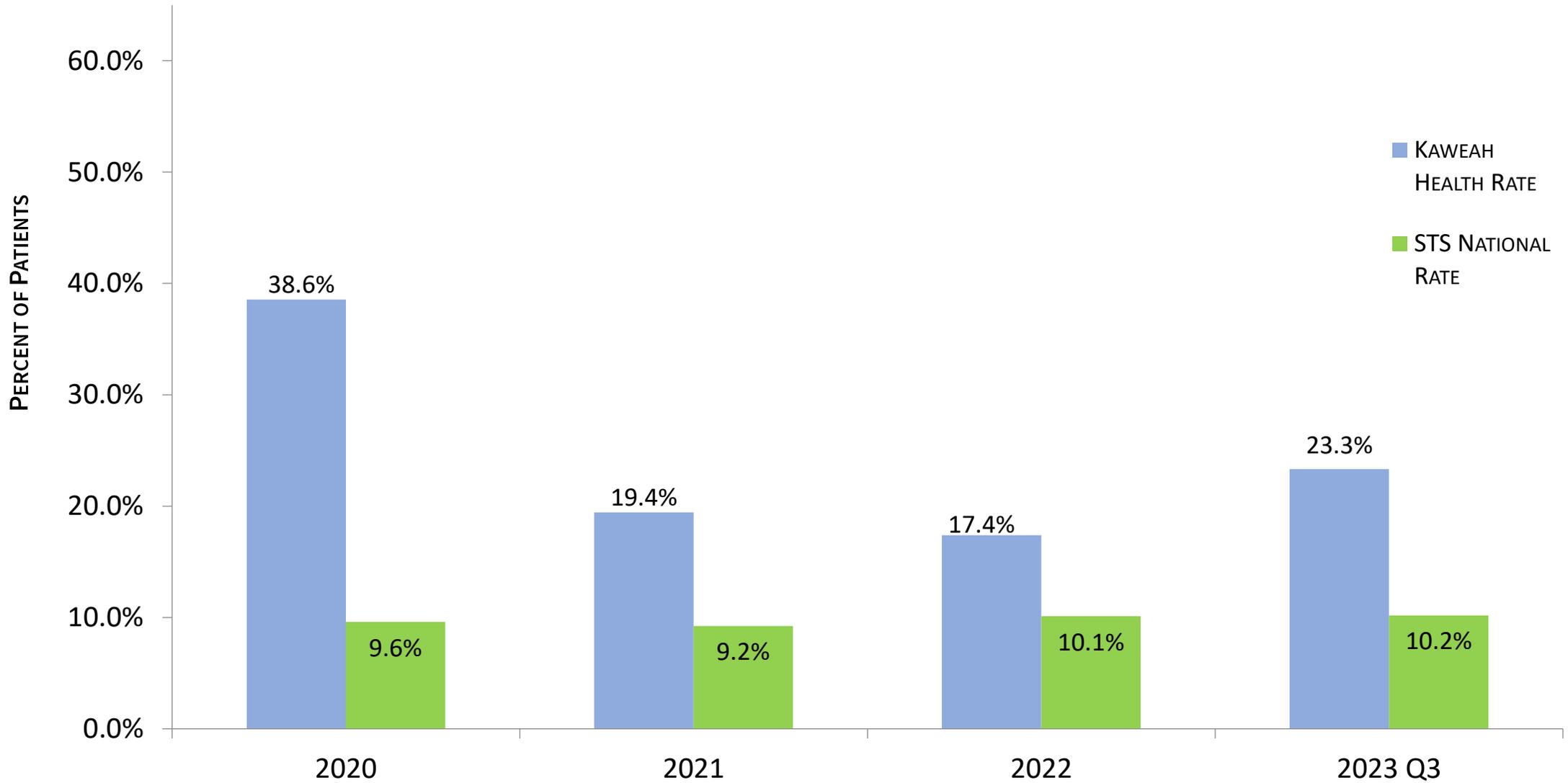
*STS National Average Comparison reporting period - 1/1 through 12/31 of each year (except 2023Q3 1/1 through 9/30) – Isolated CABG cases ONLY

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CABG Internal Mammary Artery Usage[1]

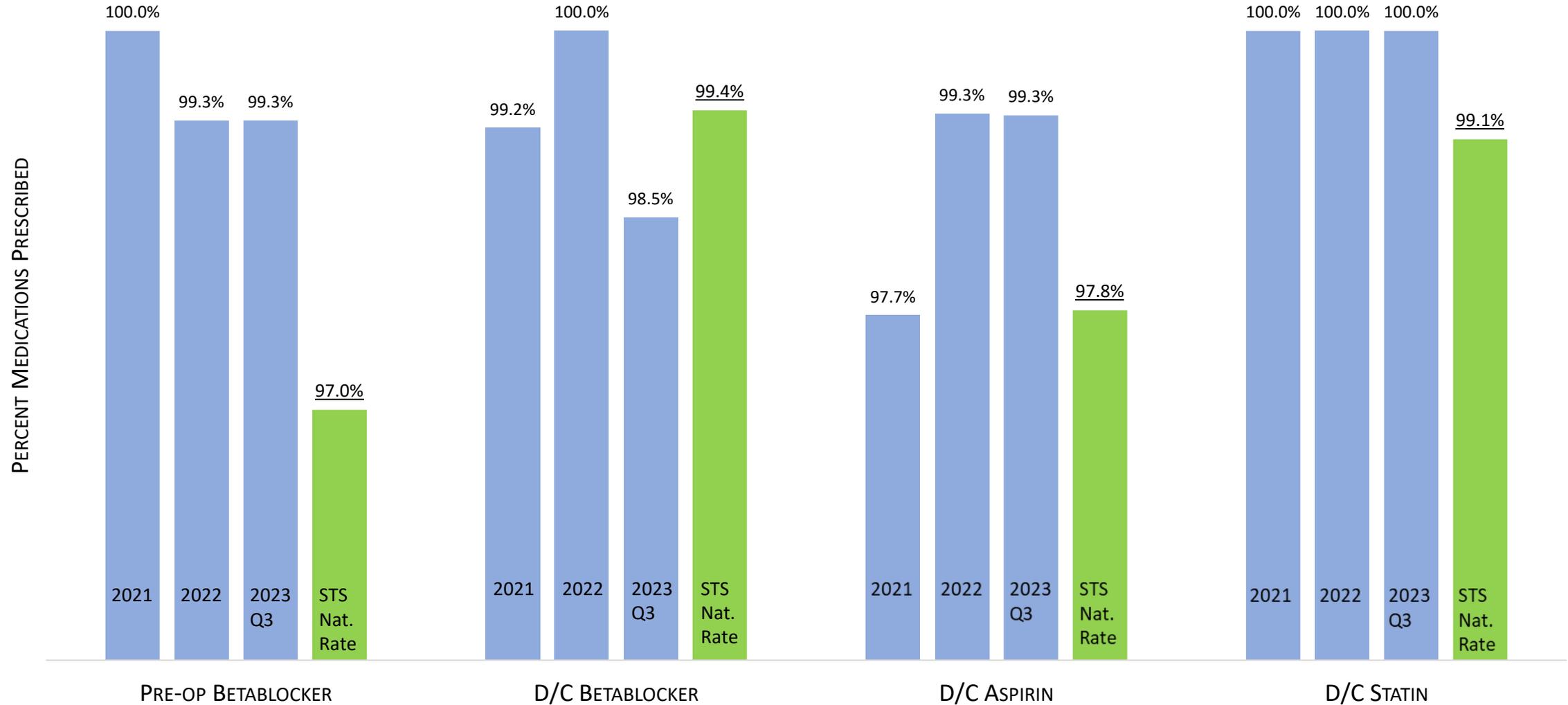Legend: CABG IMA Use | STS National Average

2023 O/E = 0.99
*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023
[1]Surgeries where at least one internal mammary artery, left or right, was used as a bypass graft. Excludes emergent or salvage cases, No LAD disease, previous thoracic or cardiac surgery, subclavian stenosis or Hx of mediastinal radiation. Q3-2020 – 2021 COVID+ pt.'s Excluded.

CABG Prescribed Medications Pre-op & Discharge

PERCENT MEDICATIONS PRESCRIBED

PRE-OP BETABLOCKER
- 2021: 100.0%
- 2022: 99.3%
- 2023 Q3: 99.3%
- STS Nat. Rate: 97.0%

D/C BETABLOCKER
- 2021: 99.2%
- 2022: 100.0%
- 2023 Q3: 98.5%
- STS Nat. Rate: 99.4%

D/C ASPIRIN
- 2021: 97.7%
- 2022: 99.3%
- 2023 Q3: 99.3%
- STS Nat. Rate: 97.8%

D/C STATIN
- 2021: 100.0%
- 2022: 100.0%
- 2023 Q3: 100.0%
- STS Nat. Rate: 99.1%

2023 O/E = 1.0
***STS National Average Comparison reporting period 01/01/2023 through 09/30/2023**
Performance is measured by the proportion of patients who receive all of the perioperative medications for which the patient is eligible . The required perioperative medications are: 1) preoperative beta blockade therapy; 2) discharge anti-platelet medication; 3) discharge beta blockade therapy; and 4) discharge anti-lipid medication. Note: patients who die prior to discharge are not eligible for discharge medications; contraindicated medications are considered non-eligible.

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CABG Skin-to-Skin and Bypass Pump Durations
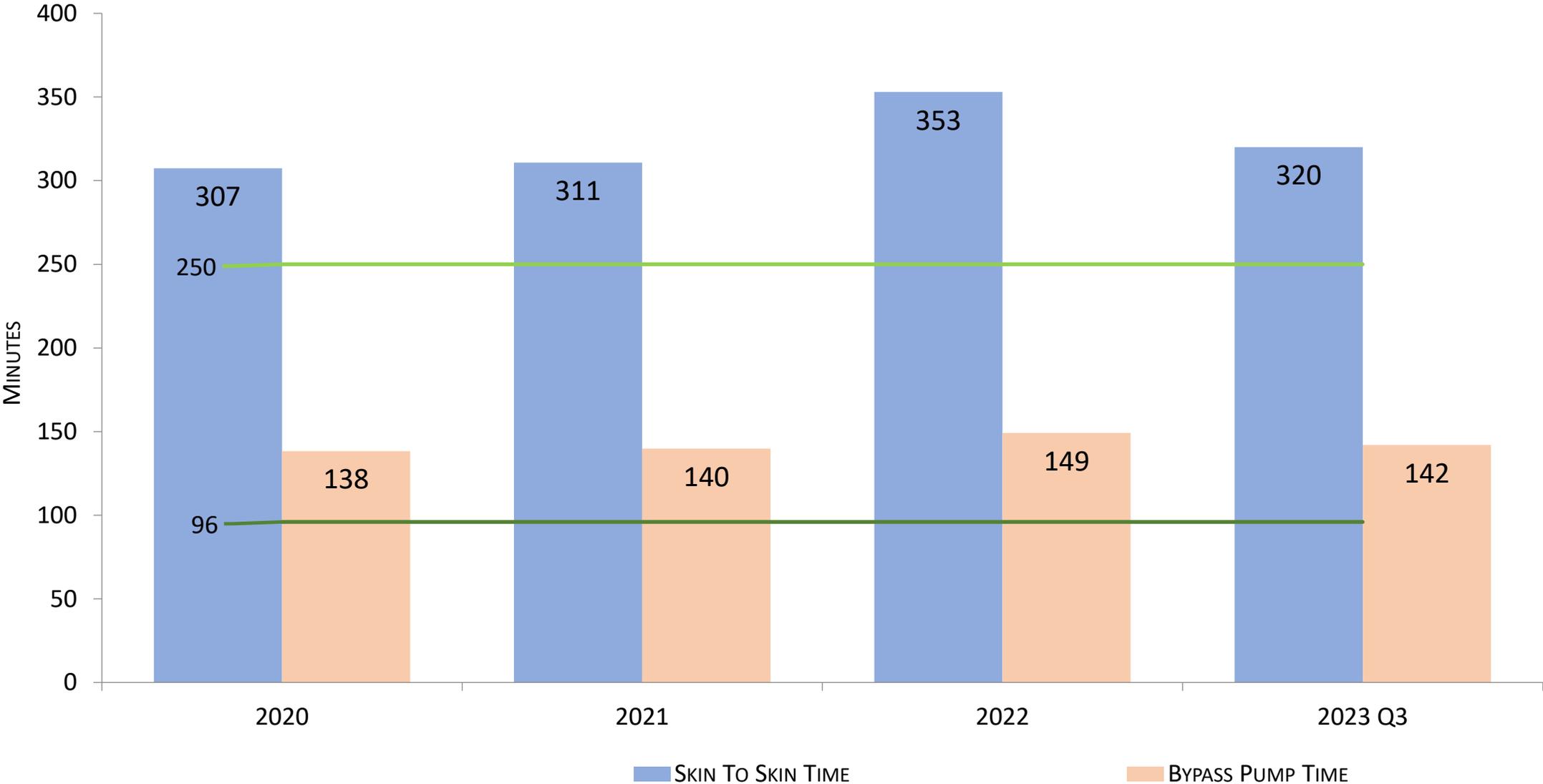
2023 O/E Skin Times = 1.3
2023 O/E Pump Times = 1.5
*STS National Average Comparison reporting period 01/01/2023 through 09/30/2023

KAWEAH HEALTH CARDIOTHORACIC SURGERY VOLUMES[1]
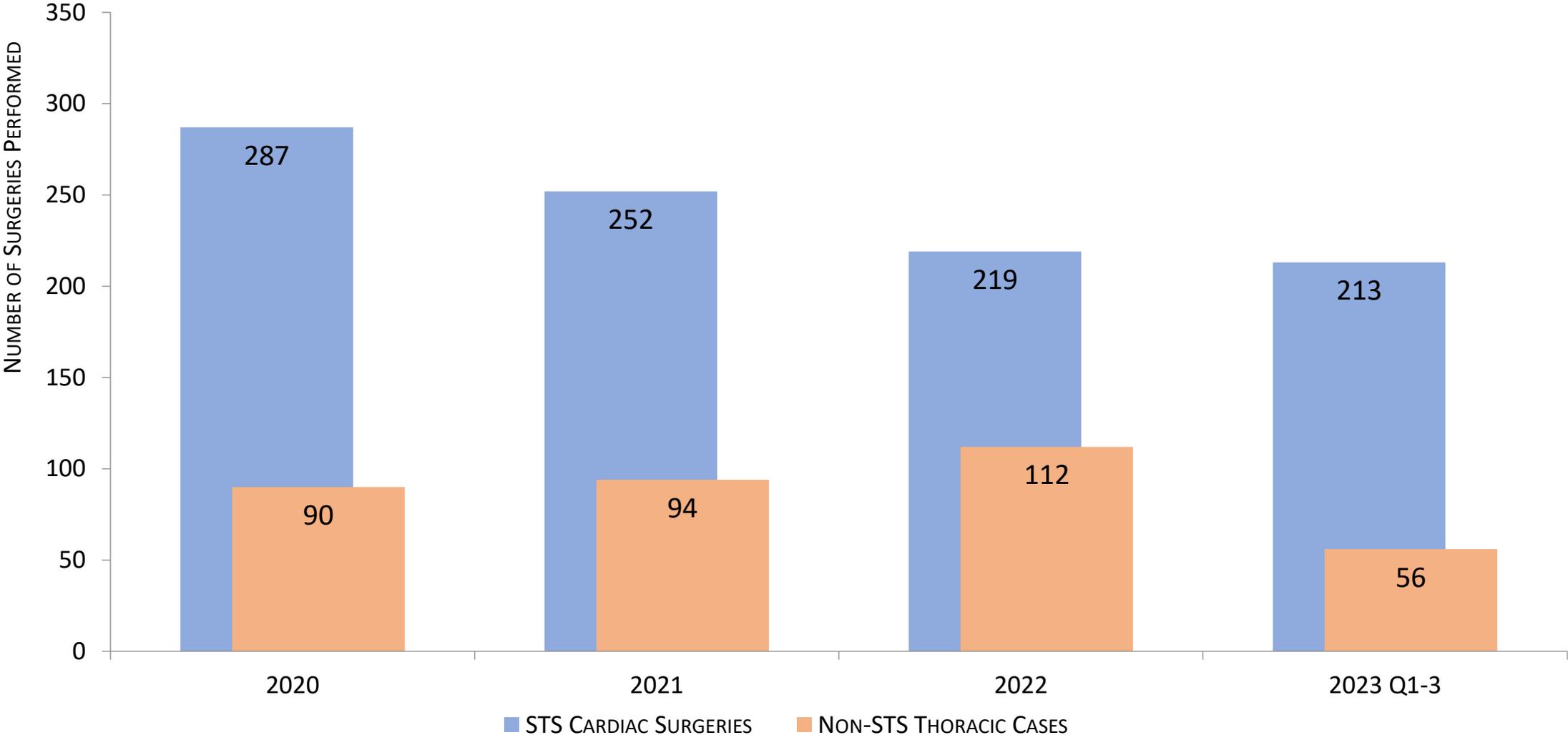
[1] Cardiac surgery as defined per STS database. Includes all 7 Major Procedure Categories **(CABG, AVR, AVR+CABG, MVR, MVR+CABG, MVP, MVP+CABG) + Other Heart only procedures.**

Outstanding Health Outcomes Update

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

May 2024

Outstanding Health Outcomes (OHO) Dashboard

Sepsis (SEP)

	FY 2024 Target	FY 2022	FY 2023	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	FYTD 24
SEP-1 CMS % bundle compliance	85%	75%	73%	68%	77%	76%	76%	82%	69%	71%	85%					76%
Sepsis and Related Conditions o/e mortality	≤0.78		1.12	0.75	0.82	0.78	0.84	1.38	1.02	0.92	0.93					0.96

Central Line Associated Blood Stream Infection (CLABSI)

	FY 2024 Target	FY 2022	FY 2023	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	FYTD 24
CLABSI Events		18 Ex COVID	14 Ex COVID	1	2	3	0	3	0	2	3	1				15
CLABSI SIR	0.39	1.01 Ex COVID	0.93 Ex COVID	0.83	1.16	2.22	0.00	1.15	0.00	1.29	2.31	0.86				1.22
Central Line Utilization Rate	0.68	1.02	0.88	0.749	0.791	0.828	0.774	0.685	0.876	0.822	0.799	0.66				0.77

Catheter Associated Urinary Tract Infection (CAUTI)

	FY 2024 Target	FY 2022	FY 2023	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	FYTD 24
CAUTI Events		23 Ex COVID	12 Ex COVID	0	0	2	0	2	1	1	0	0				6
CAUTI SIR	0.40	1.09 Ex COVID	0.55 Ex COVID	0.00	0.00	1.06	0.00	0.97	0.46	0.46	0.00	0.00				0.34
Indwelling Uninary Catheter (IUC) Utilization Rate (ICU)	0.70	1.18	1.22	0.869	0.925	1.040	1.080	1.10	1.077	1.025	1.07	0.98				1.02

Methicillin-Resistant Staphylococcus Aureus (MRSA)

	FY 2024 Target	FY 2022	FY 2023	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	FYTD 24
MRSA Events		10 Ex COVID	6 Ex COVID	0	0	1	0	1	3	2	0	0				7
MRSA SIR	0.55	1.11 Ex COVID	0.66 Ex COVID	0.00	0.00	1.47	0.00	1.32	3.00	2.26	0.00	0.00				1.12

KEY

Does not meet goal/benchmark	Within 10% of goal/benchmark	Outperforming/ meeting goal/benchmark

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Action Plan Summary

Sepsis

- Focus on 1 hr bundle and expanding to inpatient areas, new order sets/power plans in process with physician stakeholders
- Six Sigma improvement work in process to re-identifying root causes of SEP-1 non-compliance to focus improvement work on the highest contributing factors

Healthcare Acquired Infections

- Super "HAI Brain Trust" Quality Focus Team established, approved by Quality Improvement Committee
- Combine and focus efforts on process metrics that affect the SIRs for CAUTI, CLABSI & MRSA and includes:
  - Line utilization (both central lines and indwelling urinary catheters
    - Multidisciplinary Rounds (MDR) started January 2024 in ICU, addresses line necessity (less lines=less infections), monitoring line utilization rates to evaluate effectiveness; ICU central line and ICU utilization rates for last 2 months (March & April 2024) have been lower that FY23 SUR. Plan to spread MDRs to DCVICU and Step Down units following Intensivist-Hospitalist transitions.
    - Reinvigorate the Standardized Procedure – medical staff approved criteria for nurses to remove urinary catheters
  - Decolonization rates
    - Nasal Decolonization– Significantly improved from 32% (Jan-June 2023) to 84% (July – Jan 2024). Includes patients who are screened and test positive for MRSA upon admission and not discharged within 24 hours of Mupirocin order (decolonization agent). Next Steps – determining and addressing root causes of patients missed screening, and review of workflow of Mupirocin order to administration processes
    - Skin Decolonization – developing process for skin decolonization through CHG bathing
  - Cleaning effectiveness in high risk areas
    - Quantifying the effectiveness of cleaning during EVS onboarding and annual review with ATP testing; continue to measure cleaning effectiveness through ATP testing in high risk areas (ie. OR's, ICUs)
  - Hand Hygiene (use of BioVigil system for monitoring)
    - Increase use of BioVigil system, improvement from 31% of active users achieving target badge hours in FY 2023, to 51% (July 23' to Mar 24'). Next steps, additional tools provided to leaders and staff to support increase use, and evaluation of active users with the denominator
    - Started March 2024 – RECOGNITION PROGRAMS for units/departments that have achieve highest % of staff meeting 80hrs active time (paired) per month!

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Questions?

The pursuit of healthiness