

**Virginia Heart Attack Coalition
Northern Region
Regional Cardio Workgroup**

**Spring 2022
Quarter 3– FY22
Tuesday, February 15, 2022
10:00 am**



VIA ZOOM

Those present were: (All present via Zoom)

Ameya Kulkarni, MD, Kaiser Permanente, Amey.r.kulkarni@kp.org
Amy Dukovcic, HCA Reston, amy.dukovcic@hcahealthcare.com
Beth Adams, Fairfax County Fire & Rescue, beth.adams@fairfaxcounty.gov
Chip Morrison, Prince William County Fire & Rescue, cmorrison@pwcgov.org
Courtney Deihr, Mary Washington Hospital, Courtney.deihr@mwhc.com
Craig Evans, Northern VA EMS Council, craig@vaems.org
Debra Lee, MD, Sentara Northern VA Medical Center, debralee@gmail.com
Dan Avstreich, MD, Fairfax County Fire & Rescue, dan.avstreich@fairfaxcounty.gov
Eddie Fonner, VCSQI, Eddie@vscqi.org
Gary Hubble, MWAA, gary.hubble@MWAA.com
Glenn Druckenbrod, MD, Inova Fairfax, glenn.druckenbrod@inova.org
Harmony Vazquez, HCA Reston, harmony.vazquez@hcahealthcare.com
James Cooper, Loudoun County Fire & Rescue, Jamie.cooper@loudoun.gov
James Tharp, City of Manassas Park Fire & Rescue, j.tharp@manassasparkva.gov
Jennifer Li, Inova, Jennifer.li@inova.org
J’Nay Moretti, Inova, jnay.moretti@inova.org
John Morgan, MD, Loudoun County Fire & Rescue, John.morgan@loudoun.gov
Kate Kramer, Arlington County Fire Department, kkramer@arlingtonva.us
Kate Passow, PTS, Kate.passow@gmr.net
Laura Vandegrift, Northern VA EMS Council, laura@vaems.org
Lindsay Jacobs, Loudoun County Fire & Rescue, Lindsay.jacobs@loudoun.gov
Michelle Ludeman, Northern VA EMS Council, michelle@vaems.org
Scott Weir, MD, Fairfax County Fire & Rescue, scott.weir@fairfaxcounty.gov
Shelbie Kidd, HCA Spotsylvania Hospital, shelbie.kidd@hcahealthcare.com
Sherri White, VCSQI, sherri@vscqi.org
Shirley Riggsbee, Inova Fairfax Hospital, Shirley.riggsbee@inova.org
Stephen Ives, Inova, Stephen.ives@inova.org
Tom Arnoto, Prince William County Fire & Rescue, tarnoto@pwcgov.org

The quarterly Virginia Heart Attack Coalition (VHAC) meeting was started at 10:03 am by Craig Evans.

Virginia Heart Attack Coalition

Meeting Minutes

February 15, 2022

INTRODUCTIONS OF WORKGROUP CHAIRS

- Brian Orndoff, Captain, City of Fairfax Fire Department
- Dr. Benham Tehrani, Director of Cardiac Catheterization Lab, Inova Fairfax

QUARTERLY DATA REVIEW

- Eddie Fonner from VCSQI presented data for Q3 2021
 - A copy of the presentation is attached to these minutes
 - If you are a hospital interested in participating in VSCQI, please email Eddie at Eddie@vcsqi.org
- Craig Evans provided Cardiac Arrest data
 - A copy of the Utstein Survival Report presented is attached to these minutes

CARDIOGENIC SHOCK METRICS AND PATIENT VOLUME

- How many recorded cardiac arrests were cardiogenic shocks?
 - Eddie said for VCSQI, they can see some of that information, but they'll have to dig further into to see how many are cardiogenic shock cases.
 - Dr. Dan Avstreich asked why we want cardiogenic shock information in this forum.
 - Craig Evans advised it's because we want it to be more than just hospital or EMS data. Around the state, they are asking if a hospital has a cardiogenic shock team, etc., and so we're trying to dive further into that

QUARTERLY FOCUS TOPICS OR CASE REVIEWS

- Craig stated that in talking to Dr. Tehrani and Captain Orndoff they suggested taking suggestions for topics or case reviews to start each meeting with lessons learned from hospitals and EMS alike. Craig took suggestions on topics of interest.
 - Dr. Tehrani suggested pulmonary embolism and large pulmonary embolism
 - Kate Kramer suggested Post-ROSC hypothermia in EMS. Is anyone still doing it? Is there a barrier for EMS? Does data not show that it's working? It was a hot topic but has it gone to the wayside. It still happens after admission, but she is unsure of what the criteria are currently.
 - Kate also suggested limiting doses of epinephrine
 - Beth Adams suggested
 - Heads Up CPR
 - San Antonio did an interesting study on IO in the distal femur vs. humerus
 - Scott Lundquist recently put out a study on whether we should be shocking asystole

REGIONAL ROUNDTABLE

- What are you doing well? What do you want to improve? Do you have questions for the group?
 - Kate Kramer from Arlington County Fire Department
 - There was recently a lot of turnover in the STEMI team at VHC so for a time they were missing a lot of feedback while they get staff hired and trained

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- They attend the cardiac collaborative meetings regularly
- Their providers are still going direct to cath, even during COVID
- She is hearing from the STEMI team that there are so many registries and data to be entered, she's wondering what the priority is for registries or combining data sets as that could increase participation in data input if we could combine the information
 - Craig stated that is what VSCQI does
- James Tharp from Manassas Park Fire & Rescue
 - No issues currently
 - They are transmitting 12-leads within 10 minutes of arrival to the hospital
- Dr. Dan Avstreich from Fairfax County Fire & Rescue
 - New Zoll monitors are doing well
 - there was a lot of training leading up to rollout which helped, and they are currently working on ways to make some improvements for how monitors classify STEMIs, but they are happy with the change and will continue to work on an integrated collaboration with hospitals in the future
 - Beth Adams added they were only doing detailed cardiac reporting on Utstein criteria but with the Zoll monitors, they can provide performance summaries back to everyone and they are doing deeper dives on ROSC and Utstein to provide data. If there is questionable data, Paul from her department is going to the providers to show what data was received and what happened during the call to better understand why the data looks that way
- Harmony Vazquez from HCA Reston Hospital
 - Next month is their ACC Chest Pain accreditation site visit
 - They had a meeting this morning and there is a new Patient Safety employee from the Patient Quality department. They stated they need to have written consent for STEMI patients. There was a long discussion about how they couldn't get consent on some patients and many of the Interventionalists said they will not be consenting intubated patients. Harmony asked the group to provide feedback on this topic.
 - Glenn Druckebro, MD from Inova Fairfax stated they inform the patients of the process and procedures but do not get consent. They tell them what they're going to do, not ask for written/signed permission.
 - Beth Adams asked how it is documented in the EMR.
 - Dr. Druckenbrod stated it's not formally documented, it's implied consent after they inform the patient what they'll be doing
 - At the meeting, this morning Harmony spoke of, a participant who said it was a Joint Commission requirement.
 - Shirley Riggsbee says the interventionalists are putting in notes

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when they have a chance, that they got verbal consent.

- Craig Evans asked if everyone is familiar with ESO HDE. It is fully funded by the Virginia Office of OEMS for all hospitals and all feedback occurs automatically to EMS. If you are not using it or are familiar, please reach out to Craig to get set up
- Inova Hospitals
 - Glenn Druckenbrod, MD from Inova Fairfax stated their volume remains strong with no changes with COVID. They will integrate with Zoll monitors and prehospital activation is going well. Door to balloon times are staying standard
 - Nancy Morrissey from Inova Alexandria stated in her last reviews of the last few months, door to balloon times have improved. Pre-COVID they were around 90% and it's reaching that percentage again. Transfer times are a concern now as they are extended lately due to PTS being unable to be on-site, so they appreciate Fairfax County EMS for helping them with transfers and times have improved
- Dr. John Morgan from Loudoun County Fire & Rescue
 - They meet regularly on STEMI data with the hospitals
 - He looked at recent data for STEMI arrivals by EMS vs. personal vehicle and always has concerning numbers with patients driving themselves but in 2021 the numbers jumped from 30% to 60% for EMS arrive.
 - This is not due to community outreach or education on their end, so he's unsure why the shift but it's a welcome change
 - They had a good community CPR save recently in the County
 - There is a new version of Physio Control's AED called CR2. The device can send a notification that shock delivered within a 40-mile radius, so Loudoun's QA staff gets a notification and can download information like the pre-shock rhythm and other data.
 - Additionally, when there is a save with this AED, Physio-Control will donate an AED on behalf of the survivor to the charity of their choice.
 - There was a bill being introduced in the General Assembly that would provide a tax credit for putting an AED in your personal vehicle but as of February 11, 2022, it was in the house finance committee and was recommended it lay on the table for this cycle
- Gary Hubble from MWAA
 - They have many AEDs in the airport, so oftentimes a patient has been shocked by a bystander, employee, PD, etc., by the time EMS arrives.
 - Their EMTs do 12-leads like many jurisdictions and often the BLS units arrive first, but many EMTs are doing the initial 12-lead in a suspected STEMI and this is helping to decrease scene time for ALS when they arrive
- Chip Morrison from Prince William County Fire & Rescue
 - They are continuing to improve out of hospital CPR
 - They review quarterly STEMI data with their local hospitals

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- On average, they have about 30-40 STEMIS identified per quarter
- Most are getting identified within 8 minutes of arrival/contact with the patient, 15-16 minutes to get out of the house to transport, and at the hospital in about 24 minutes
- Shelbie Kidd, Chest Pain Coordinator for HCA Spotsylvania Hospital
 - Things there are going well
 - FMC to EKG times are getting better
 - They have good collaboration with EMS
 - They have many rural areas and EKG transmissions are tough in some areas
 - Overall, they have a small volume and not much data, but what they do have is good
 - They will investigate VCSQI
 - They, like Reston Hospital, are in ACC accreditation soon and have some good collaboration come from that recently
- Debra Lee, MD, ED Director from Sentara NVMC
 - They recently had some turnover in the cath lab but that has stabilized
 - They recently installed a recording device for EMS calls in the ED

Craig asked if there are any general asks for EMS to the hospital or vice versa.

- Beth Adams wants to thank Shirley, Nancy, and Harmony for turnaround times on outcome reports. They receive a fast and the providers really appreciate receiving them

UPCOMING MEETINGS

- Meetings will be 10 am – 12 pm via Zoom
 - Tuesday, May 17, 2022
 - Tuesday, August 18, 2022
 - Tuesday, November 15, 2022

CERTIFICATION OF NORTHERN REGION QUARTERLY MEETING OF THE VIRGINIA HEART ATTACK COALITION

Northern Virginia EMS Council
7250 Heritage Village Plaza, Suite 102
Gainesville, Virginia 20155

I, Craig Evans, Executive Director of the Northern Virginia EMS Council certify that the above minutes are a true and correct transcript of the meeting minutes of the Northern Region Quarterly Meeting of the Virginia Heart Attack Coalition held on February 15, 2022. The minutes were officially approved on May 17, 2022, at the meeting of the Committee.

Craig A. Evans

Date

Meeting ID	Topic
84245268971	Northern Virginia Cardio/STEMI/VHAC Regional Meeting

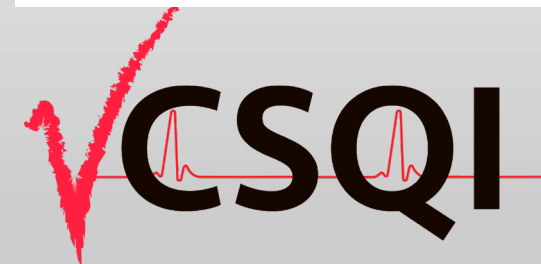
Start Time	End Time
2/15/2022 9:48	2/15/2022 11:19

Duration (Minutes)	Participants
92	41

Name	User Email	Total Duration (Minutes)
12027018884		55
15407412647		22
15714950177		62
17032987153		64
17036249332		57
Ameya Kulkarni	amey.r.kulkarni@kp.org	5
Amy Dukovic	amy.dukovic@hcahealthcare.com	1
beth adams	beth.adams@fairfaxcounty.gov	66
Carl Morrison	cmorrison@pwcgov.org	61
Courtney Deihr	courtney.deihr@mwhc.com	24
Craig Evans	craig@vaems.org	92
Debra Lee	debralee@gmail.com	51
Dr Dan	dan.avstreich@fairfaxcounty.gov	63
eddie fonner	cefonner@gmail.com	60
Gary Hubble	gary.hubble@mwa.com	63
Glenn Druckenbrod	glenn.druckenbrod@inova.org	63
Harmony Vazquez	harmony.vazquez@hcahealthcare.com	65
James Cooper	jamie.cooper@loudoun.gov	62
James Tharp	j.tharp@manassasparkva.gov	67
Jennifer Li	jennifer.li@inova.org	53
J'nay	jnay.moretti@inova.org	50
John Morgan	john.morgan@loudoun.gov	61
Kate Kramer	kkramer@arlingtonva.us	44
Kate Passow	kate.passow@gmr.net	67
Laura Vandegrift NVEMSC	laura@vaems.org	85
Lindsay Jacobs	lindsay.jacobs@loudoun.gov	47
Michelle Ludeman NVEMS Council	michelle@vaems.org	88
Scott Weir	scott.weir@fairfaxcounty.gov	28
Shelbie Kidd	shelbie.kidd@hcahealthcare.com	61
Sherri White	sherri@vcsqi.org	41
Shirley Riggsbee	shirley.riggsbee@inova.org	126
Stephen	stephen.ives@inova.net	21
Tom Arnoto	tarnoto@pwcgov.org	60

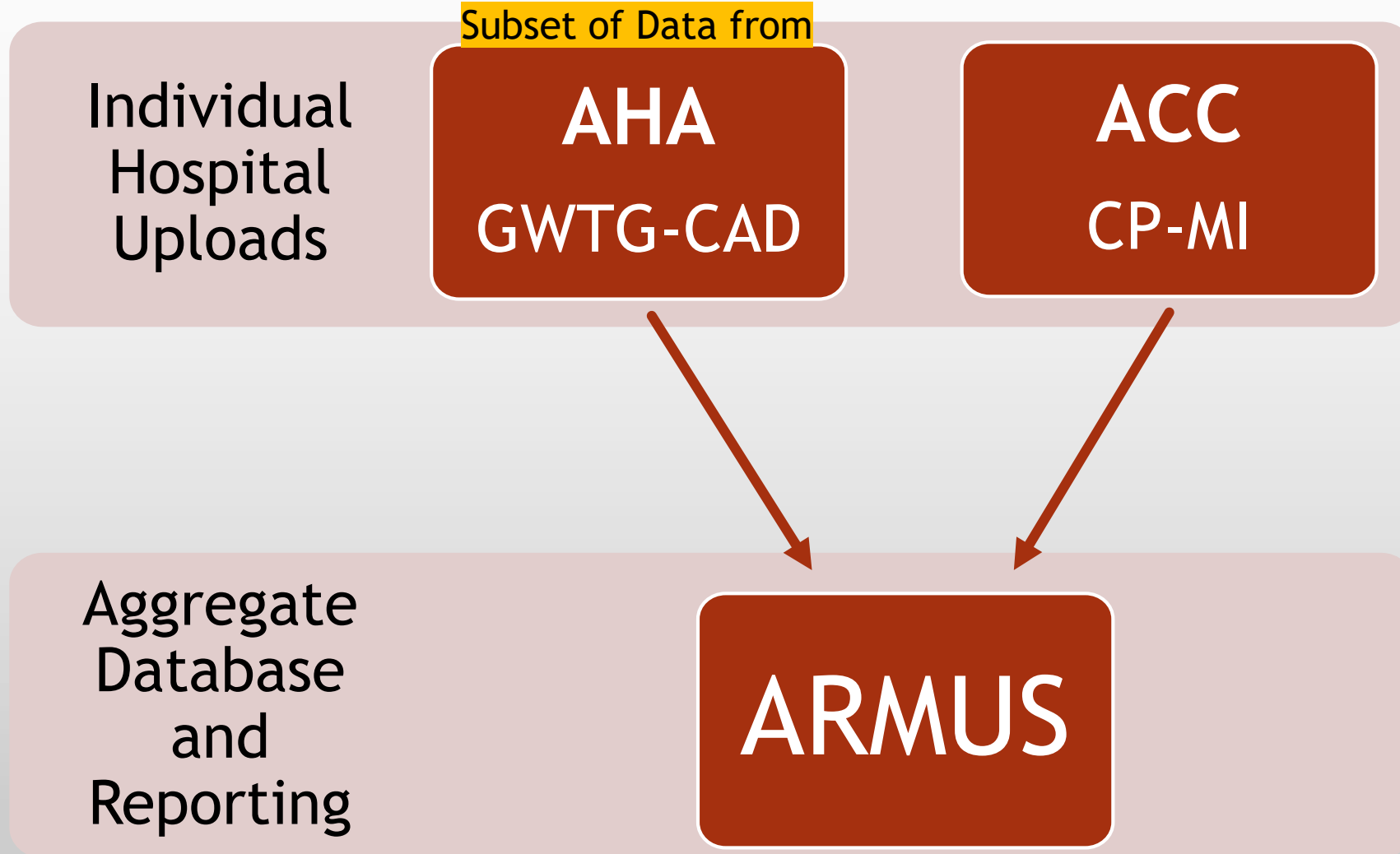
VHAC-VCSQI STEMI Database

Q3 2021 Preliminary Reports






Transforming Cardiovascular Care to Improve Patient Experience and Value

Data Aggregation Model



Preliminary Reports by Region: Q4 2020 - Q3 2021

Population: Q4 2020 - Q3 2021 (N=4,757)	VCSQI	East	North	Northwest	South	West
Median Door In - Door Out (Minutes): Transfer Patients	55.5	59.0	41.5	63.5	52.0	79.0
Median Transfer Time between Hospitals	29.0	28.5	24.0	31.0	31.0	38.0
FMC to Primary PCI <= 90 Minutes: Non-Transfer Patients	75.3%	75.6%	79.4%	76.9%	78.0%	58.9%
Median FMC to Primary PCI: Non-Transfer Patients	75.0	75.0	75.0	75.0	65.0	85.0
Pre-Hospital ECGs	88.4%	89.7%	93.3%	77.6%	88.8%	90.1%

-  = Exceeds VCSQI Average
-  = Equal to VCSQI Average
-  = Lower than VCSQI Average



Northern Region: Q4 2020 - Q3 2021



Population: Q4 2020 - Q3 2021 (N=1,144)	North Region	3E3HC	5ZUU4	J5DO3	T4DUC
Median Door In - Door Out (Minutes): Transfer Patients	41.5	52.0	36.0	42.0	42.0
Median Transfer Time between Hospitals	24.0	20.0	30.5	11.0	21.0
FMC to Primary PCI <= 90 Minutes: Non-Transfer Patients	79.4%	60.0%	84.3%	83.3%	80.6%
Median FMC to Primary PCI: Non-Transfer Patients	75.0	80.0	75.0	73.5	75.0
Pre-Hospital ECGs	93.3%	95.4%	94.5%	94.7%	84.5%

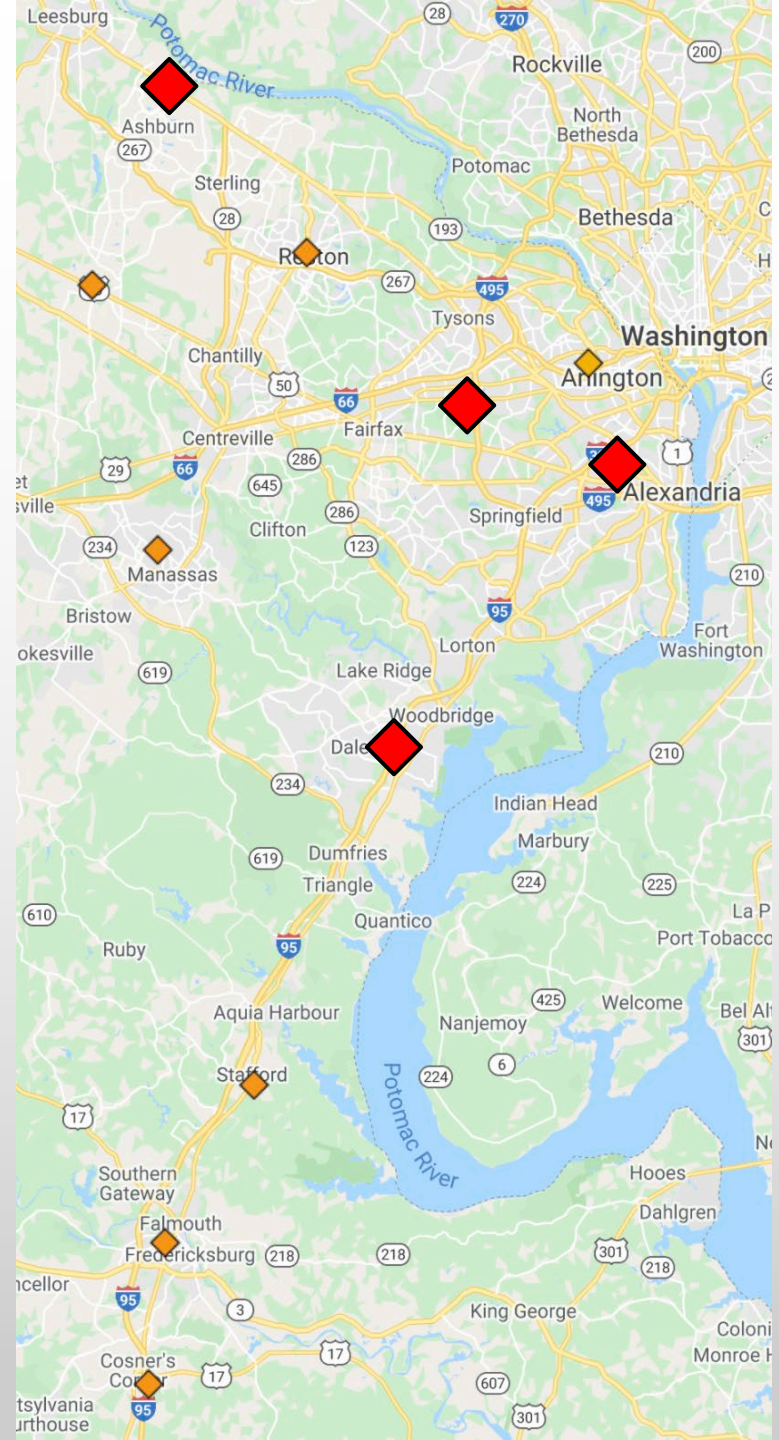
- = Exceeds VCSQI Average
- = Equal to VCSQI Average
- = Lower than VCSQI Average



We Need Your Help!

- Please join in this collaborative effort to improve STEMI care across Virginia
- New members will need to sign agreement forms with VCSQI and ARMUS

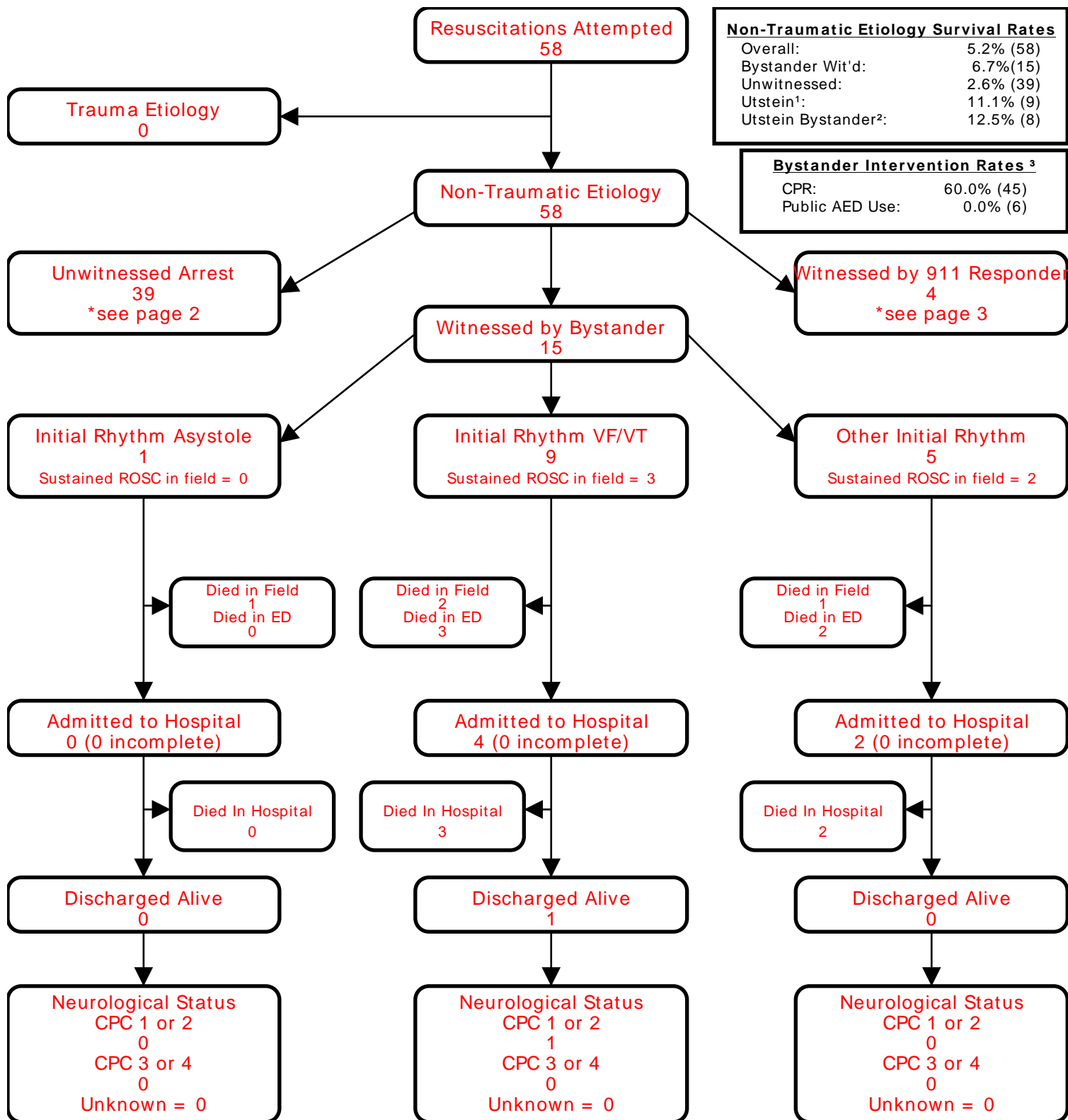
Current VCSQI Members (4)	
Awaiting Participation (7)	



Utstein Survival Report

All Agencies

Agency Group: NVAEMS Council | Date of Arrest: From 6/1/21 Through 9/30/21



Non-Traumatic Etiology Survival Rates	
Overall:	5.2% (58)
Bystander Wit'd:	6.7% (15)
Unwitnessed:	2.6% (39)
Utstein ¹ :	11.1% (9)
Utstein Bystander ² :	12.5% (8)

Bystander Intervention Rates ³	
CPR:	60.0% (45)
Public AED Use:	0.0% (6)

¹Utstein: Witnessed by bystander and found in shockable rhythm.

²Utstein Bystander: Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR and/or AED application).

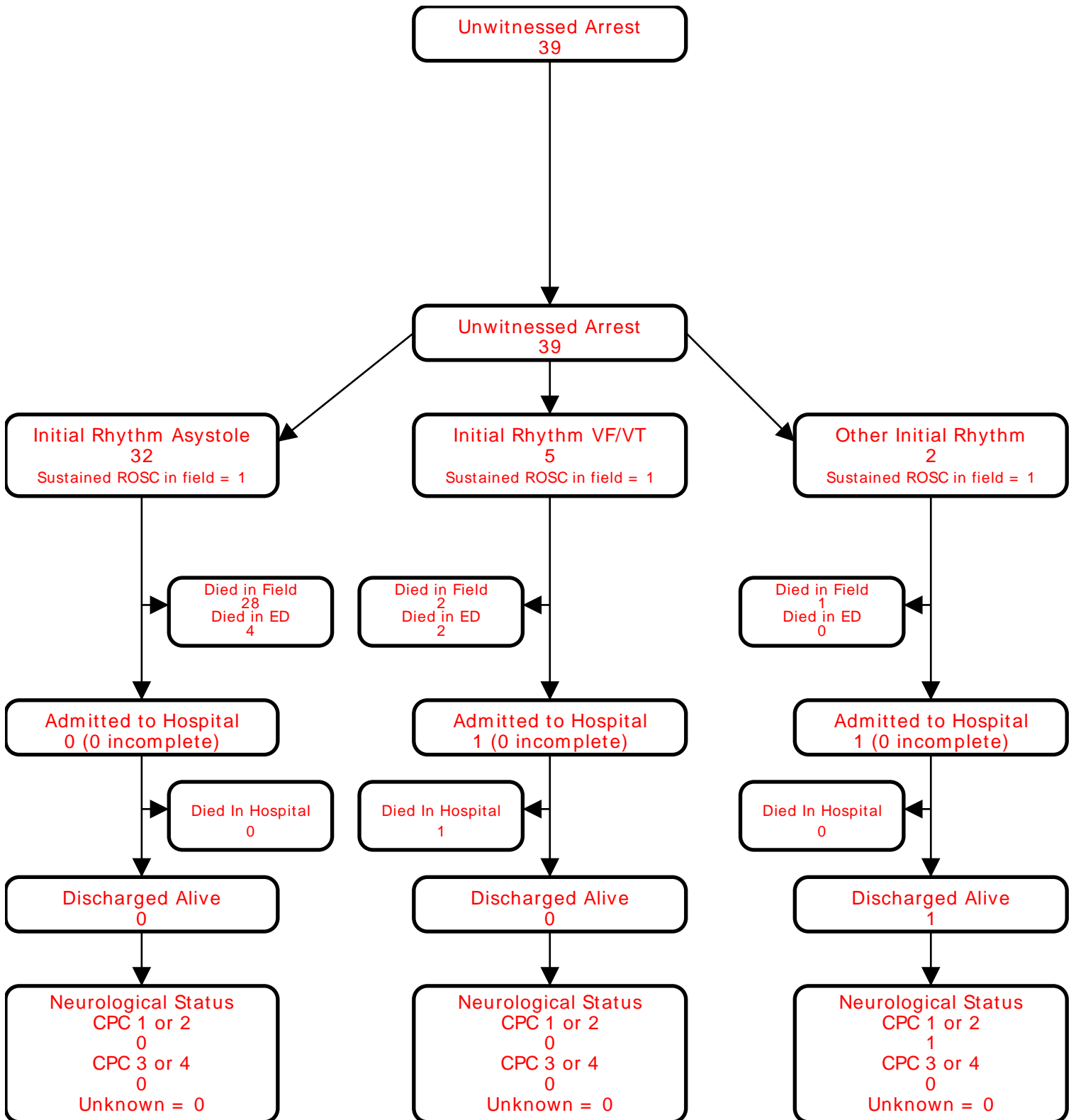
³Bystander CPR rate excludes 911 Responder Witnessed, Nursing Home, and Healthcare Facility arrests. Public AED Use rate excludes 911 Responder Witnessed, Home/Residence, Nursing Home, and Healthcare Facility arrests.

*Only data from the previous calendar year is fully audited. Data from the current calendar year is dynamic.

Utstein Survival Report

All Agencies

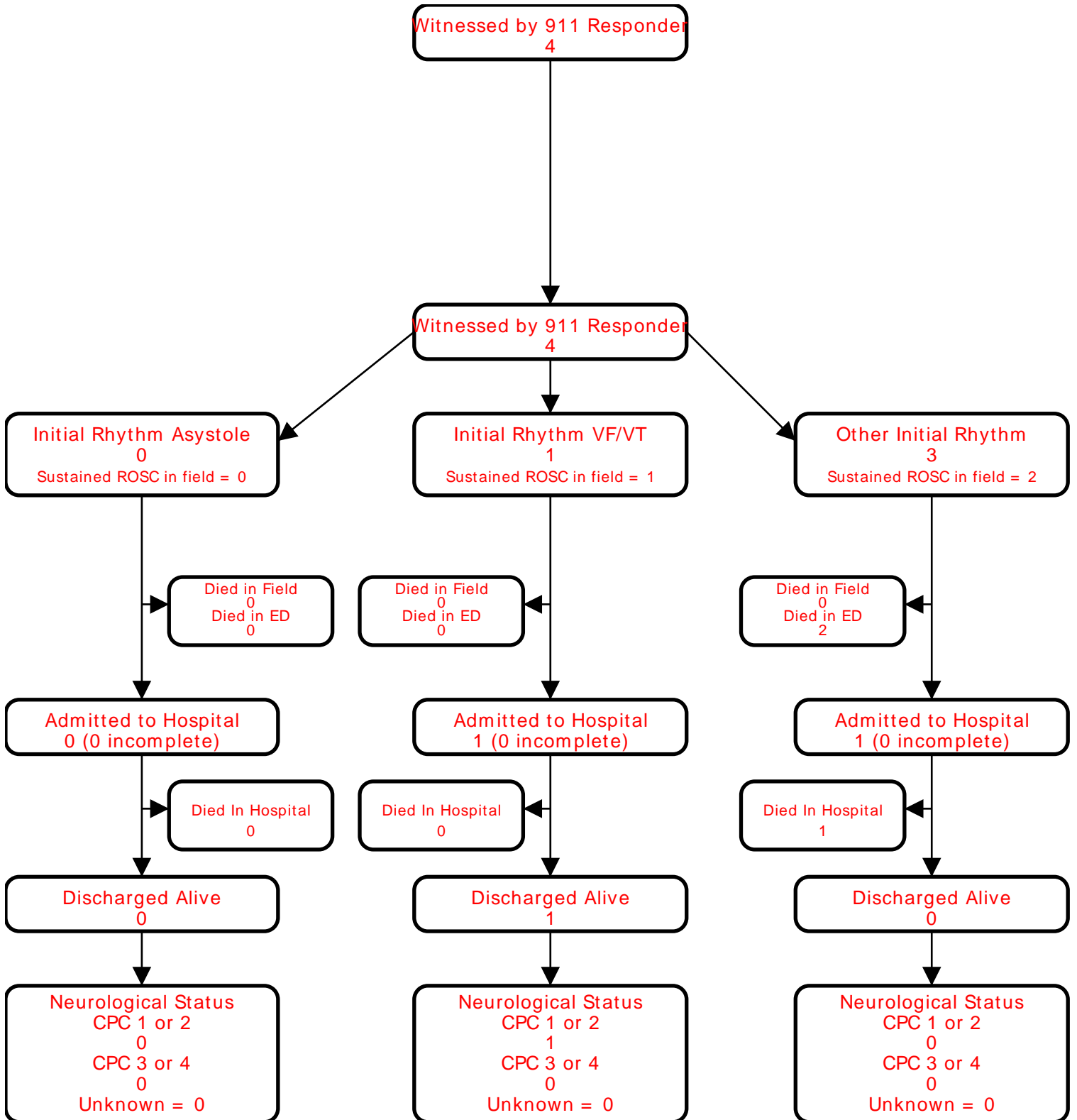
Agency Group: NVAEMS Council | Date of Arrest: From 6/1/21 Through 9/30/21



Utstein Survival Report

All Agencies

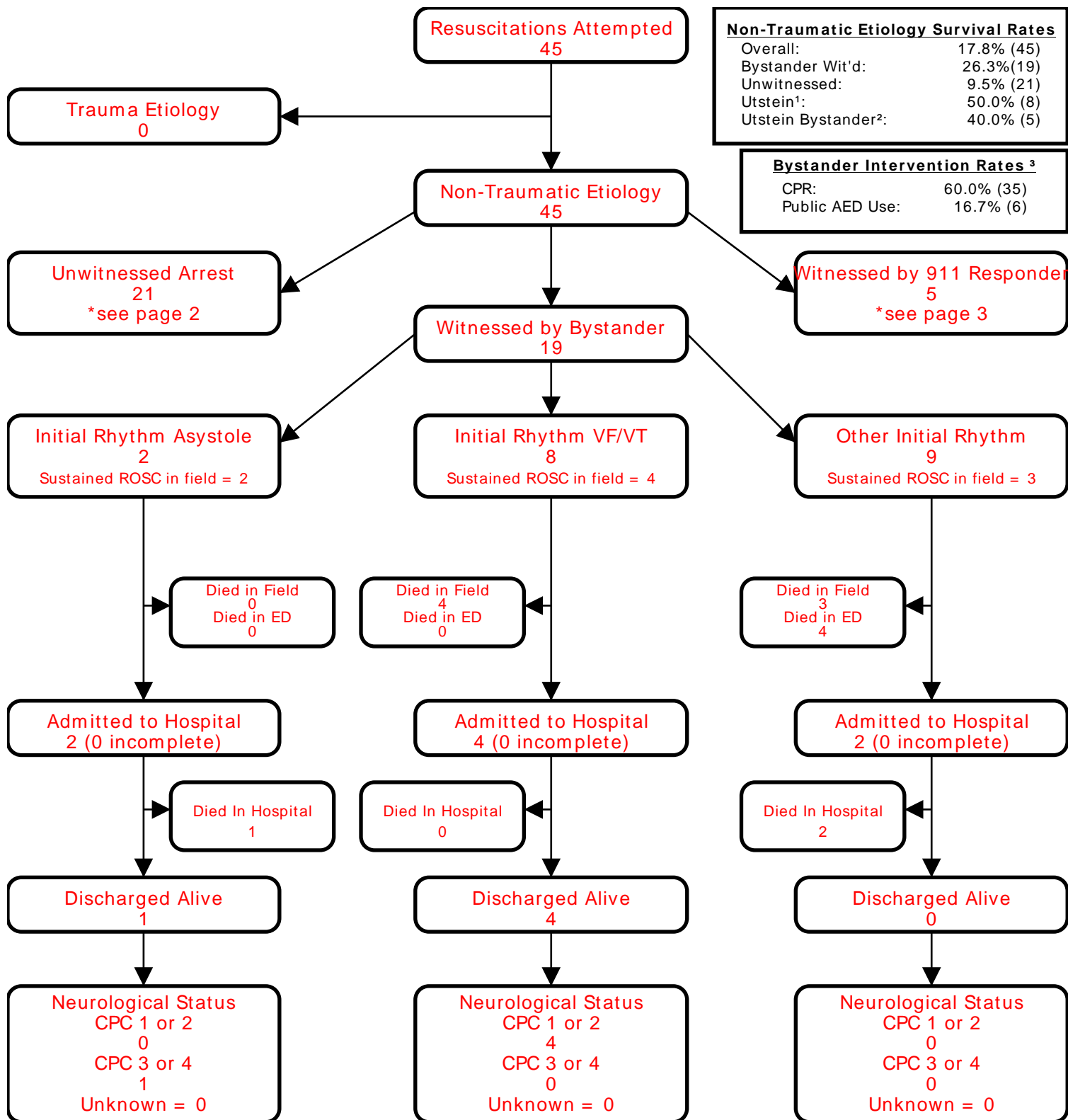
Agency Group: NVAEMS Council | Date of Arrest: From 6/1/21 Through 9/30/21



Utstein Survival Report

All Agencies

Agency Group: NVAEMS Council | Date of Arrest: From 10/1/21 Through 12/31/21



¹Utstein: Witnessed by bystander and found in shockable rhythm.

²Utstein Bystander: Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR and/or AED application).

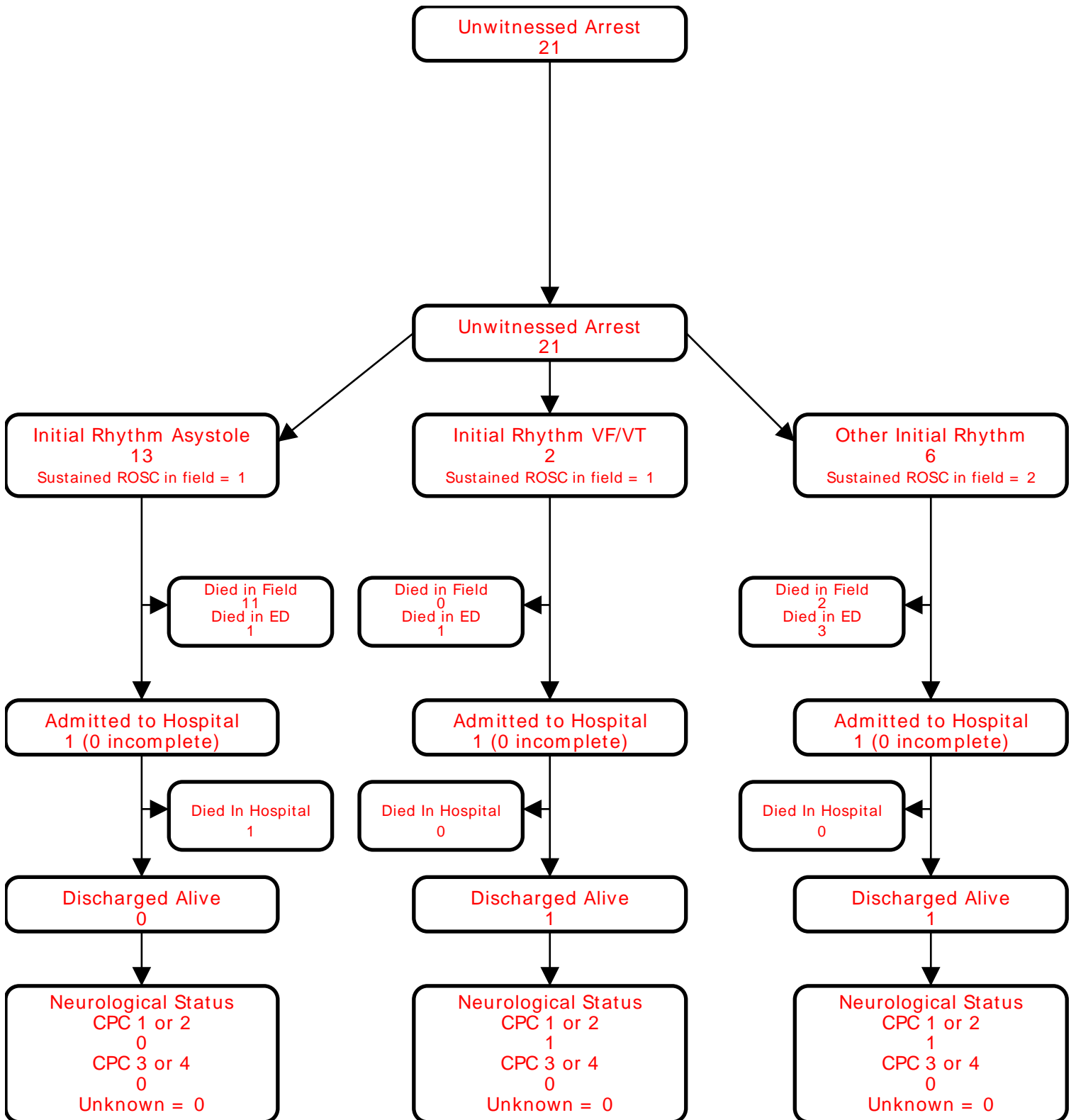
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