STS National Database:

ACSD Monthly Webinar

February 7, 2024

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Agenda

- Welcome and Introductions
- STS Updates
- Frailty Project

STS Updates

- Febraury **Training Manual Posted**
- Beta Blocker Data Collection
- H 4 **Reports** Released
- H1 Closes on February 23, 2024

Important Dates

7 Feb. 2024

ACSD Monthly Webinar @ 2pmCT

10 Feb. 2024

Updates to the ACSD Executive Dashboard for the missingness to be released

13 Feb. 2024

ACSD Webinar – Preparing for Harvest Close

21 Feb. 2024

ACSD STS DB Quality Improvement Series/Beta Blocker @ 2pmCT

23 Feb. 2024

Harvest 1 Close (OR Dates through December 31, 2023)

27 Feb. 2024

Harvest 1 Opt-out Ends

6 Mar. 2024

ACSD Monthly Webinar @ 2pmCT

Harvest 2024 Dates

2024 Harvest

Term	Harvest Submission Window Close	Opt-Out Date	Includes Procedures Performed Through:	Report Posting	Comments
Harvest 1	2/23/2024	02/27/2024	12/31/2023	Spring 2024	Star Rating
Harvest 2	5/24/2024	05/28/2024	3/31/2024	Summer 2024	
Harvest 3	8/23/2024	8/27/2024	6/30/2024	Fall 2024	Star Rating
Harvest 4	11/22/2024	11/26/2024	9/30/2024	Winter 2024	

Data Submission Open is continuous for all harvest terms. Submission Close occurs at 11:59 p.m. Eastern on the date listed.

Collection of Frailty Data in the STS National Databases: What's Coming

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Physician Executive Lead, Heart & Vascular Service Line
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Disclosures

Consultant/Proctor: Medtronic, Boston Scientific

STS 2024

Summary:

1. Why frailty is so important
2. What metric & data collection were chosen & why
3. Technical aspects of frailty data collection
4. Timeline for implementing frailty assessment into ND
5. Questions

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Important Aspects: Frailty Assessment

- Elderly & frail is fastest growing demographic in North America
- Frailty is common among cardiac & thoracic surgery patients
- Frailty is more common in elderly, but is a condition independent of biological age and therefore an independent risk
- Frailty associated with prolonged hospitalization, morbidity & mortality

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Medicare-Linked STS ACSD Dataset

Isolated CABG, isolated AVR, AVR/CABG; n= 294,672 (Segal et. al CBFi)

Risk increase after STS PROM adjustment: 30-day outcomes

Death	*Prolonged Ventilation*	*Stroke*	*Renal failure*	*None-home discharge*
x 2.0	**x 4.0**	**x 2.3**	**x 3.1**	**x 4.8**

Risk increase after STS PROM adjustment: 1-year outcomes

Death	*Readmission*
x 2.8	**x 1.9**

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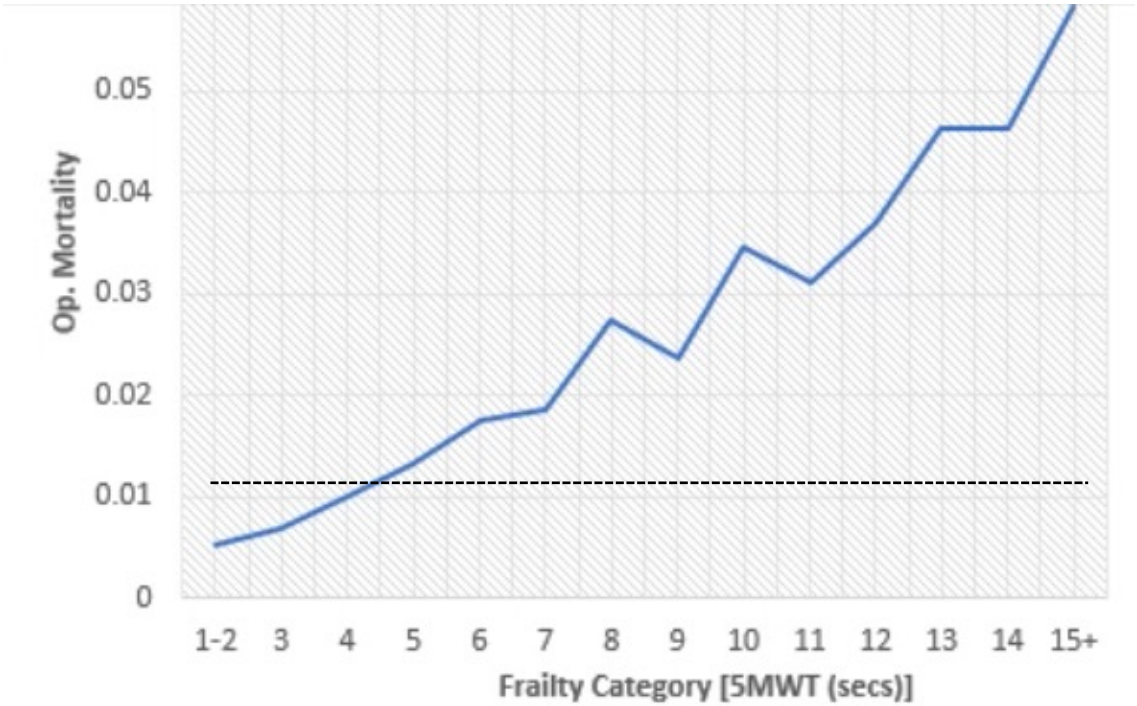
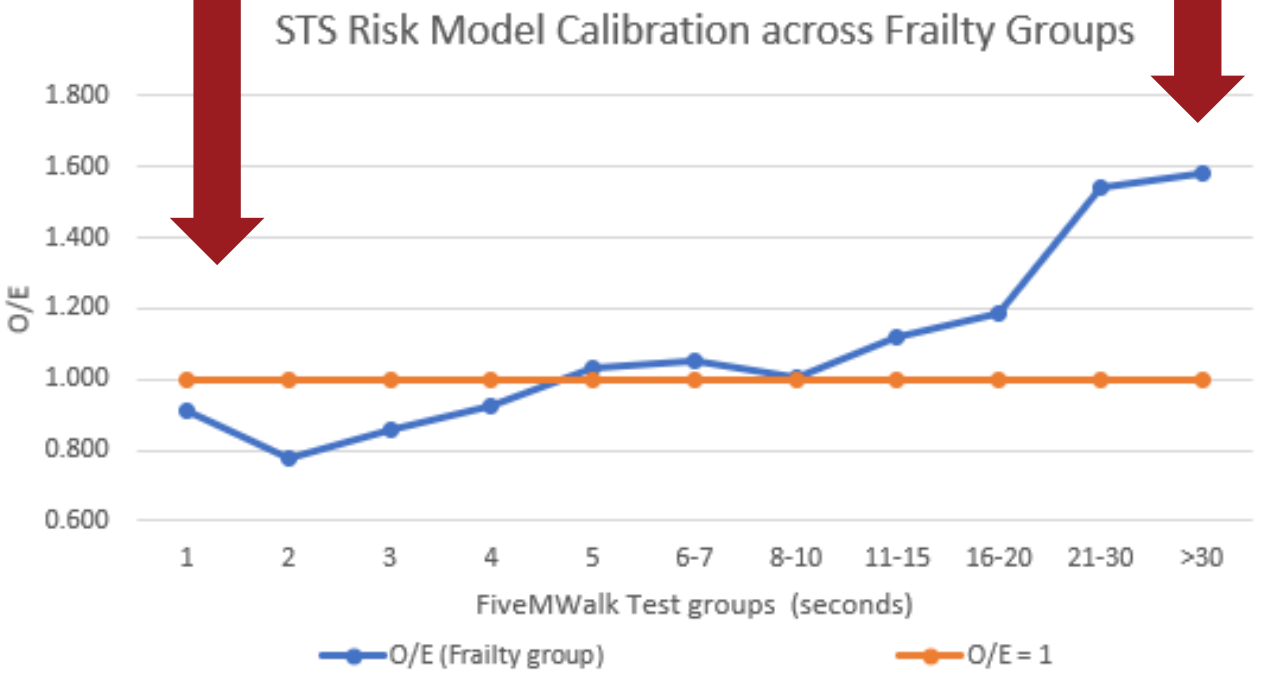
The Problem of Not Adjusting for Frailty

5 years of CABG Data ACSD:



"Fitness"

Vulnerability



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The Problem of Not Knowing Frailty In Our Patients

No standardized frailty assessment of all patients

=

1. Shared decision-making is based on incomplete information

=

2. Risk models & risk-adjusted performance metrics are incorrect

Requirements: STS Frailty Test/Measures

Low effort & high yield

Robustly validated

Agnostic to diagnosis/procedures

Clinical Frailty Scale
- inpatient/outpatient
- patients in wheelchair/bed
- by proxy
- etc.

Timed chair rises

Frailty Data to Be Collected in STS ND

- Clinical Frailty Scale: ADL, IADL, general health, stamina, activity
- Timed chair rises (stand up from sitting position 5 times without using arms; <15s; >15s; unable to complete exercise)
- Data collection completed by a clinician (RN/APP/MD) with the patient preoperatively

Data Collection Form

The Society of Thoracic Surgeons
Adult Cardiac Surgery Database
Frailty Supplement
Data Collection Form
For all STS ACSD cases starting with
OR dates of April 1, 2024

Patient Information	
Participant ID:	Patient ID:
Record ID:	Date of Surgery:

Frailty Assessment

Indicate the following activities your patients' need any help with from another person:
(select all that apply)

Exclude activities that the patient never had to do before or had always relied on someone else to do

☐ Getting dressed
☐ Taking a bath or shower
☐ Eating/Drinking
☐ Walking Around
☐ Getting in/out of bed
☐ Patient does not need help with any of these

Indicate the following activites your patient needs any help with from another person:
(select all that apply)

Exclude activities that the patient never had to do before or had always relied on someone else to do:

☐ Going shopping for groceries or clothes
☐ Preparing their own meals (including planning and cooking full meals)
☐ Doing housework (including heavy housework)
☐ Taking their own medication (including preparing and taking the right dose at the right time)
☐ Handling their own money (including writing checks and paying bills)
☐ Patient does not need help with any of these

Does your patient have problems with logical reasoning or memory (cognition)?

☐ No
☐ Mild impairment (forgetful of recent events; repetitive questioning; more socially withdrawn than used to be)
☐ Moderate or severe impairment (more than mild impairment)

In general, would you say your patient's health is:

☐ Excellent
☐ Very good/Good
☐ Fair/Poor

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Adult Cardiac Surgery Database
Frailty Supplement
Data Collection Form
January 21, 2024

In a typical week, how often does your patient feel that everything they do is an effort?

☐ Never/Rarely (Not more than one day a week)
☐ Sometimes/Occasionally (1-4 days)
☐ All the time (5-7 days)

In a typical week, how often does your patient engage in moderate of strenuous sports or recreational activities:

(I.e., dancing, golfing without a cart, softball, pickle ball, jogging, swimming, cycling, or other similar activated. Do not included regular paced walking).

☐ Never
☐ Sometimes/Occasionally (1-4 days a week)
☐ Frequently (5-7 days a week)

Indicate how long it takes your patient to perform five timed chair rises from the sitting to standing upright position without using their hands or arms for support:

☐ <15 seconds
☐ >15 seconds
☐ Unable to finish exercise
☐ Unable to assess (e.g., Patient is intubated)

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5 Timed Chair Rises

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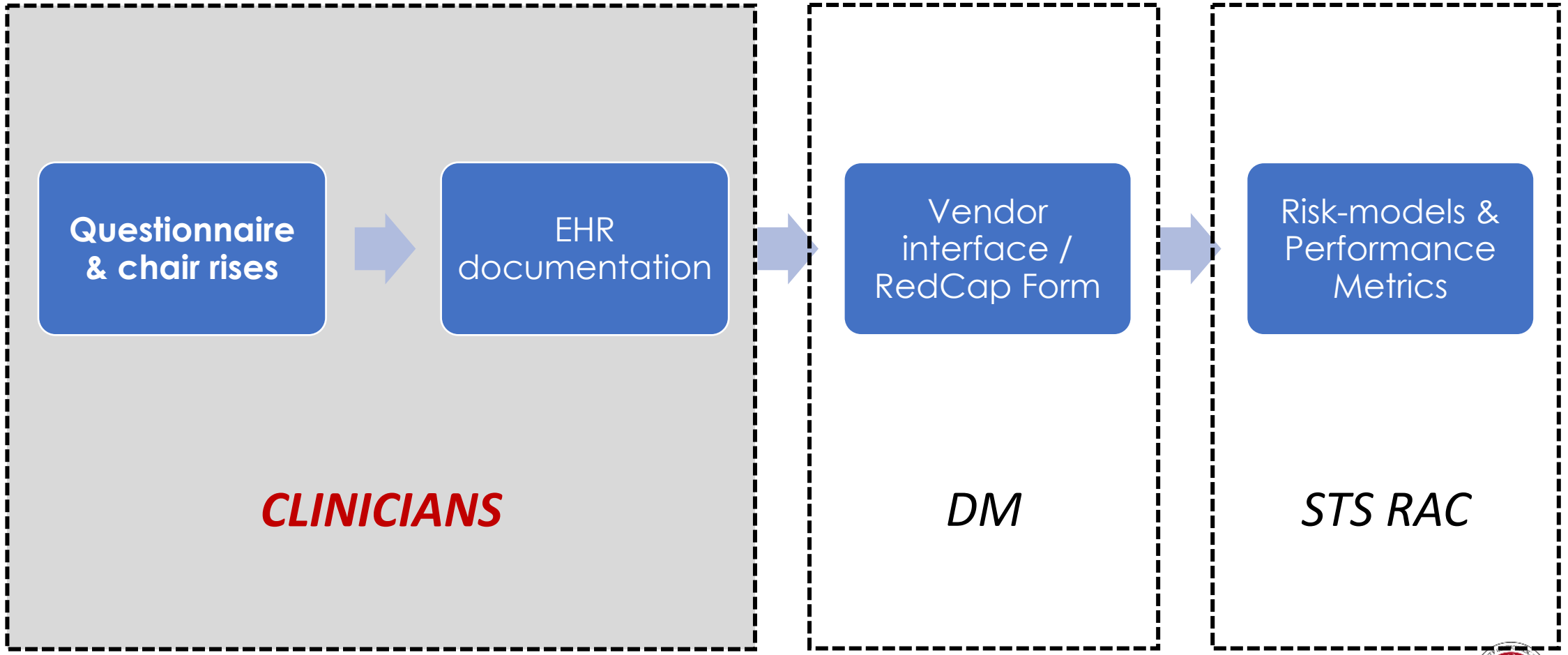
Frailty Data Collection

- Will be using RedCap until the next version upgrade of the databases
- Collaboration with vendors to facilitate data entry

Frailty Data Collection Process



1. **Company Data**: Starbucks itself suggests that the average time to complete an order falls within the range of **3 to 5 minutes** [1]. This includes the time it takes to prepare the drink and serve the customer.
2. **QSR Study**: A study conducted by a Quick Service Restaurant (QSR) found that the typical wait time at Starbucks is approximately **4 minutes and 44 seconds** [1].

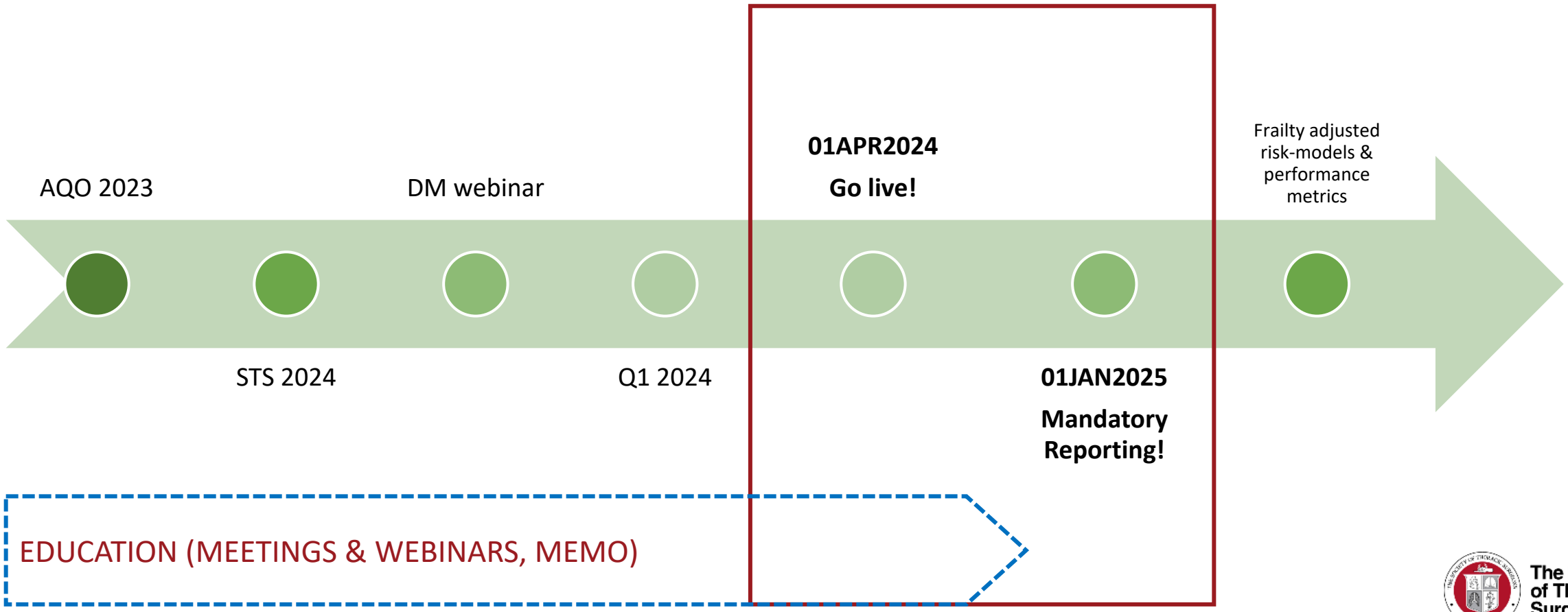
Roll-Out Process

- ACSD first (GTSD in 2nd stage)

- All cases (not only PROM cases); elective, urgent & emergent cases => every patient going to OR…

- Go live: 4/1/24
- Mandatory: 1/1/25

Implementation Timeline



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Supporting Materials for DM & Participants

1. User manual(clinicians)
2. Training manual (DM)
3. DCF
4. Instructional videos


Y’all be good out there. If you can’t be good, be careful.
THANK YOU FOR YOUR ATTENTION!
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TCU
BURNETT
SCHOOL of MEDICINE
Texas Health
Harris Methodist Hospital

Frailty Data Collect

- Begins April 1, 2024
- Mandatory January 1, 2025
- All Cardiac Surgeries, analyzed and non-analyzed cases entered into the ACSD
- Data Entry into REDCap Form; will also work with willing vendors

Resources

- STS National Database Webpage
- STSDB_Helpdesk@sts.org (Uploader, DQR, Missing Variable, Dashboard, Password and Login)
- STS National Database Feedback Form
- Resource Documents
  - Contact Information
  - Webinar Information
  - FAQ Document
  - Go-Live Checklist
  - Tiered-level Support Document
  - *Training Videos*
  - *Link to IQVIA*
  - ckrohn@sts.org

Open Discussion

Please use the raise-hand function.

Please use the Q&A Function.

We will answer as many questions as possible.

We encourage your feedback and want to hear from you!

Element: 4561 Canadian Study of Health and Aging (CSHA) Clinical Frailty Scale

Code System Name **Code**

ACC NCDR 1000142381

Coding Instruction: Indicate the Canadian Study of Health and Aging (CSHA) Clinical Frailty Scale of the patient.

Target Value: The last value prior to the start of the first procedure

Supporting Definition:

Technical Specification

Short Name: CSHAScale
Missing Data: Report
Harvested: Yes (DDS)
Is Identifier: No
Is Base Element: Yes
Is Followup Element: No
Data Type: CD
Precision:
Selection Type: Single
Unit of Measure:
Default Value: Null
Usual Range:
Valid Range:
Data Source: User

Code System Name	Code	Selection Text	Definition
ACC NCDR	1000142382	1: Very Fit	CHSA Clinical Frailty Scale 1: Very Fit - People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.
ACC NCDR	1000142383	2: Well	CHSA Clinical Frailty Scale 2: Well - People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.
ACC NCDR	1000142384	3: Managing Well	CHSA Clinical Frailty Scale 3: Managing Well - People whose medical problems are well controlled, but are not regularly active beyond routine walking.
ACC NCDR	1000142385	4: Vulnerable	CHSA Clinical Frailty Scale 4: Vulnerable - While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.
ACC NCDR	1000142386	5: Mildly Frail	CHSA Clinical Frailty Scale 5: Mildly Frail - These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside
ACC NCDR	1000142387	6: Moderately Frail	
ACC NCDR	1000142388	7: Severely Frail	
ACC NCDR	1000142389	8: Very Severely Frail	
ACC NCDR	1000142390	9: Terminally Ill	people with a life expectancy <6 months, who are not otherwise evidently frail.

(KNOWN OR DIAGNOSED PRIOR TO FIRST **CATH LAB** VISIT)

Diabetes Mellitus[4555]**:**	O No O Yes	**Currently on Dialysis**[4560]**:**	O No O Yes
CSHA Clinical Frailty Scale[1] [4561]**:**	O 1: Very Fit	O 4: Vulnerable	O 7: Severely Frail
	O 2: Well	O 5: Mildly Frail	O 8: Very Severely Frail
	O 3: Managing Well	O 6: Moderately Frail	O 9: Terminally Ill

[1]Canadian Study Of Health And Aging Clinical Frailty Scale Is Used With Permission For The American College Of Cardiology Foundation By Dr. Kenneth Rockwood (© Kenneth Rockwood, MD)

Goodhart's Law & Misclassification