VCSQI Spring Meeting

Networking Hour Conversation Prompts

1. What is the staffing and structure of TAVR at your institution (cath lab vs. hybrid OR)?

2. How is your program implementing Diversity, Equity, and Inclusion programs?

3. Has your ratio of travelers vs. FTEs stabilized since the peak of COVID? What measures have you taken to ensure consistent staffing?

Virginia Cardiac Services Quality Initiative

Spring 2024

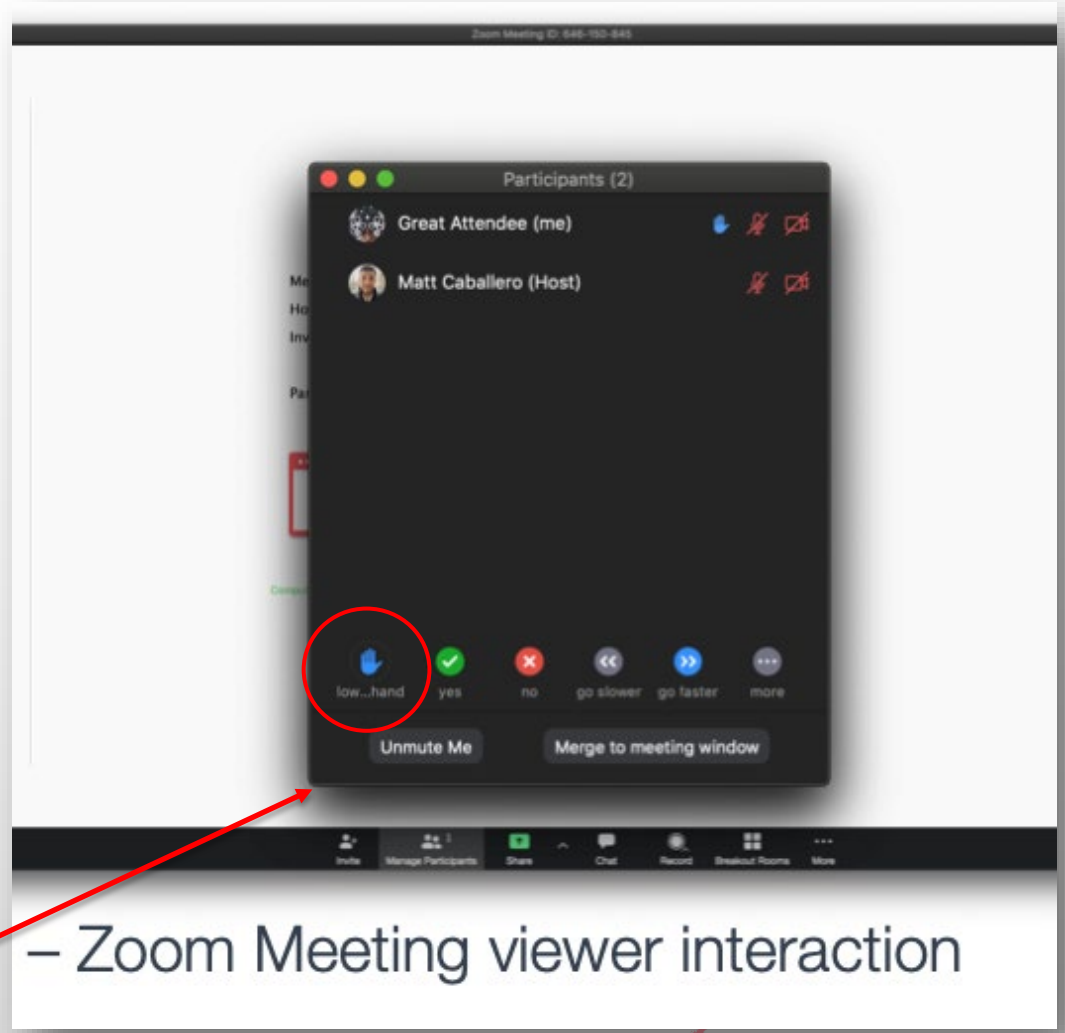
Quarterly Meeting

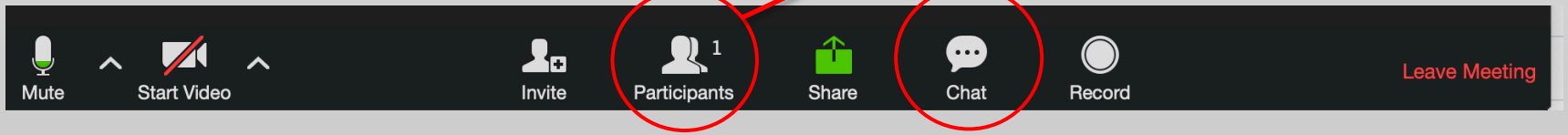
Transforming Cardiovascular Care to Improve Patient Experience and Value

VCSQI

To ensure a smooth meeting...

- Please mute your lines (phone or audio), until called upon
  - Interactive features available under **'participants'** window
- Hold questions until end of presentation
- Use "Raise Hand" feature for questions or comments
- The Chat Room can also be used to ask questions
- **Call/text Sherri (216) 513-3141** if you need assistance





New CME Opportunities Available

- Medicine- AMA PRA Category 1
- Nursing- ANCC Contact Hours
- Physician Assistant - AAPA
- IPCE Performance Improvement
- ABMS Maintenance of Certification - MOC II- ABIM

How to Claim Credit

1. Go to www.cmevillage.com.
2. Click on the “Learning Portal” button and select “CE Certificate”.
3. **Sign in with your email and password or create an account if you are a new user.**
4. Enter CE Activity Code **150805** and click “Submit” and “Continue”.
5. Complete the evaluation and click “Done”.
6. Certificate Preparation; indicate number of credits you wish to claim for attending this activity. Click “Submit”
7. Click “Print Certificate” or you can access later by visiting our website, Click “Learning Portal”, Sign in at the top of the page and click “Credit History & Past Certificate”.

For problems, contact the CME office at uvacme@virginia.edu

PLEASE NOTE: The post activity evaluation will only be available for a 30-day period. Credit will not be issued after the evaluation period has closed.

Tonight's Agenda

Welcome and Highlights from the Board
Mohammed Quader, MD; Virginia Commonwealth University

Awards & Recognition
Sherri White and Eddie Fonner, VCSQI

VCSQI/VHHA Readmissions Risk Calculator
Sherri White; VCSQI Quality Improvement Advisor

Cost and Quality Data Review
Eddie Fonner; VCSQI Executive Director

Efficiency Metrics
Mohammed Quader, MD; Virginia Commonwealth University

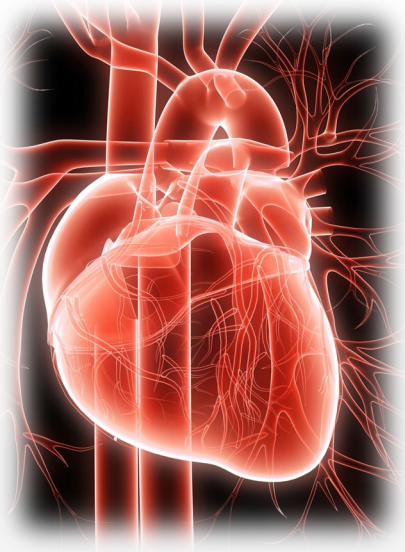
VCSQI Quality Initiatives:
Successful integration and implementation of quality improvement strategies improve outcomes and quality

Reduction of Prolonged Ventilation: The Road of Success
Dana Millner, RN, BSN, CCRN; Virginial Commonwealth University

Welcome and Highlights from the Board

Mohammed Quader, MD
Virginia Commonwealth University
VCSQI Chairman

VCSQI Strategic Plan



Mission

Transform Cardiovascular Care to Improve Patient Experience and Value

Vision

Optimize Heart Care Outcomes Through National Collaboration, Innovation and Research

Core Values

- **V** alue-Based Best Practices
- **C** ollabration & Transparency
- **S** tewardship of Healthcare & Costs
- **Q** uality and Patient Centered
- **I** nnovation; Data and Analytic-Driven

Board Updates: Spring 2024

- Succession planning:
  - Election of VCSQI Vice Chairperson: Dr. Nick Teman, UVA
- Changes in investment partner and strategy
- Angiogram Reviews: Members needed for participation and presentation
- 2023 VCSQI Contributor of the Year
  - Winner will be announced tonight!

Awards & Recognition

Sherri White and Eddie Fonner, VCSQI

Survey Participation

Winter Quarterly Meeting Feedback Survey

- Barbie Schumm (Mary Washington)
- Maribeth Fonner (VCSQI Alumni)
- Sue Ann Carneal (Riverside)
- Pete O'Brien, MD (Centra)

VCSQI Service Evaluation

1. Barbie Schumm (Mary Washington)
2. Ourania Preventza (UVA)
3. Robert Shor, MD (VCSQI)
4. Eve Dallas (UVA)
5. Megan Vaughan (Bon Secours Southside)
6. Freedom Fonner (VCSQI)
7. Jatifha Harris (Riverside)
8. Robbin W Shifflett (UVA)
9. Linwood Williams, MD (RMH Medical Center)
10. Natasha Ramey (Clinch Valley Health)
11. Kristy Mays-Myers (Carilion)
12. Sue Ann Carneal (Riverside)
13. Judy Green Smith (UVA)
14. Pete O'Brien, MD (Centra)
15. Catherine Moore (UVA)

Wheel of Names | Random name picker

Alan Speir, MD (Inova)

Robert Shor, MD (Virginia Heart – Retired)

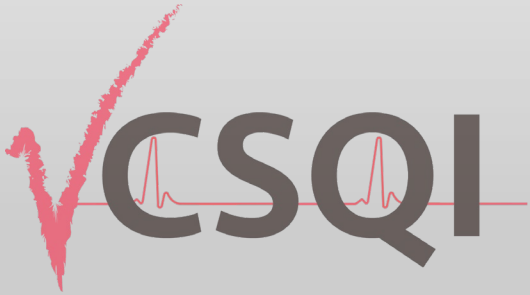
Recognizing Our Past Chairs

Improving heart care quality, patient experience and costs

VCSQI

The Nominees

Improving heart care quality, patient experience and costs



Robert Lancey, MD (Sentara Rockingham)

Dr. Robert Lancey is recognized for his leadership, knowledge sharing, and contribution to reducing readmissions. His involvement in workgroups, presentations, and taking on roles such as treasurer showcases his commitment to VCSQI's mission.

"Dr. Lancey has been a tremendous resource and contributor for our VCSQI family."

- Shelley Cahalan, Sentara

NOMINATOR(S):

Tiasha Campbell (Sentara), Shelley Calahan (Sentara), Anonymous

Nancy Fauber, RN (UVA)

Nancy Fauber is recognized for her integral role in the Cardiology team at UVA Health, going above and beyond in managing data registries and providing actionable feedback on STEMI/nSTEMI calls. Her ability to foster collaboration across the healthcare team has been pivotal in identifying system barriers, areas of opportunity for improvement, and celebrating excellence in patient care.

Blythe Cherrix lauds Nancy Fauber for her invaluable contribution to the heart team, emphasizing her role in combining transport, providers, nurses, technicians, and ancillary services to improve patient care and experience.

NOMINATOR(S):

Tiasha Campbell (Sentara), Shelley Calahan (Sentara), Anonymous

VCSQI

Judy Smith, RN (UVA)

Judy Smith is recognized across multiple nominations for her profound expertise and constant presence in the realm of STS data and VCSQI meetings. Renowned for her readiness to support and innovate, Judy is seen as an encyclopedia of knowledge, significantly enhancing data management practices and playing a transformative role in quality improvement and evidence-based practice at UVA. Her dedication to improving patient outcomes and operational standards has earned her the respect and gratitude of colleagues and peers alike.

"Judy is a walking encyclopedia of the STS data." - Nick Teman, UVA

"She is the ultimate collaborator - she is transparent in sharing of information and solutions." - April Howell, University of Virginia

"Judy's enthusiasm for this work is contagious and affirming." - Karen Forsman, University of Virginia

NOMINATOR(S):
Nick Teman, MD (UVA), Sue Ann Carneal (Riverside), April Howell (UVA), Ourania Preventza (UVA), Jatifha “Jay” Harris (Riverside) Karen Forsman (UVA)

VCSQI

J'nay Harshbarger (Inova)

J'nay Harshbarger has made significant contributions to process improvement initiatives, specifically in reducing bleeding rates. Through collaboration and sharing of the "Reduce the Bleed Initiative," she has enabled operational success and resource identification for Sentara Norfolk General Hospital.

"J'nay was able to share their 'Reduce the Bleed Initiative'... our hospital was able to get a better understanding of what we needed to do to improve this bleeding metric."

- Rosalba Lozano, Sentara Health

NOMINATOR(S):

Rosalba Lozano (Sentara)

Mike Brown, CCP (Mary Washington)

Mike Brown is lauded for his passion for quality improvement, community dedication, and impactful contribution to AKI reduction. His engagement and collaborative efforts have enhanced patient outcomes within VCSQI.

"Mike is caring, compassionate, passionate and excellent at making quality a large portion of our Cardiology team."

- Jessie S Mountjoy, Mary Washington

NOMINATOR(S):

Jessie S Mountjoy (Mary Washington)

VCSQI

Peter O'Brien, MD (Centra)

Peter O'Brien is praised for his visionary leadership in founding and continually reinventing VHAC, expanding its mission to improve healthcare across Virginia. His collaborative approach and steadfast commitment to the mission have been instrumental in VHAC's success.

"Peter O'Brien was a visionary to realize the need to start VHAC and remarkable in his unwavering energy continuing to lead the organization since its inception."

- Robert C. Bernstein, EVMS / Sentara

NOMINATOR(S):

Robert C. Bernstein (EVMS / Sentara)

University of Virginia

The University of Virginia is acknowledged for its outstanding contributions to collaborative projects that align with the VCSQI mission. The institution's efforts in various key areas, such as atrial fibrillation (A fib), acute kidney injury (AKI), disparities, and structural heart, exemplify its commitment to improving patient care and outcomes in cardiac surgery and related fields.

Ourania Preventza highlights the University of Virginia's multiple collaborative projects, demonstrating the institution's leadership and participation in efforts to advance the VCSQI mission.

NOMINATOR(S):

Ourania Preventza (UVA)


VCSQI
COLLABORATOR
OF THE
YEAR
2023

VCSQI/VHHA Readmissions Risk Calculator

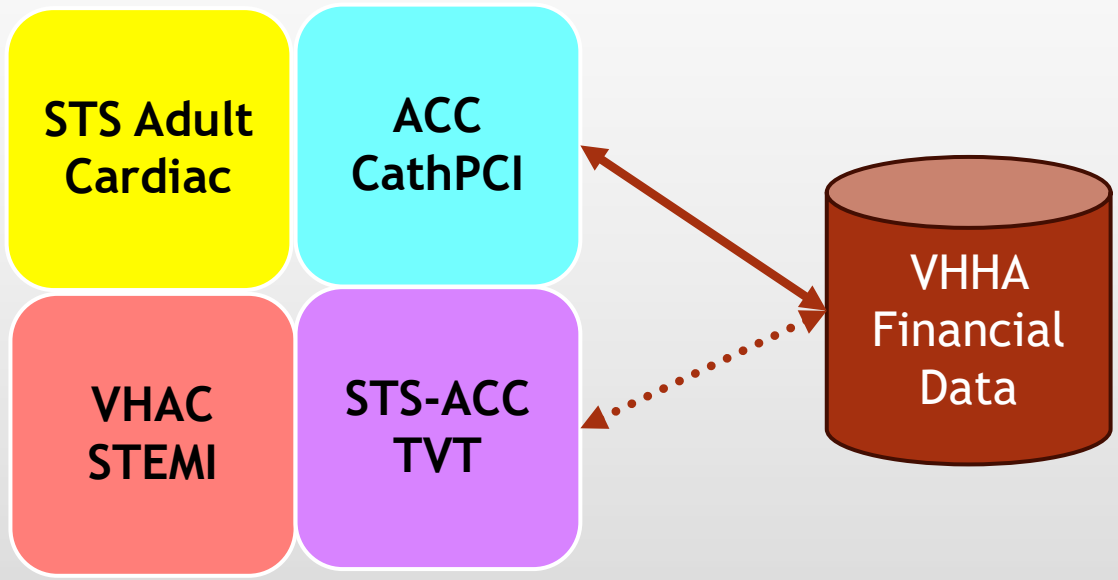
Sherri White; Quality Improvement Advisor, VCSQI

Cost and Quality Data Review

Eddie Fonner
Executive Director, VCSQI

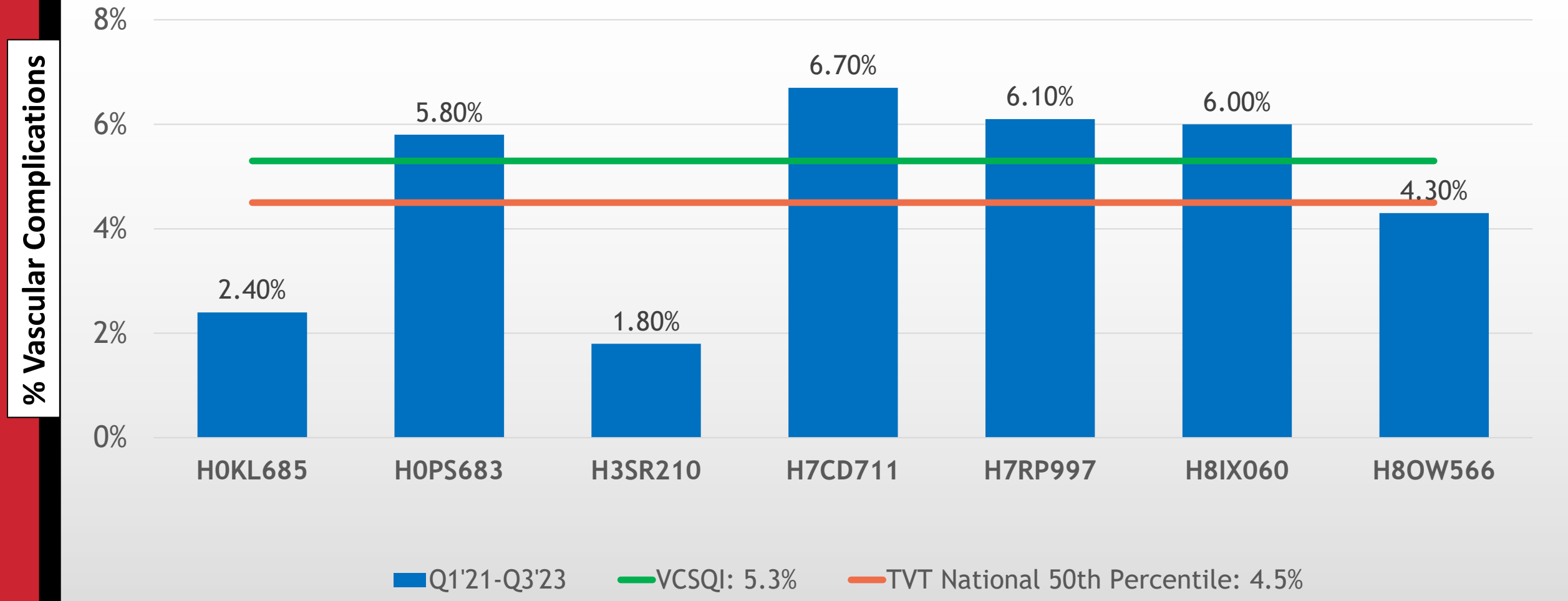
VCSQI Database Summary

- **Extensive Database**
  - 145,000+ STS Adult patients from 2001-2024
  - 86,000+ ACC CathPCI patients
  - 35,000+ ACC CP-MI episodes
  - 4,800+ TVT operations
- **Quarterly and Ad Hoc Reports**
- **Scientific Publishing**
  - 80+ manuscripts & presentations

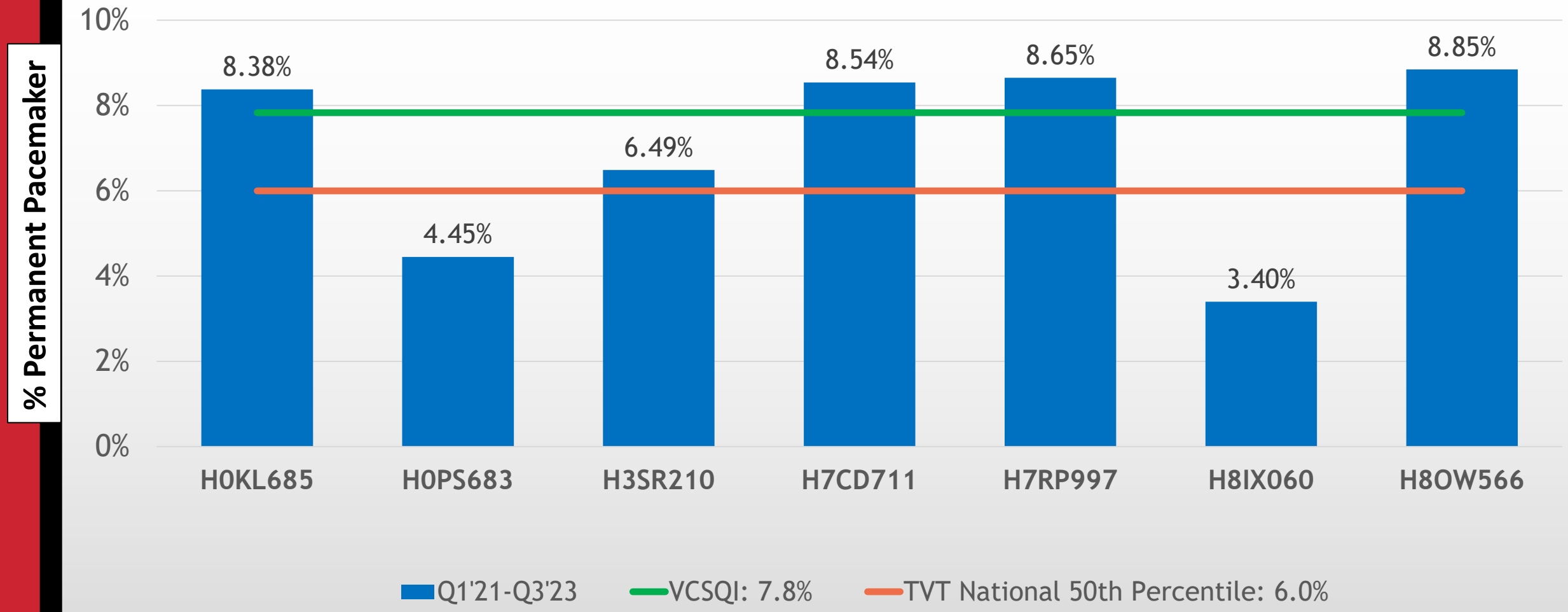


STS-ACC TVT

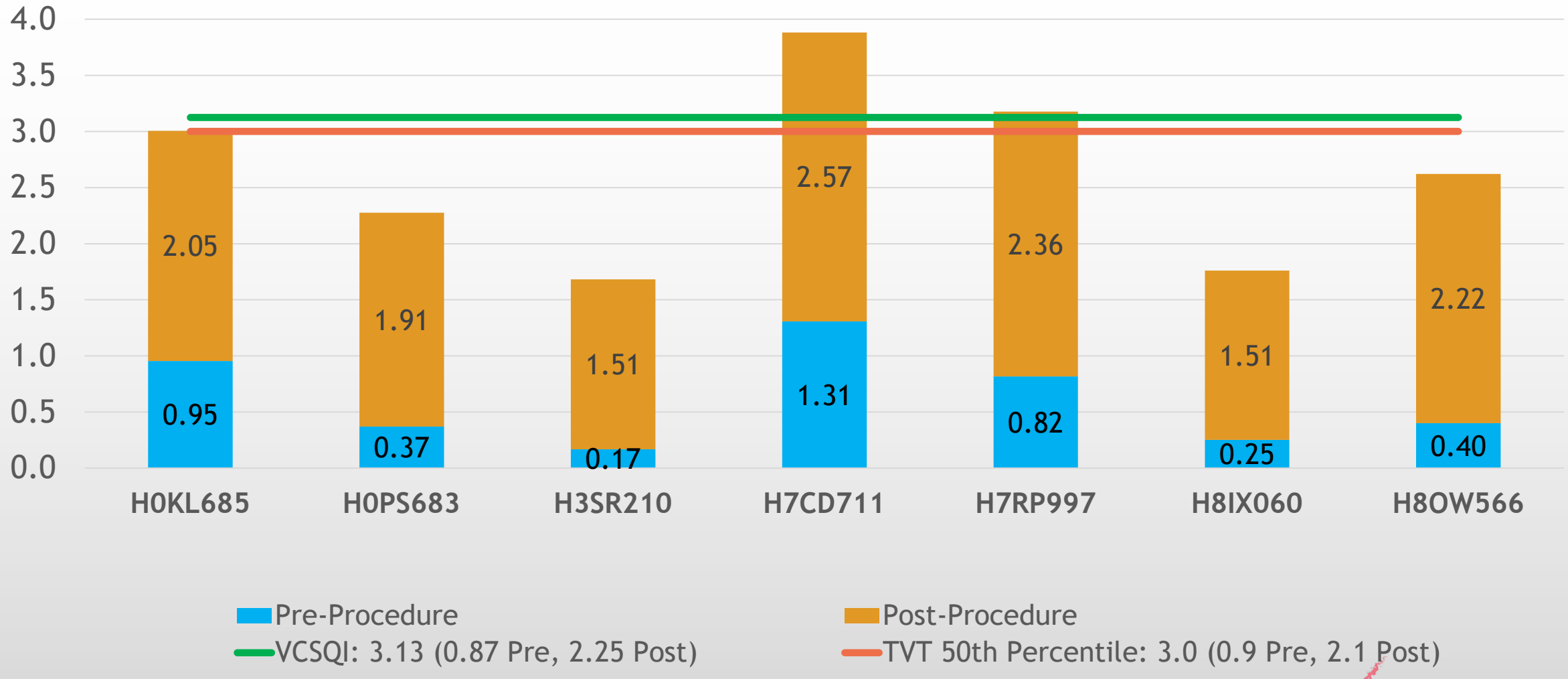
Major or Minor Vascular Complication by Hospital: All TAVR Procedures, Q1 2021 – Q3 2023 (N=3,817)



New Permanent Pacemaker by Hospital: All TAVR Procedures, Q1 2021 – Q3 2023 (N=3,817)

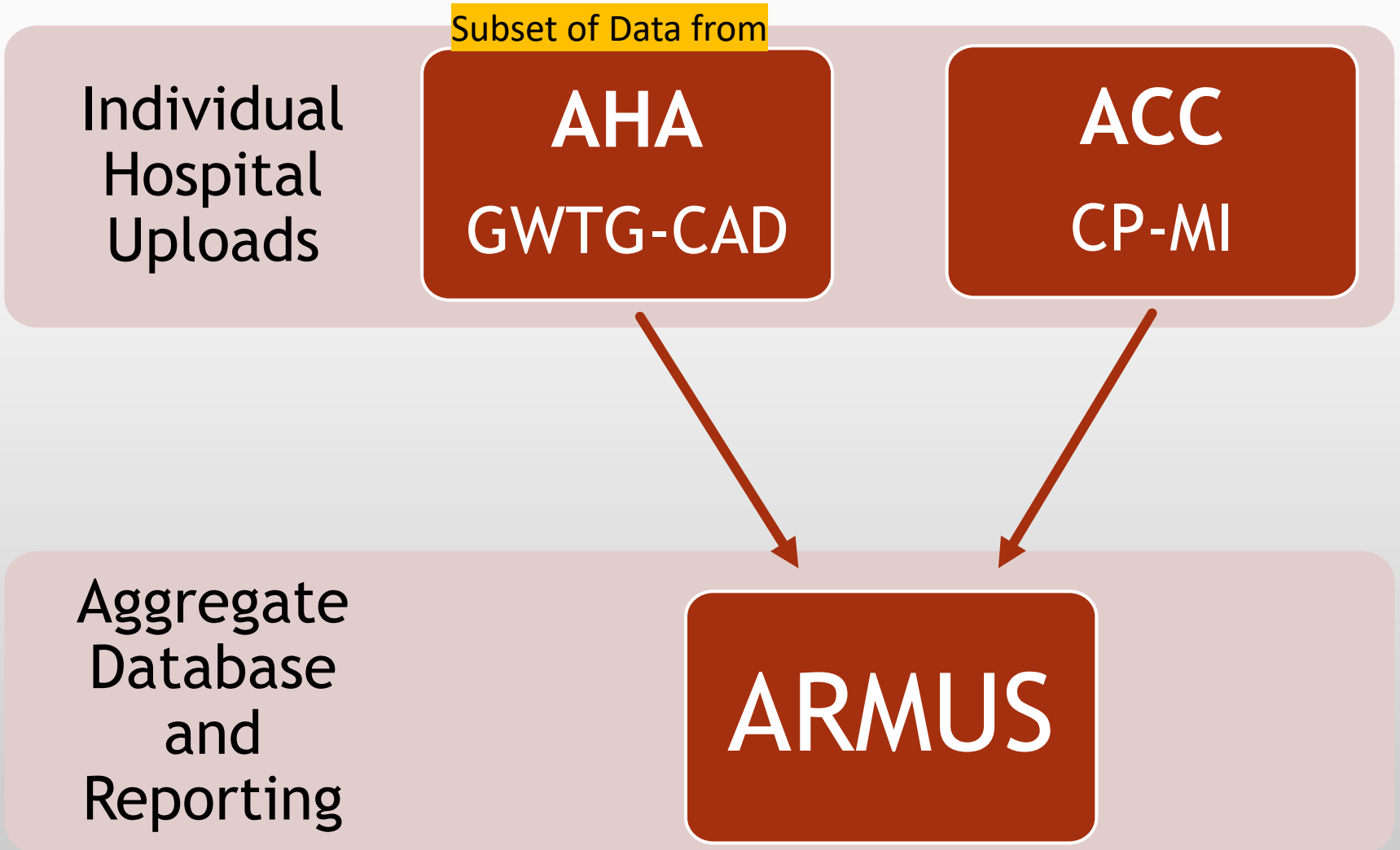


Average Length of Stay by Hospital: All TAVR Procedures, Q1 2021 – Q3 2023 (N=3,817)



VHAC STEMI

Data Aggregation Model



Virginia Heart Attack Coalition
VHAC
VCSQI

STEMI Reports by Region: Q4 2022 – Q3 2023

Population: All STEMI Patients, Q4 2022 – Q3 2023 (N=1,651)	VCSQI	Central	East	North	Northwest	South	West
Median Door In - Door Out (Minutes): Transfer Patients	**58.0**		60.0	50.0	65.5	37.5	63.0
Median Transfer Time between Hospitals	**29.0**		28.0	24.0	32.0	37.0	32.0
FMC to Primary PCI <= 90 Minutes: Non-Transfer Patients	**86.9%**	**84.8%**	84.2%	86.5%	92.0%	90.1%	77.6%
Median FMC to Primary PCI: Non-Transfer Patients	**71.0**	**61.0**	75.0	74.0	63.0	66.0	75.5

= Exceeds VCSQI Average

= Equal to VCSQI Average

= Lower than VCSQI Average

Virginia Heart Attack Coalition VHAC

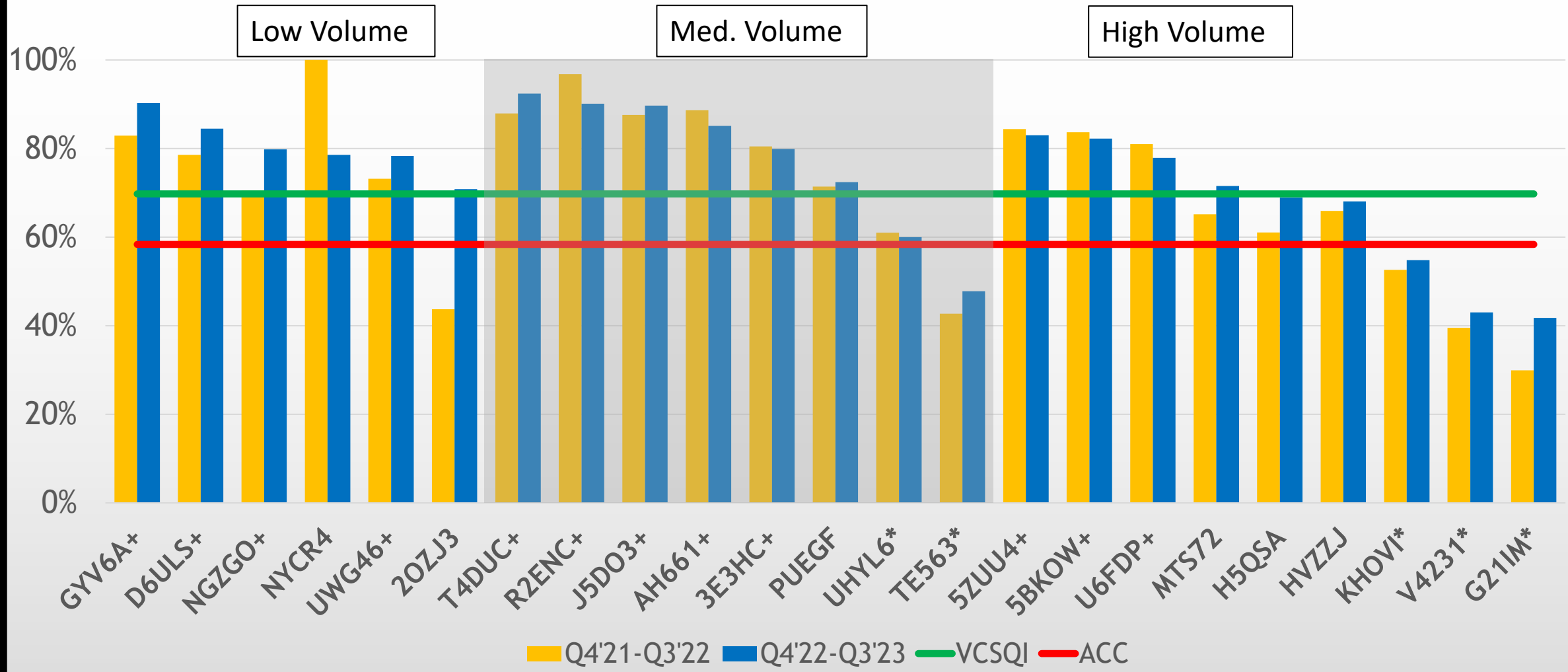
VCSQI

VHAC Workgroups

- VHAC + VCSQI Workgroups
- Thrombolytics
- Cardiogenic Shock
- ED Bypass + False Activations
- PE Response Teams (PERT)
- ECG and EMS Education

ACC CathPCI

Radial Access Site by Hospital: All PCI Procedures, Q4 2021 – Q3 2023 (N=21,035)

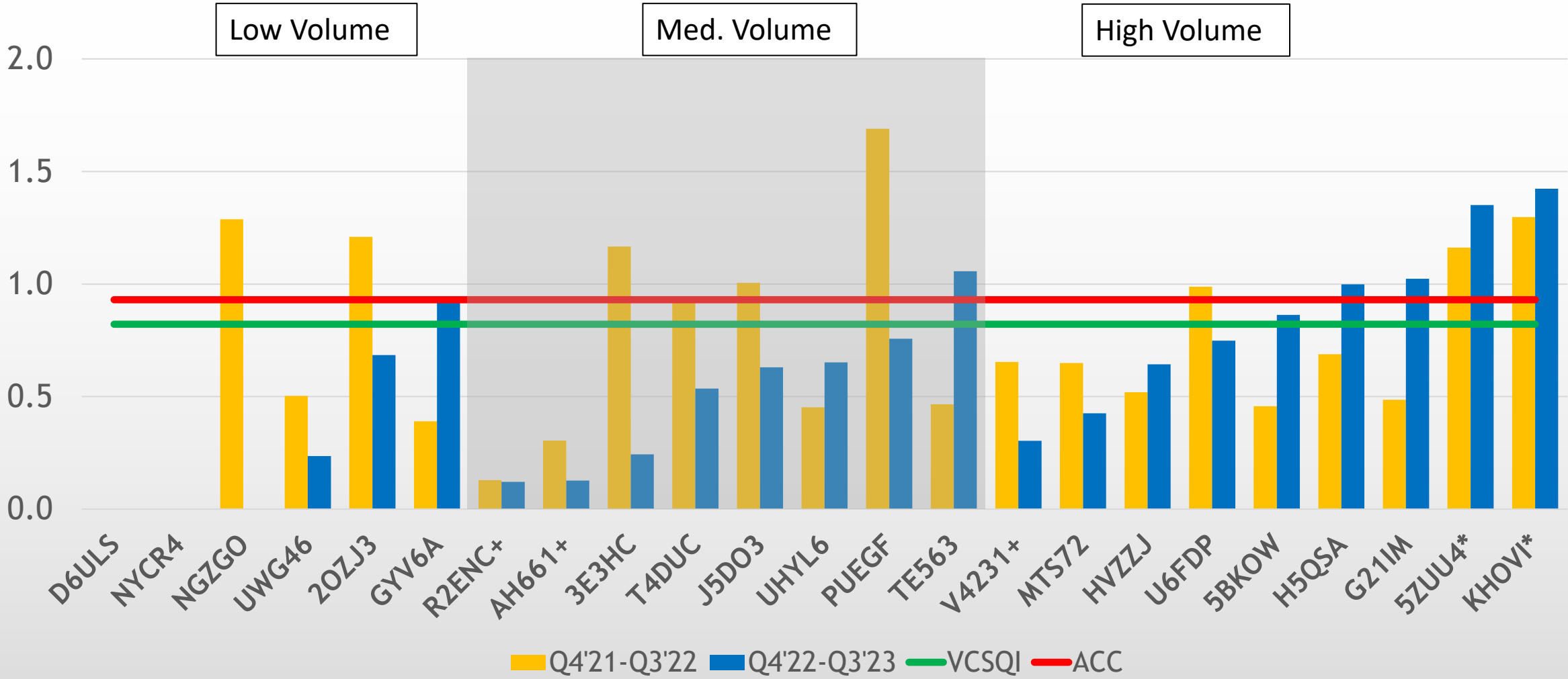


VCSQI: Femoral – 29.9% **Radial – 69.8%**

ACC: Femoral – 41.22% **Radial – 58.35%**

For the latest 4 quarter period:
A plus (+) following the hospital code indicates the hospital is statistically better than the rest of VCSQI
An asterisk (*) following the hospital code indicates the hospital is statistically poorer than the rest of VCSQI

Bleeding O/E by Hospital: All PCI Procedures, Q4 2021 - Q3 2023 (N=20,230)

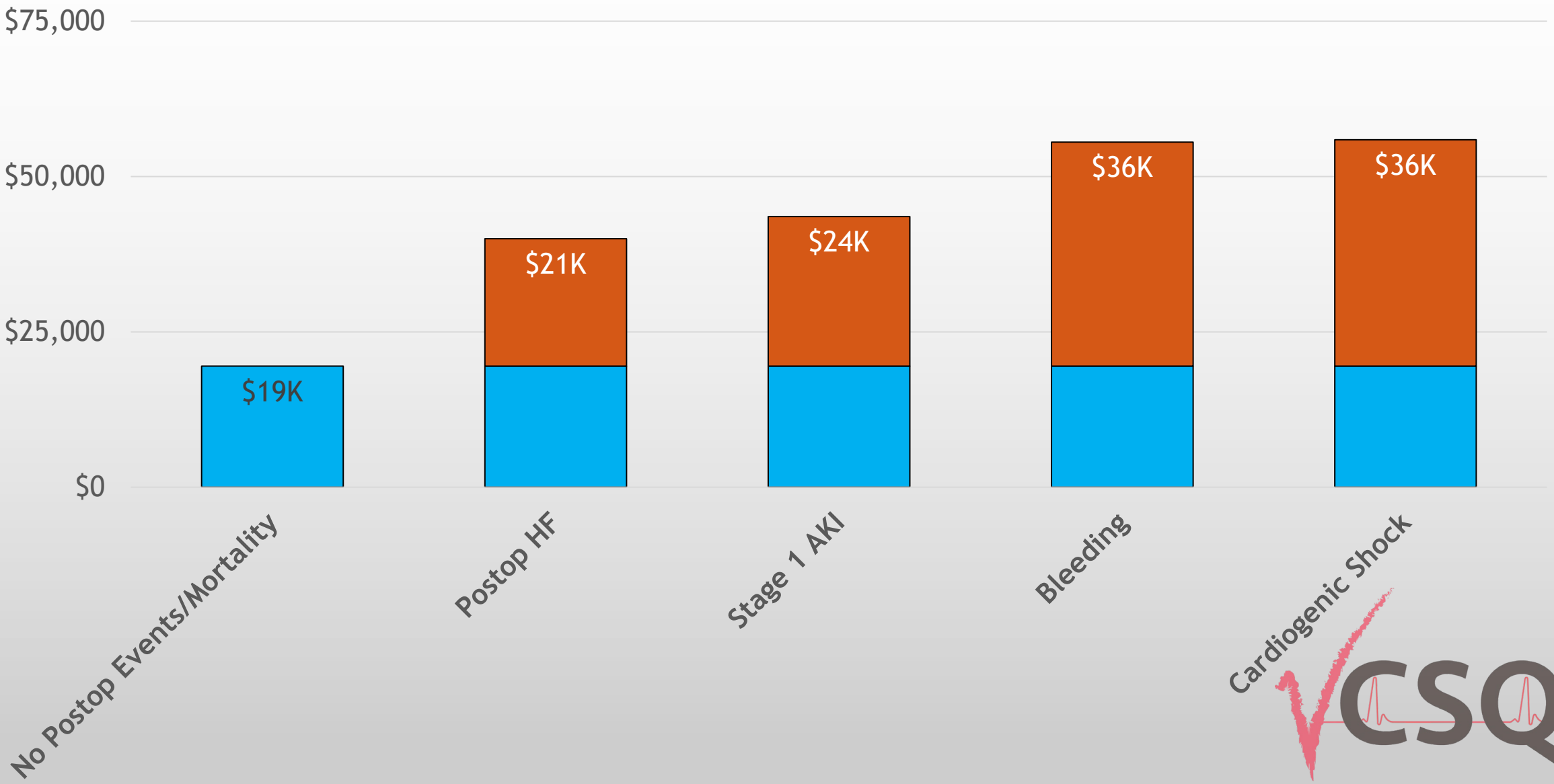


VCSQI: 0.82 (Observed Rate: 2.1%)

ACC: 0.93 (Observed Rate 2.37%)

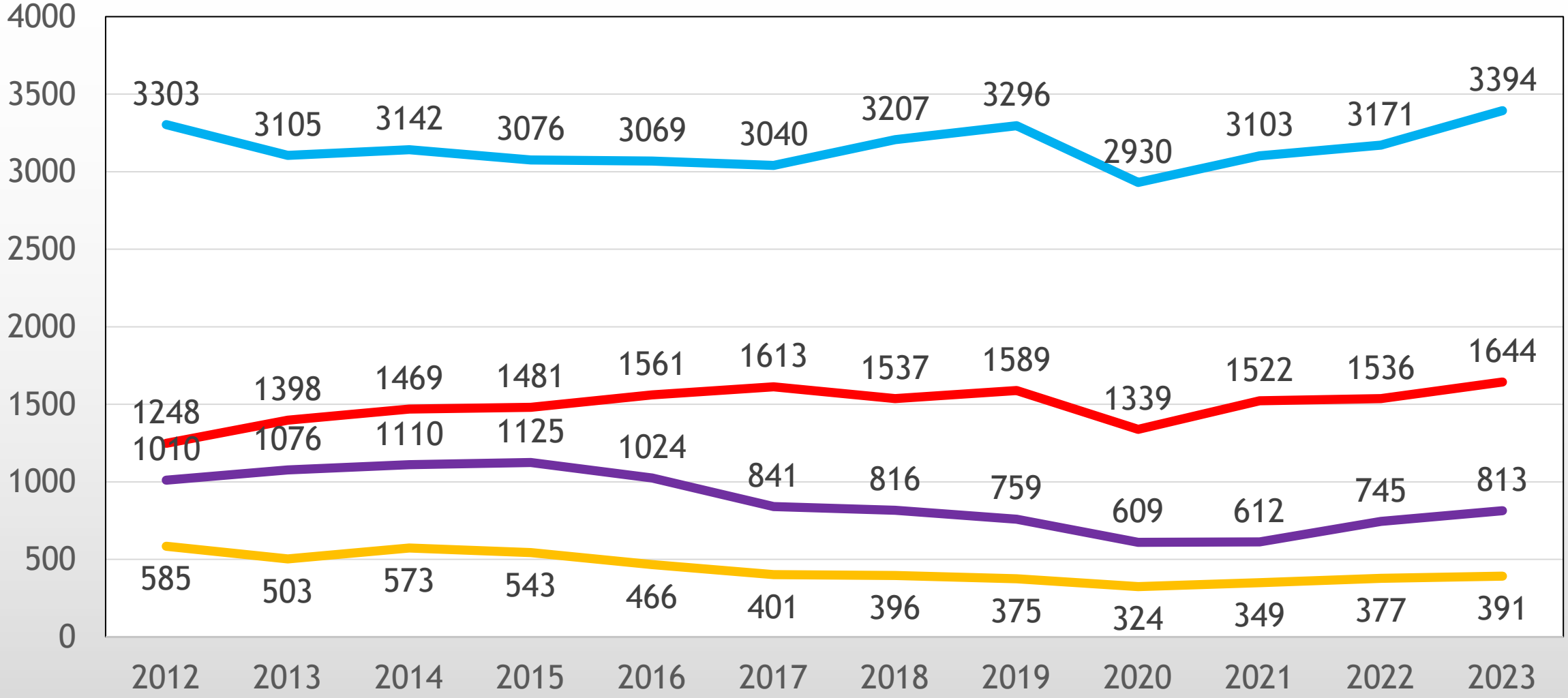
For the latest 4 quarter period:
A plus (+) following the hospital code indicates the hospital is statistically better than the rest of VCSQI
An asterisk (*) following the hospital code indicates the hospital is statistically poorer than the rest of VCSQI

Additive Costs: PCI Procedures, Q1 2017 – Q2 2023



STS Adult Cardiac

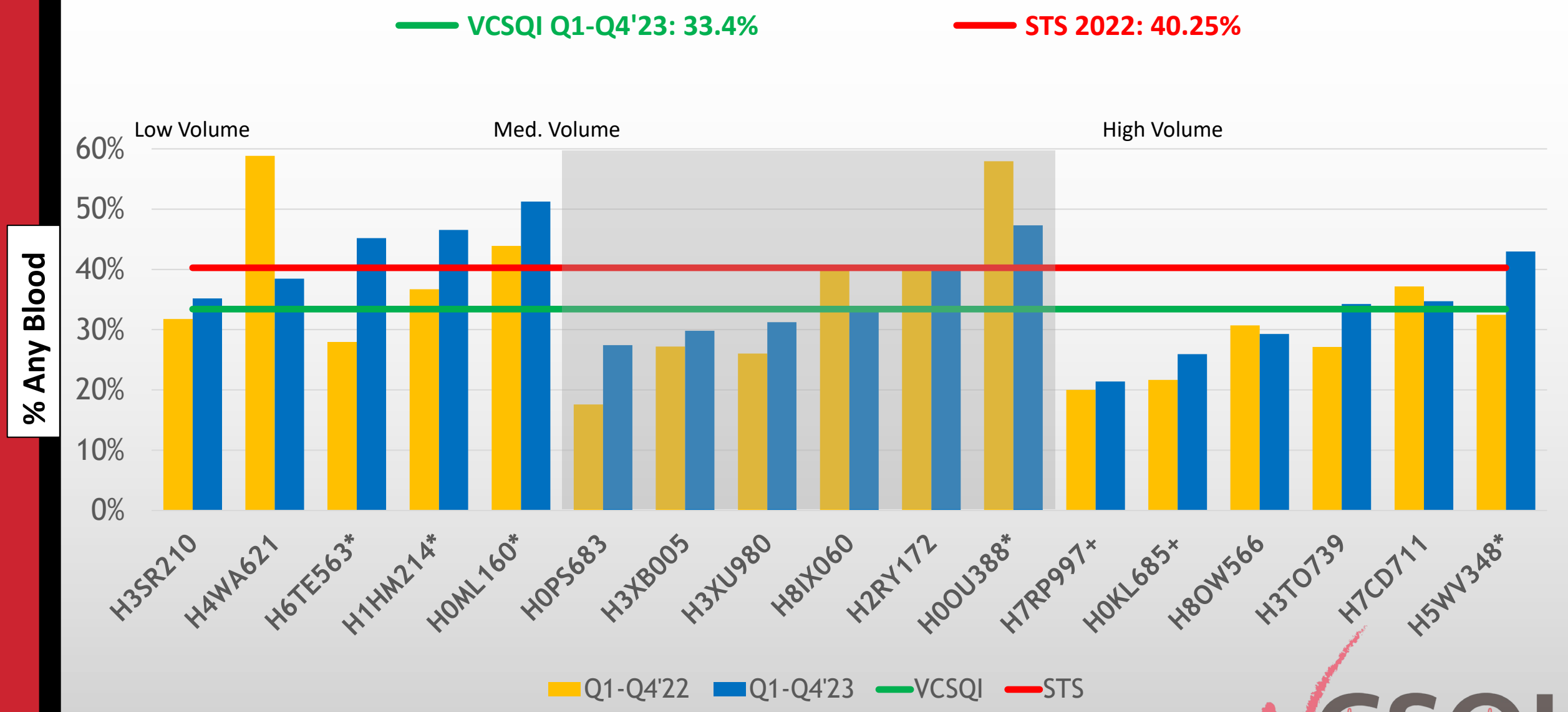
VCSQI Total Cardiac Surgery Volume By Year: 2012 – 2023



Total Volume:	6,146	6,082	6,294	6,225	6,120	5,895	5,956	6,019	5,202	5,586	5,829	6,242

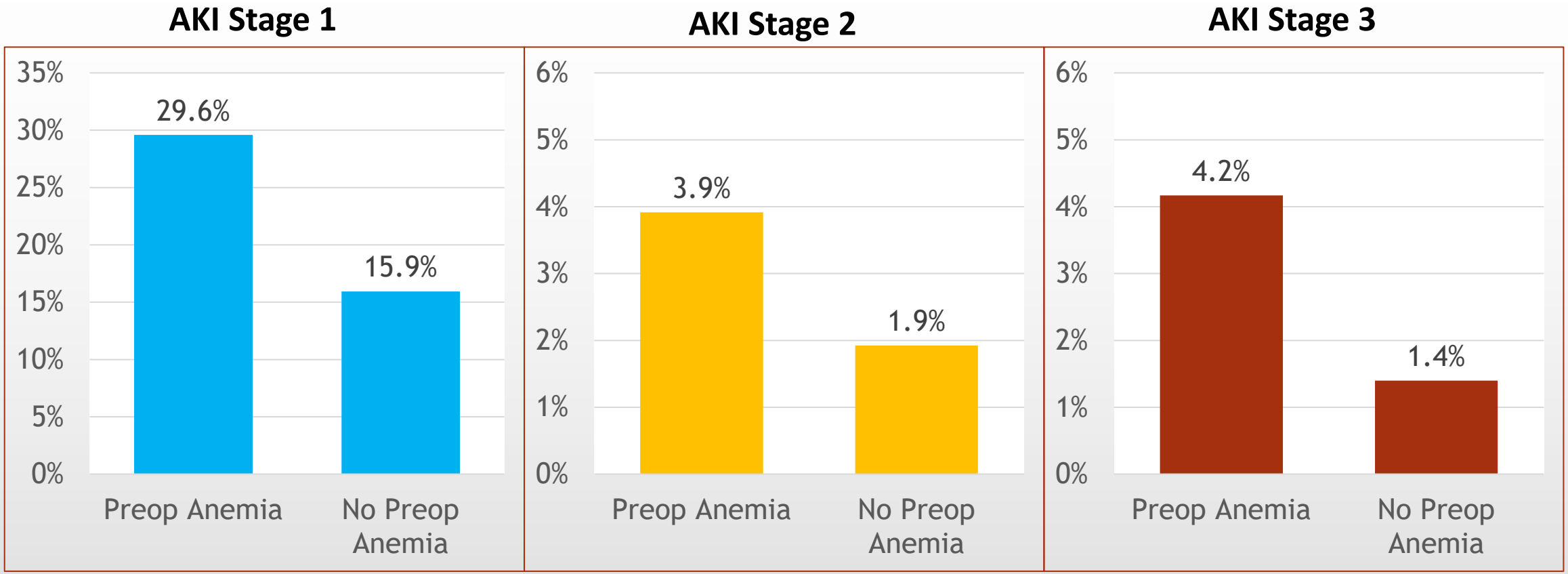
CAB Only Valve Only Valve + CAB Other

Any Intra- or Post-Op. Blood Use by Hospital: Isolated CAB, Q1 2022—Q4 2023



For the latest 4 quarter period:
A plus (+) following the hospital code indicates the hospital is statistically better than the rest of VCSQI
An asterisk (*) following the hospital code indicates the hospital is statistically poorer than the rest of VCSQI

AKI vs. Preop Anemia*: VCSQI Total, CAB Only, Q1 2022 – Q4 2023 (N = 6,333)

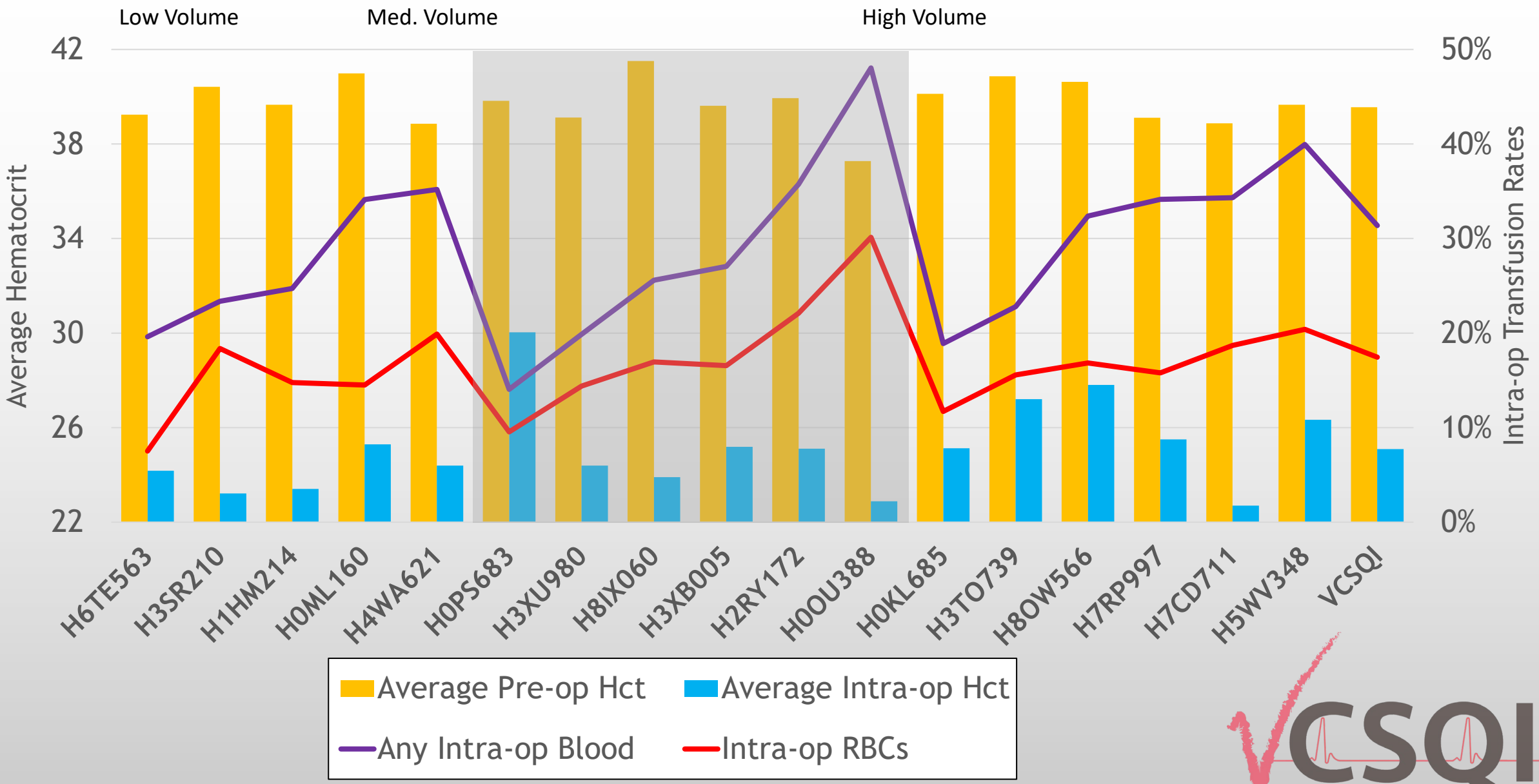


p < 0.001 p < 0.001 p < 0.001

* Anemia Definition: Hgb < 12.0 g/dL in women and < 13.0 g/dL in men

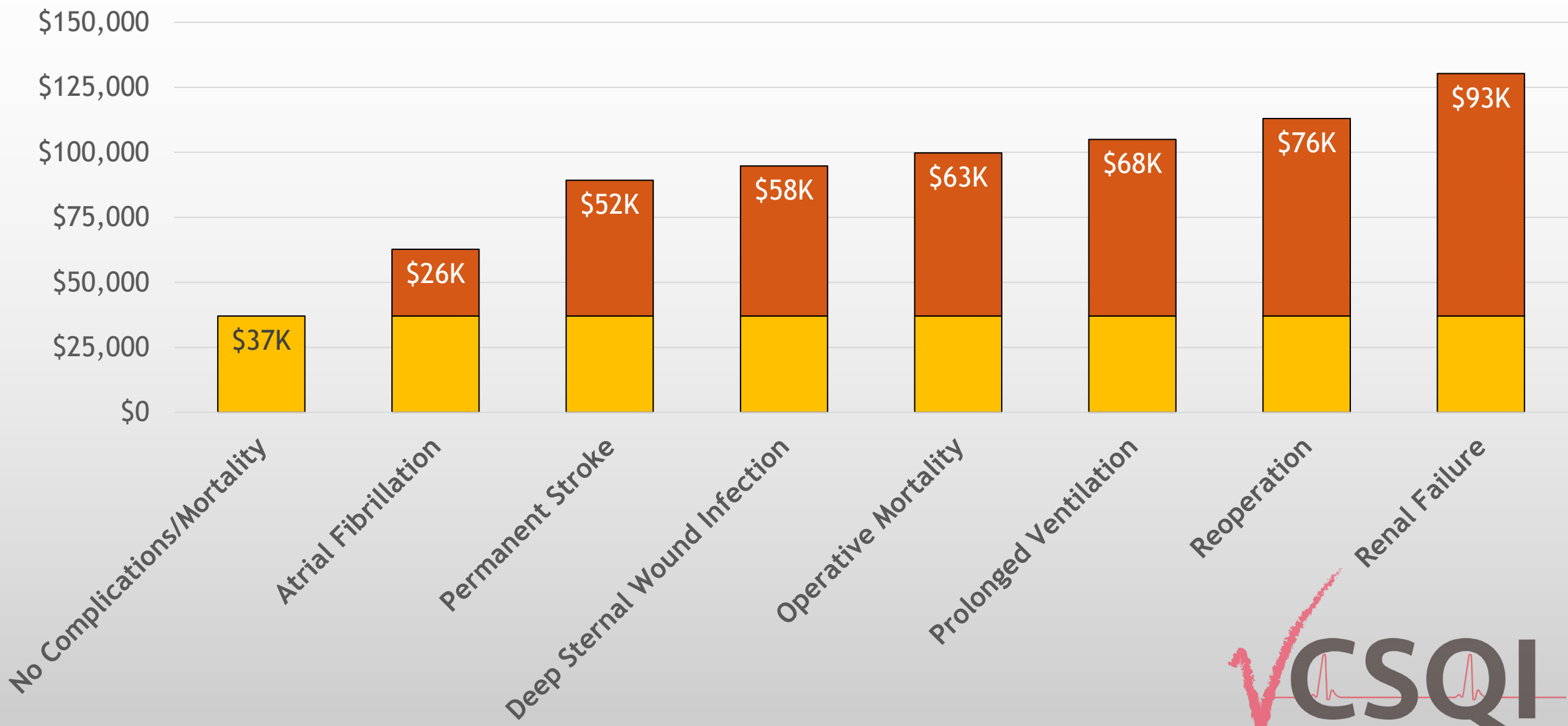
VCSQI Perfusion Group

Pre- and Intra-op Hct vs. Intra-op Transfusion Rates: On-Pump Cases, Q1 2021 – Q4 2023 (N=16,727)



VCSQI Perfusion Group

Additive Costs: Isolated CAB, Q1 2017 – Q2 2023



Quarterly Reports Available at:
https://www.vcsqi.org/portal

Thank You!

Questions / Suggestions?

Looking into the Future of VCSQI

Mohammed Quader MD
Chairman VCSQI
March 28, 2024

Objectives

- Our objective in the VCSQI family has been to exchange ideas and best practices from each other to provide the best care to our patients in the Commonwealth of Virginia
- We selected outcome metrics that focus on improving patient outcomes
  - Blood transfusion following heart surgery
  - Prolonged ventilation
  - Post operative atrial fibrillation
  - Door to balloon time for STEMI*
  - Other morbidities and mortality

One of the metrics we routinely collect, but do not focus much is **efficiency**

6. _____	7. _____	8. _____	9. _____	10. _____

OR Entry Date And Time: __ __/__ __/__ __ __ __ __ __:__ __ (mm/dd/yyyy hh:mm - 24 hr clock)		
OR Exit Date And Time: ++ __ __/__ __/__ __ __ __ __ __:__ __ (mm/dd/yyyy hh:mm - 24 hr clock)		
General Anesthesia: ☐ Yes ☐ No	(If General Anesthesia No→)	Procedural Sedation : ☐ Yes ☐ No
	(If General Anesthesia Yes →)	Intubation: ☐ Yes, prior to entering OR for this procedure ☐ Yes, in OR for this procedure ☐ No
Skin Incision Start Date and Time: __ __/__ __/__ __ __ __ __ __:__ __ (mm/dd/yyyy hh:mm - 24 hr clock)		
Skin Incision Stop Date and Time: __ __/__ __/__ __ __ __ __ __:__ __ (mm/dd/yyyy hh:mm - 24 hr clock)		

		Cardiopulmonary Bypass Time (minutes): _____

Definition of Efficient:

- capable of producing desired results with little or no waste (as of time or resources)

VCSQI OR Time Utilization for On-Pump Isolated CABG by Hospital, July 2011 – June 2023 (N = 35,597)

- There is over 1.5 hours of variation in OR time, and 44 minutes of variation on CPB for CABG procedures

- Possible Reasons-

Teaching institutions
Complex patient population
Resource allocation- staffing….
Other factors

- More important question- does this matter to patient outcomes?

Hospital	Avg. OR Hours	Avg. CPB Time
H01	4.7	87.2
H15	4.7	87.4
H11	4.8	72.9
H03	5.0	88.5
H14	5.0	87.0
H02	5.1	92.9
H12	5.3	89.8
H13	5.3	82.3
H05	5.4	97.4
H08	5.4	102.7
H06	5.6	120.3
H04	5.9	100.1
H07	5.9	112.9
H16	6.0	111.5
H09	6.1	103.7
H10	6.5	122.0
H17	6.5	131.3
VCSQI Avg.	5.3	96.9

Why Should We Consider Incorporating Efficiency in Our Outcome Metrics?

- We use time metrics in our everyday tasks
- Time on cardiopulmonary bypass support for a given procedure has been independently associated with increased morbidity and in some studies mortality
- Impact of Cooling Strategies on Transfusion Requirements in Aortic Hemiarch Surgery- Dr. Anthony Norman
  - In risk adjusted analysis, **cardiopulmonary bypass time,** not MHCA, was independently associated with transfusion requirements
- With improved efficiency we will not only serve our patients better but also support our institutions.

How should we proceed from here

- **Carefully examine our own data set to see how longer operative times and CPB times influence the resource utilization and patient outcomes**
- **Bring the data to this forum for an open discussion**
- **Ask questions and address them based on academic rigor and objective data**
- **Once agreed upon by the VCSQI family incorporate the efficiency metric into one of the quarterly outcomes' metrics**
- **Identify programs that are consistently efficient, adopt their practices to better serve our patients**

How to engage OR team towards efficiency

Perhaps something similar to Timeout chart

Seek input from ALL OR team members, build consensus, then develop a chart that is displayed in OR for everyone to see

Time	Expected time	Improvement task
Patient in OR	7:30 AM	
General Anesthesia and lines done	8:30 AM	
Incision start time	8:45 AM	
IMA and Endo Vein procurement done	9:30 AM	
Initiate CPB	9:45 AM	
Off CPB	11:15 AM	
Skin incision closed	12:15 AM	
Out of OR	12:30 PM	
Total time in OR	5 hours	

I sincerely believe that there are more efficient programs among us, and we can serve our patients better by understanding and adopting the policies that can bring efficiency to all our programs.

Thank You

VCSQI Quality Initiatives:

Successful integration and implementation of quality improvement strategies improve outcomes and quality

Decreasing Prolonged Intubation in the Cardiac Surgery ICU: A Quality Improvement Project

Maggie Crawley RN, MSN, CCRN
Linda Currie RN, MSN, ACNS-BC, CCRN-CSC, WTA
Dana Millner RN, BSN, CCRN

Society of Thoracic Surgeons Extubation Measure What Is It?

Patients will not be intubated for greater than 24 hours cumulative total during their inpatient stay.*

Intubation includes the initial hours of intubation + any re-intubation hours

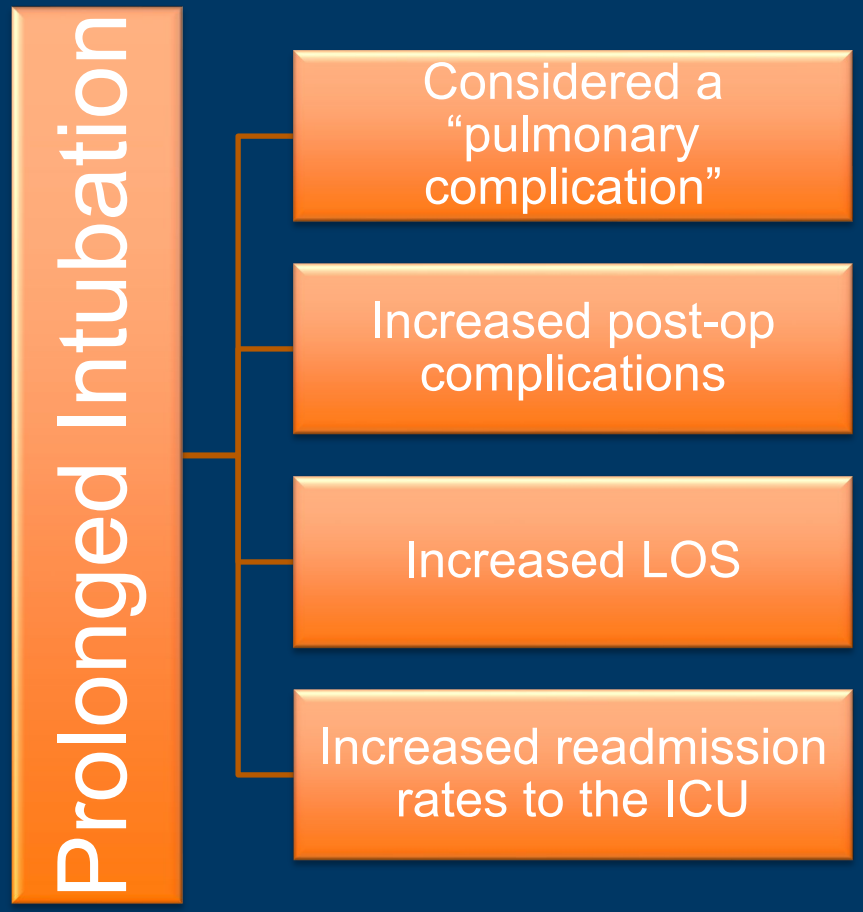
Start Time: OR exit time as indicated in anesthesia documentation

End Time: patient discharge from hospital

*Regardless of length of inpatient stay

Importance to Critical Care Teams

*Shorter intubation times are linked to higher quality of care and better long-term outcomes



Previous Interventions

- Endless discussions at QAPI
- General agreement with goal but incomplete communication
- Loose implementation of a FAST TRACK sign
- Minimal change in outcomes

STEP 1: Patient Data Drilldown

Focus: All prolonged intubations in the previous 2 years

Medical record reviews for documented contributing factors

Evaluation of common themes:

- Post op bleeding with reoperation
- Pulmonary complications
- Worsening cardiogenic shock
- IABP
- Volume overload: CRRT/Lasix infusion
- Neuro changes: Stroke/seizure
- Open chest
- Rescue MCAD: Impella/ECMO

STEP 2: Six Sigma Project

Performance Improvement led

Collaborative participation:

- Medical director
- CSICU and Clinic APPs
- Respiratory Therapy
- Nurse Manager
- Clinical Nurse Specialist
- Cardiac Surgeon
- Head Cardiac Surgery RN
- Data analyst

Step 3: Revisiting Respiratory Therapy Practices

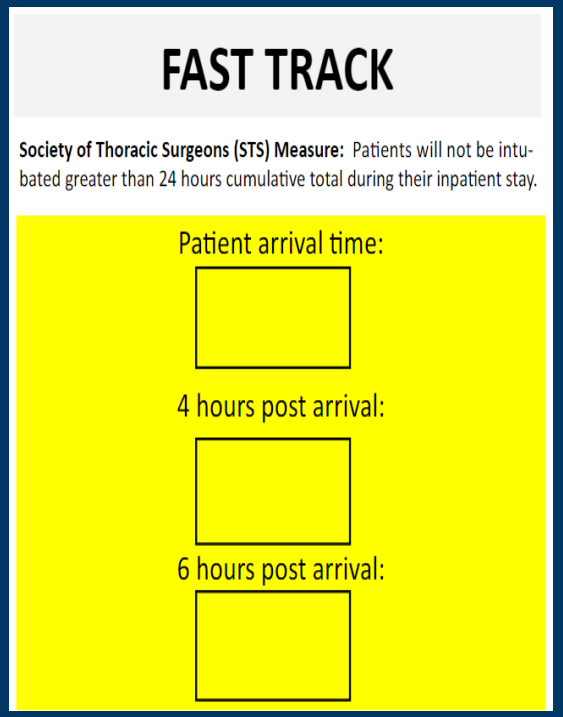
Timeliness and frequency of regular rounding

Barriers to being present for sterile cockpit

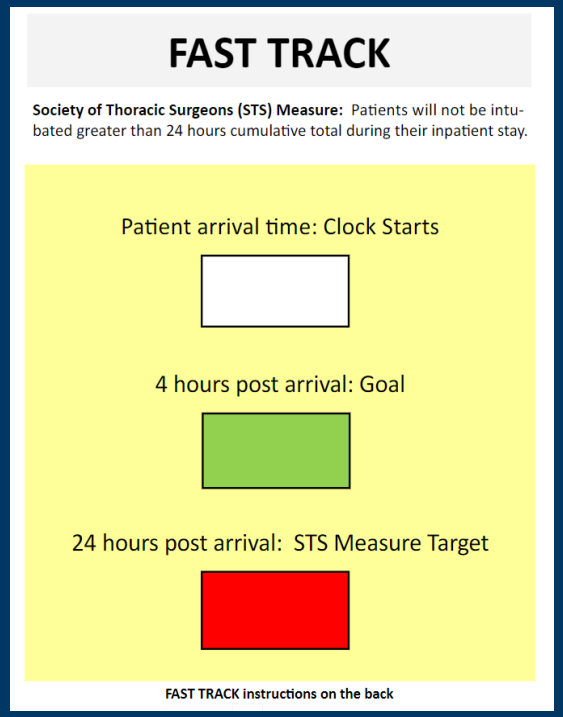
Understanding the FAST TRACK process

STEP 4: The FAST TRACK Sign

2019

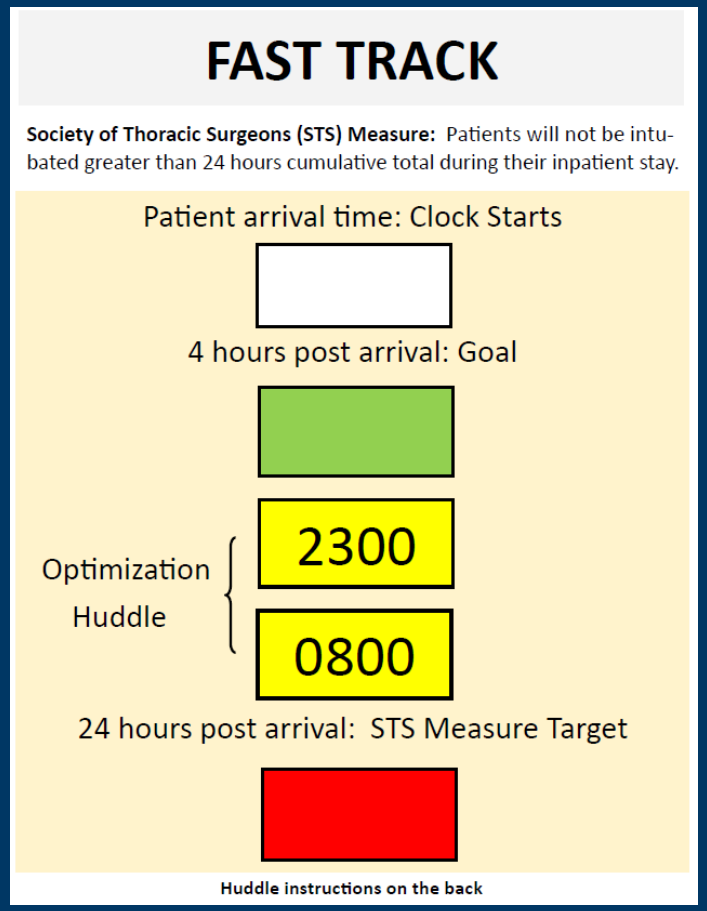


July 2020



November 2020

Optimization Huddle added



FRONT

Optimization Huddle Checklist	
Airway: Does the patient have a cuff leak? Does the patient have a known difficult airway?	PLAN
Breathing: Have SAT/SBT been performed? (delete, should be performed before the huddle) Is there hypoxemia or hypercarbia? What are the patient's current ventilator settings and can they be weaned?	PLAN
Circulation: What are the patient's current vasopressor/ inotrope requirements? Is the patient on mechanical support preventing extubation? Does the patient's hemodynamic condition preclude extubation?	PLAN
Depth of Sedation: What is the patient's current sedation regiment? Does the patient require neuromuscular reversal or optimization of sedation?	PLAN
Electrolytes: What is the patient's current lactate level and trend?	PLAN
Fluid: What is the patient's volume status? Does the patient require resuscitation? Diuresis?	PLAN

BACK

STEP 5: Real-Time Data Tracking

OCTOBER (n=17) (17 /17)			Total time intubated	Intensivist	Surgeon	RT present for sterile cockpit	ICU transfer time*	Reversal agent used?	Time Extubated*
	10/2/2020	CABG X 4	16 h 51 min			Yes	17:04	No	9:55
	10/5/2020	CABG	5 hr 23 min			Yes	14:26	No	20:11
	10/13/2020	CABG x 2	6 hr 25 min			No data	17:20	No	23:45
	10/15/2020	CABG x 3	1 hr 7 min			Yes	14:23	Yes (1500)	15:30
	10/15/2020	CABG x 3	11 hr 17 min			No data	21:25	No	8:42
	10/16/2020	CABG x 1	0 hr 0 min			Yes	NA	Uncertain	In OR
	10/16/2020	CABG x 2	3 hr 2 min			Yes	13:38	No	16:40
	10/16/2020	CABG x 3	5 hr 58 min			Yes	20:27	No	2:25
	10/20/2020	CABG x 1	10 hr 33 min			No data	18:59	No	5:34
	10/20/2020	CABG X2	4 hr 3 min			Yes	11:59	No	16:02
	10/26/2020	CABG x 3	4 hr 26 min			Yes	13:13	No	17:39
	10/26/2020	CABG x 3	12 hrs 17 min			Yes	21:18	No	9:35
	10/26/2020	CABG x 2	4 hr 28 min			No	17:35	No	22:03
	10/27/2020	CABG x 2	6 hr 20 min			No	14:20	Yes (1835)	20:00
	10/29/2020	CABG X 4	11 hr 22 min			Yes	17:20	No	4:42
	10/29/2020	CABG X 4	3 hr 22 min			No	20:01	No	23:23
	10/30/2020	CABG x 2	2 hr 18 min			Yes	13:27	Yes (1545)	18:08
NOVEMBER (n=11)(11 /11)			Total time intubated	Intensivist	Surgeon	RT present for sterile cockpit	ICU transfer time*	Reversal agent used?	Time Extubated*
	11/2/2020	CABG x 3	2 hr 34 min			Yes	14:40	No	17:14
	11/3/2020	CABG x 3	6 hr 16 min			Yes	14:39	No	20:55
	11/5/2020	CABG x 2	2 hrs 30 min			Yes	13:45	No	16:15
	11/5/2020	CABG x 3	3 hrs 45 min			Yes	15:00	No	18:45
	11/6/2020	CABG X 4	3 hrs 18 min			Yes	13:57	Yes (1516)	17:15
	11/10/2020	CABG x 3 + C X 1	21 hrs 00 min			No data	14:37	No	11:37
	11/20/2020	CABG x 2	2 hrs 50 min			Yes	22:50	No	1:40
	11/20/2020	CABG x 2	2 hrs 21 min			Yes	13:23	Yes (1503)	15:44
	11/25/2020	CABG x 2	3 hrs 20 min			No data	16:00	Yes 120 mg (1708)	19:20
	11/28/2020	CABG x 3	4 hrs 7 min			No data	14:08	No	18:15
	11/12020	CABG X 4	2 hrs 38 min				20:07	No	22:45
DECEMBER (n=16)(14/16)			Total time intubated	Intensivist	Surgeon	RT present for sterile cockpit	ICU transfer time*	Reversal agent used?	Time Extubated*
	12/1/2020	CABG X 4	3 hrs 36 min			Yes	13:24	No	17:00
	12/3/2020	CABG X 4	64 hrs 25 min (Anticipated)			Yes	16:10	No	12/6/2020 8:35
	12/4/220	CABG x 2	3 hrs 3 min			Yes	14:32	No	17:35
	12/7/2020	CABG x 3	20 hours 59 min				15:25	No	12/8/2021 12:24
	12/8/2020	CABG x 2	8 hrs 20 min			No data	18:46	No	12/9/2020 3:06
	12/10/2020	CABG x 3	6 hr 32 min			Yes	14:21	No	20:52

STEP 6: Team Education

Providers

Initial presentation/ discussion in team meeting

100% agreement

Individual accountability with data tracking

Monthly new resident education

Nursing

In-person in-services

Recorded zoom presentations

Included in orientation class content

Posting of compliance data

US/CP

1:1 education

Just in time education for float help

RT

Recorded presentation (included in onboarding of new staff)

Expanding RN role in extubation process

Defining Roles

Place FAST TRACK sign on patient door with appropriate times filled in

- Unit Secretary, CP, RN

Participate in Sterile Cockpit

- RN, RT, Provider

Stabilize the patient

- RN, Provider

Guide vent weaning process/address pulmonary complications

- RN, RT, Provider

Lead optimization huddle if not extubated in 4 hours

- Provider, RN, RT

Extubate patient and document time

- RT, RN

VCU Health

Original 10/2020
Updated 12/2023

Improving Documentation and Coding

Coding reminders: Documentation effects the E (Expected)

Presentations from the data analysts and coding team during QAPI

Pocket cards with most common DRGs

Patient case reviews

*Application of this process to all patients

Step 7: Feedback

Reviewed in biweekly CSICU Collaborative Practice meeting

Monthly review in QAPI

Case review

Positive reinforcement

Positive Reinforcement Email

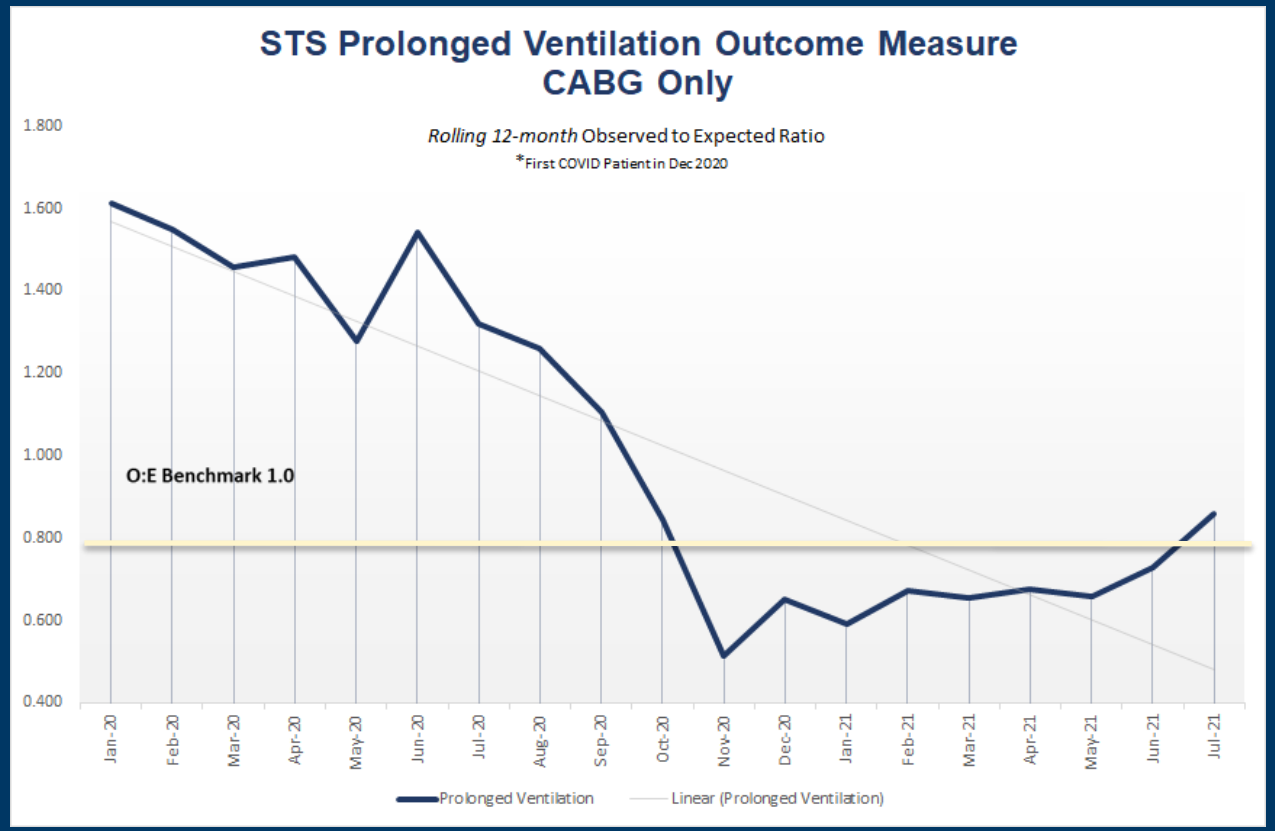
Great job! You contributed towards meeting our program metric for extubation when you cared for Mr. XXX yesterday! You extubated him in XX hours and XX min.

Metric: Patient's will not be intubated for greater then 24 hours cumulative total during their postoperative inpatient stay. This include initial hours intubated and any additional reintubation hours.

You reduced your patient's risk of post-operative pulmonary complications.

Keep up the good work!

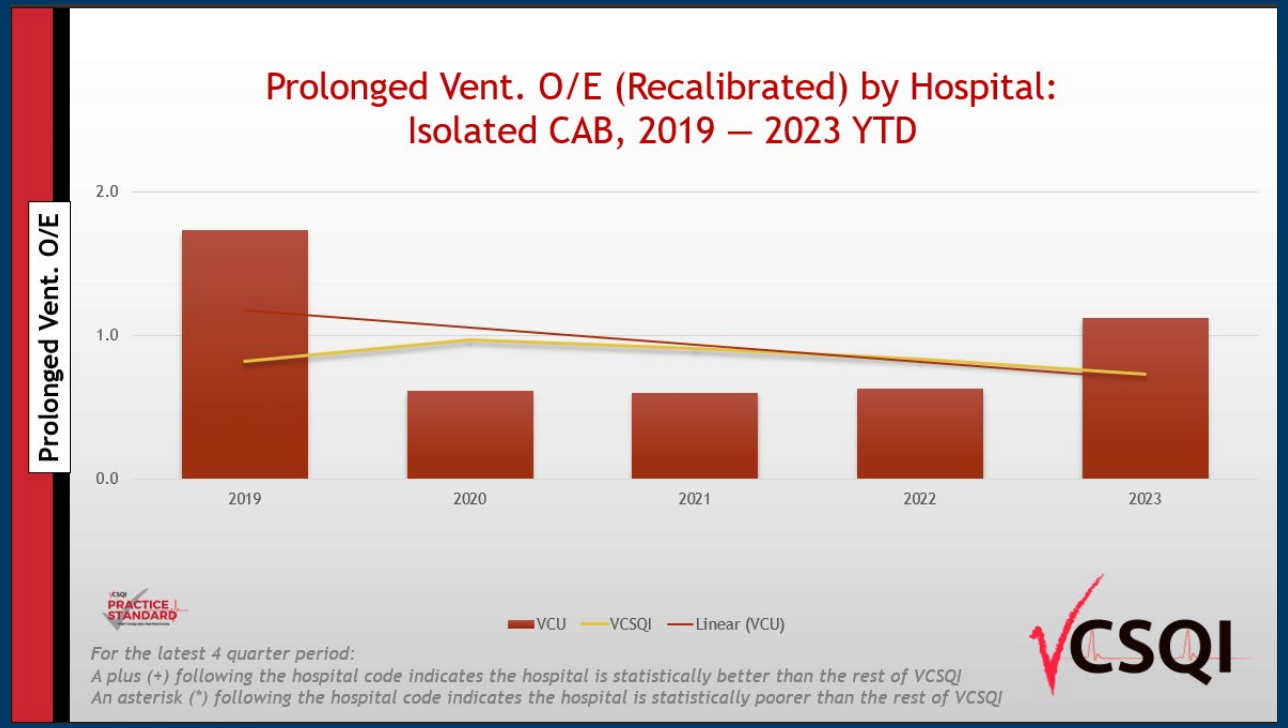
Progress 2020-2021



Data Source: Armus Metric Library

- Each data point is 12 months' worth of data (O:E)
- These data points are extremely hard to move
- Dramatic improvement mid-2020
- Potential to initiate as a standard of practice across the organization to decrease ventilation times

Where are we now?



- Culture change
- Continued real-time data collection
- Ongoing education
- Increased collaboration with RT
- Refocus in early 2023

Barriers

- Patient acuity/staffing challenges
- Competing quality priorities
- Communication/buy in
- Documentation (O:E)

Thank You!