



## Society of Thoracic Surgeons Adult Cardiac Surgery Database

Quality Improvement Series:  
Decreasing Vent Times

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Dignity Health:  
Chandler Regional Medical Center

January 17, 2024

HAPPY 2024!!!

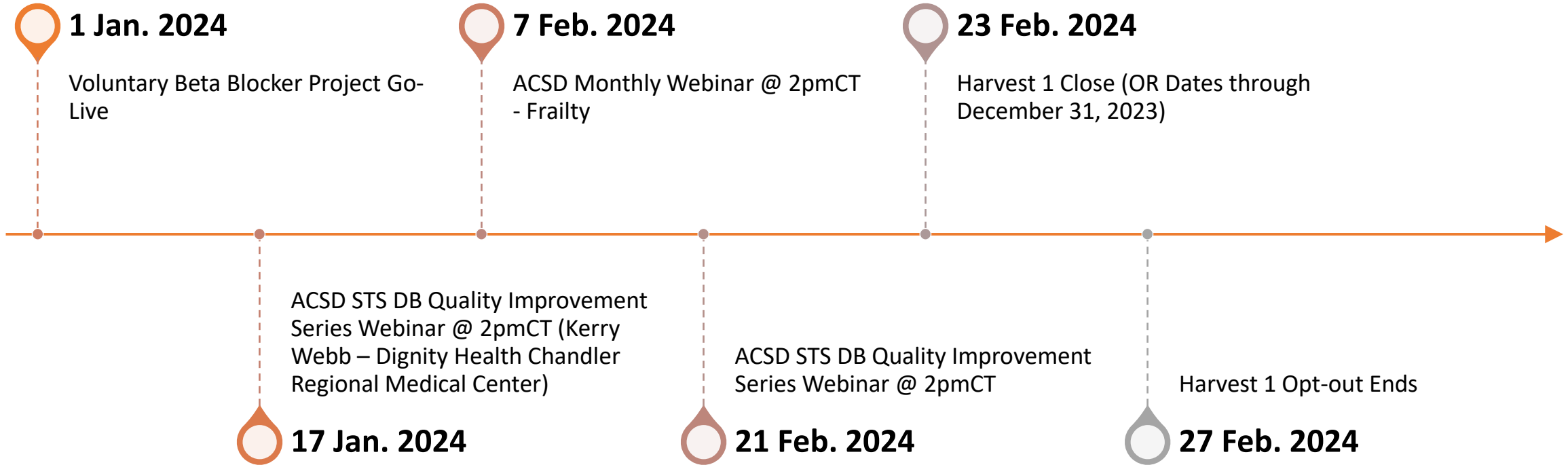
# Agenda

WELCOME AND  
INTRODUCTIONS

STS UPDATES

DIGNITY HEALTH –  
CHANDLER REGIONAL  
MEDICAL CENTER ON  
<6 HOUR EXTUBATION

# Important Dates



# Important Updates

- ACSD Executive Summary Dashboard/Community Page
- Harvest 4 Released
- Next National QI Project – Blood Usage, coming soon...
- Beta Blocker went live on January 1
- Status on Frailty

# STS IsoCABG <6 Hour Extubation

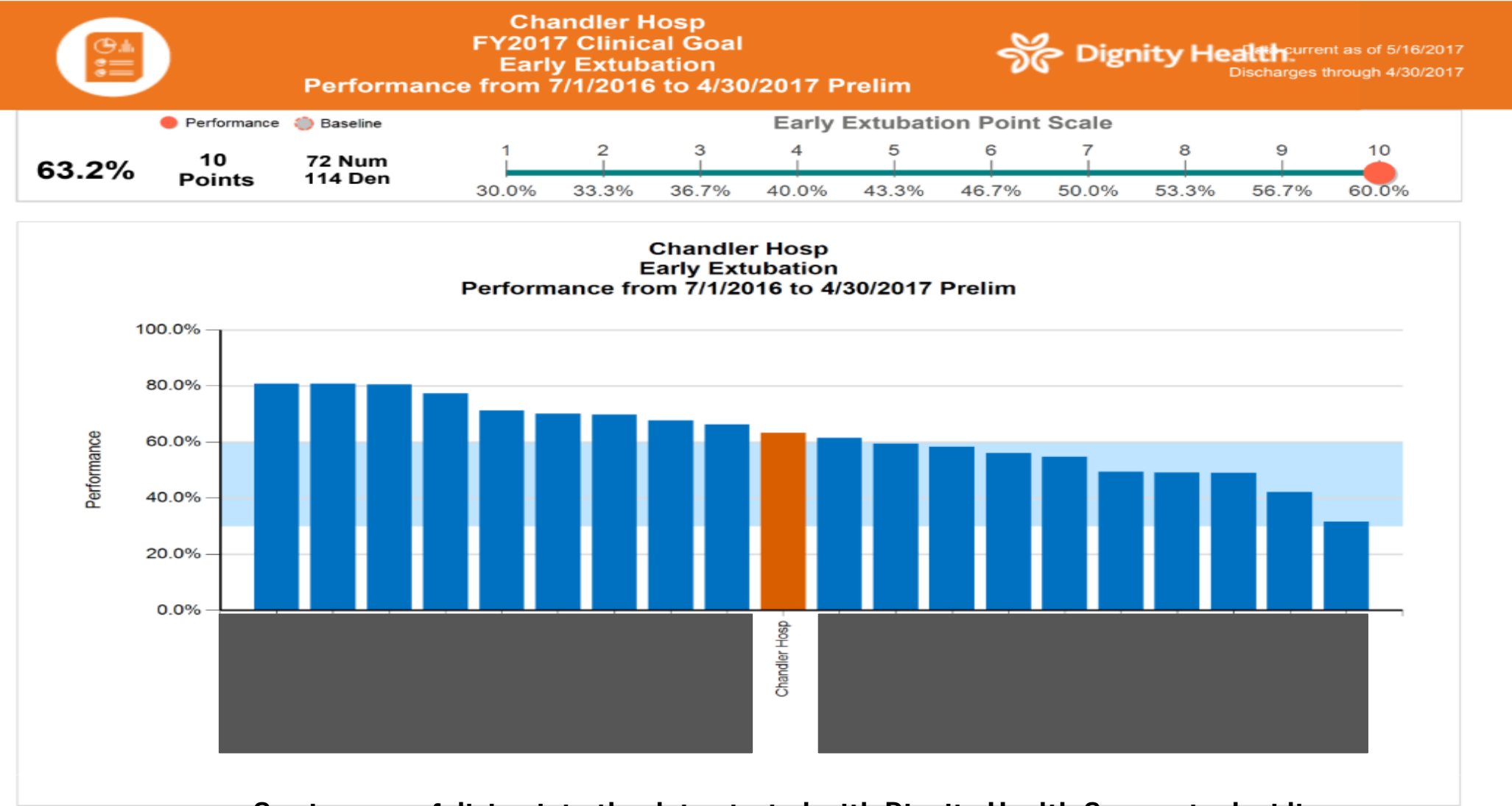
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# Agenda

- **Pre changes data - ext**
- **Who was involved and why**
- **What was implemented**
- **Post changes data**
- **Current data**

# Baseline <6 hour Initial Ventilation Data

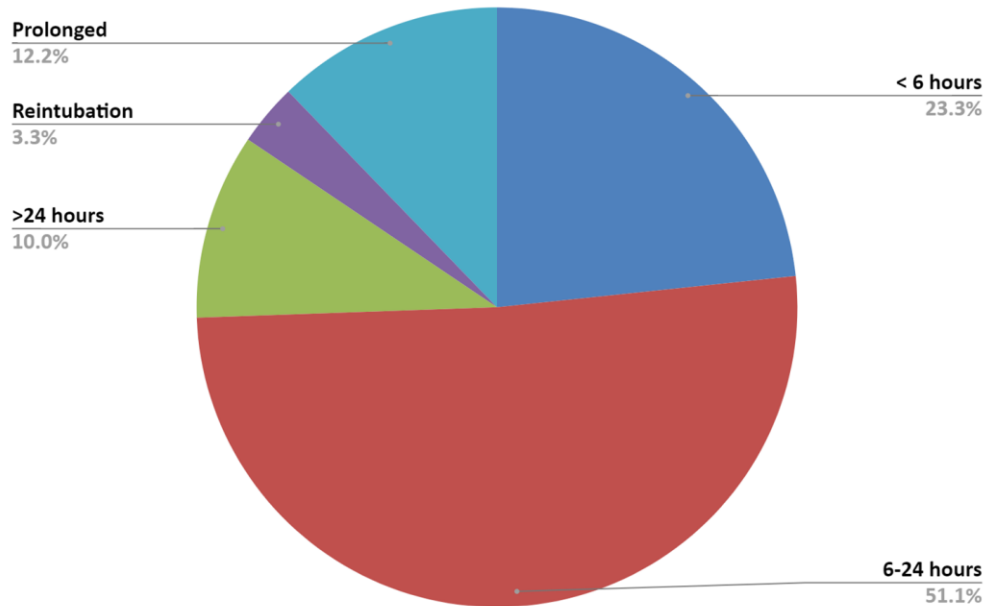


Our journey of diving into the data started with Dignity Health Corporate deciding that the <6 hour and prolonged ventilation as goals for the year.

## How we looked at our data

### IsoCABG Ventilation Data

FY2019



We looked our raw data each month, breaking it down into those extubated in <6 hours, 6-24 hours and >24 hours to identify where we had the most opportunity to make improvements

We also looked at the numbers by surgeon to see if we had any specific surgeons that may have been an outlier

### Isolated CABG Jan-Aug 2018

Physician	Total # of Cases	Total >24hr	Percentage
	5	0	0%
	33	1	3%
	2	0	0%
	47	2	4%
	29	4	14%
	1	0	0%
	5	2	40%
	1	0	0%
	14	0	0%

### Isolated CABG Jan-Aug 2017

Physician	Total # of Cases	Total >24hr	Percentage
	1	0	0%
	13	1	8%
	1	0	0%
	50	2	4%
	4	0	0%
	16	2	13%
	23	1	4%
	3	0	0%
	2	0	0%

# **Who was involved**

**This was a multidisciplinary approach involving surgeons, nursing, respiratory and our data analyst.**

**Leadership for both nursing and respiratory were supportive in process change coming from bedside staff.**

# Nursing's Involvement

There seemed to be a lack of awareness among both nursing staff and respiratory as to what specific metrics we were measuring and how adherence to metrics equaled better outcomes for our patients. To overcome this, we focused on education.

We developed a CV Process Improvement Committee where education and unit processes could be discussed. We also created a log in which RNs would enter their patients information and whether they were extubated on time or if there was a delay. If there was a delay, the reasoning was investigated. The log created both accountability for staff and a speaking point for outliers on process improvement.

The CVICU RNs - Participate in monthly meetings in which data is presented, education is provided as needed and best practice initiatives are discussed. Accept post-op CV pts directly from CVOR and 1:1 recovery including extubation.

# **Respiratory Therapy Involvement**

**The education need was also addressed with RTs. Taking a team approach, RT's who participated in extubations also were held accountable in the extubation log. Wherever the extubation fall out occurred, it was addressed. It became a culture of how are WE going to extubate our pt.**

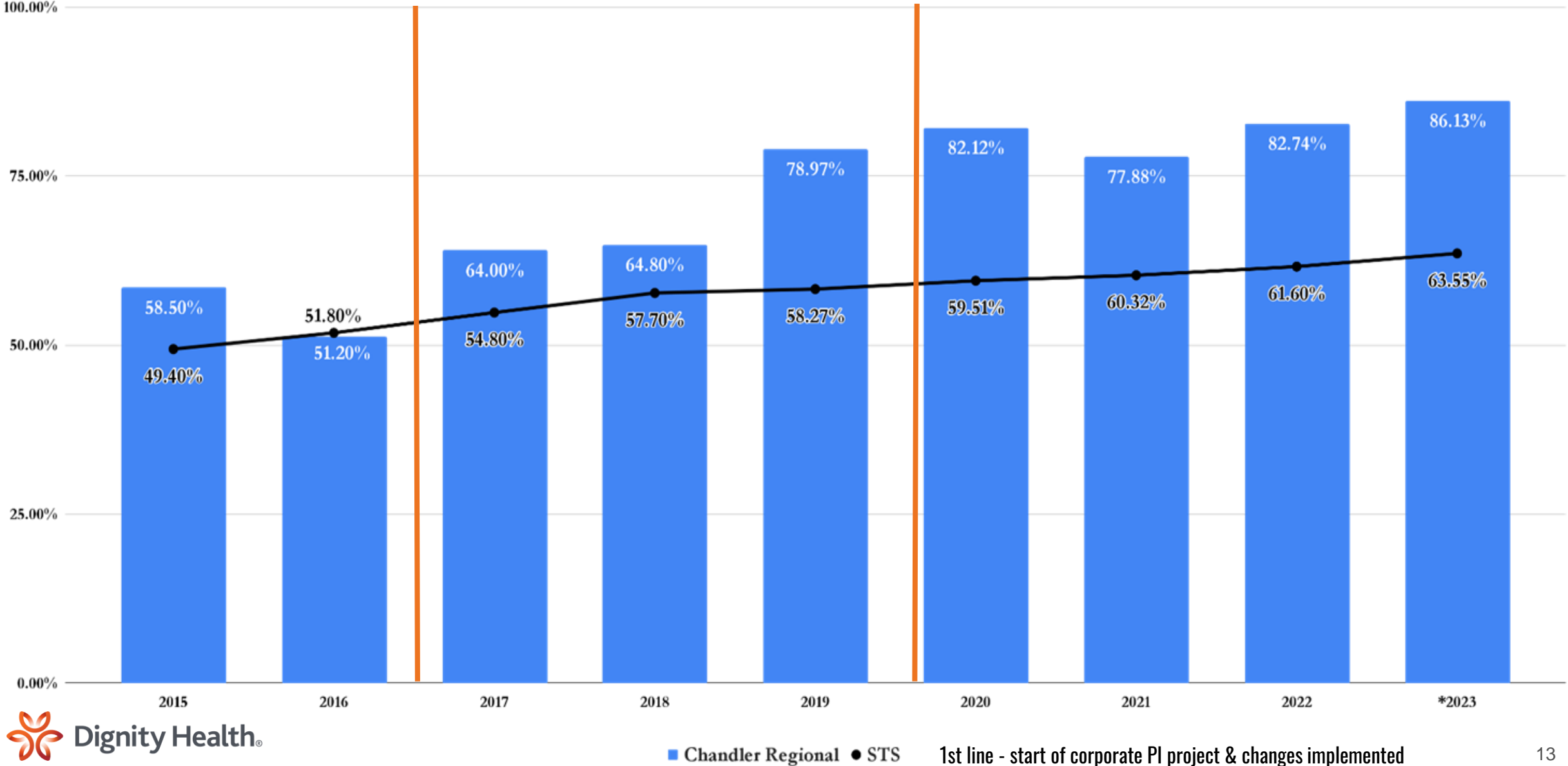
**Early utilization of the Cardiac Surgery Ventilator Protocol RT's and CVICU RN's collaborate to address potential extubation barriers early.**

**Our data analyst also investigated extubation time between 6-10 hours to verify times were abstracted correctly. Once times were verified, outliers were sent to RT leadership to evaluate for trends.**

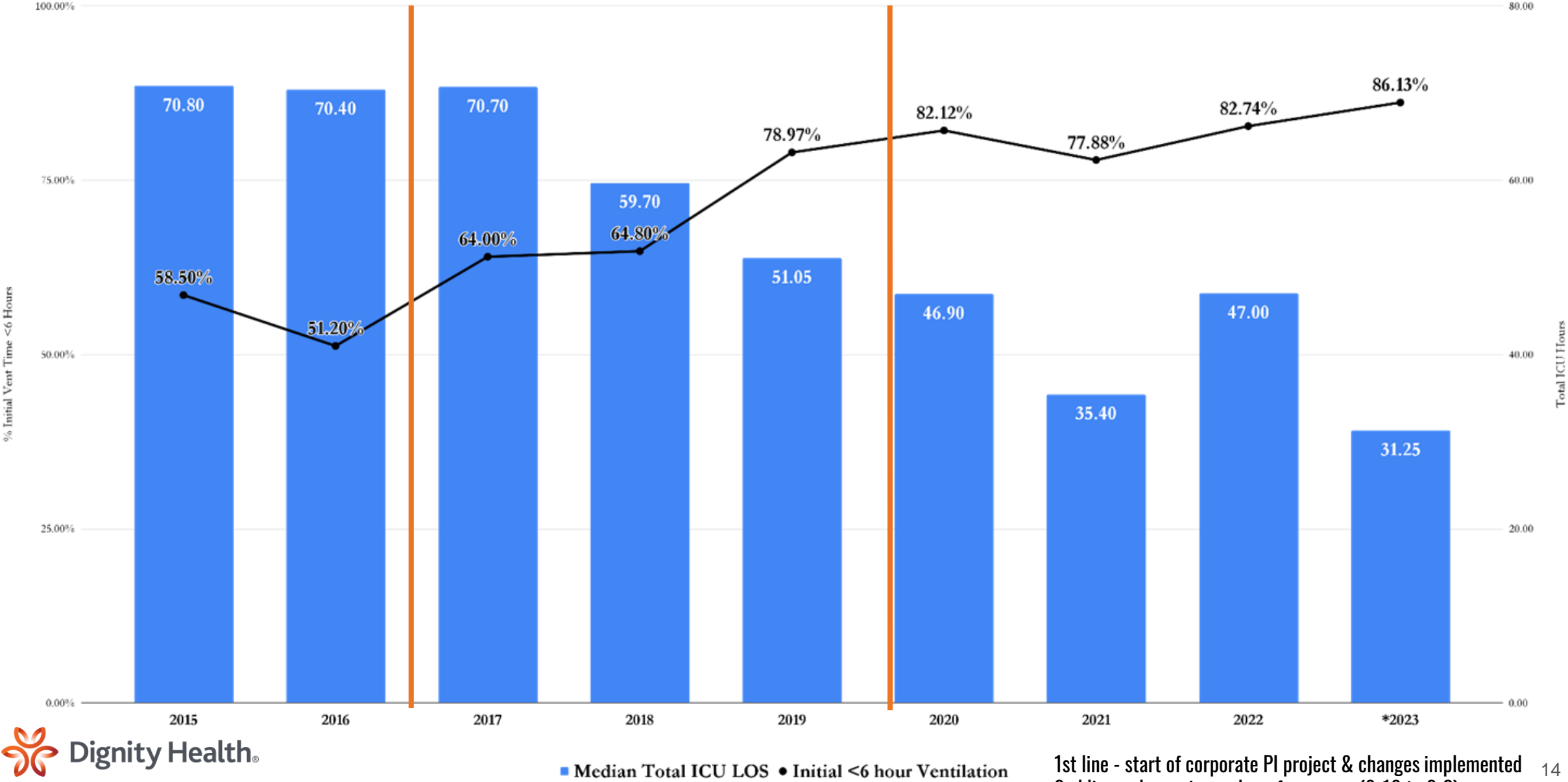
# Cardiac Weaning Protocol Tracking Sheet

Patient Label	RN/RT	Out Time	Extubation Time	Surgeon	Procedure	Extubated within 6 hours? Yes or no, why?
<p>12 F</p> <p>DOB: 11/02/19 Age: 76Y Sex: [redacted]</p> <p>DOS: 03/12/2019 LOC: MSG</p>	Anisa/Trang	1000	1600	Brady	AVR	Barily! Ver nutsleepy and no cuff leak w/ 7.0 DETT
<p>2 F</p> <p>DOB: 05/30/19 Age: 66Y Sex: [redacted]</p> <p>DOS: 03/04/2019 LOC: MSG</p>	Makenzie Marco	1411	1815	Khary	CABG x 3	yes
<p>DOB: 09/06/1945 Age: 73Y Sex: F</p> <p>DOS: 03/02/2019 LOC: MSG</p>	Steve RN Michelle RT	20:04 3/12		Khoury	Emergent CABG x 3	Resp Code - Intubation prior to emergent CABG 724°
<p>DOB: 09/04/19 Age: 69Y Sex: [redacted]</p> <p>DOS: 03/12/2019 LOC: MSG</p>	Jolena RN Sterling RT Tyne RN	3/14 0139	3/14 0520	Khary	CABG	RESP DID NOT MAKE VENT SETTING AS PATIENT DROWSY NO
		3/14 @ 1105	3/14 @ 1105	Brady	CABG x 3	yes

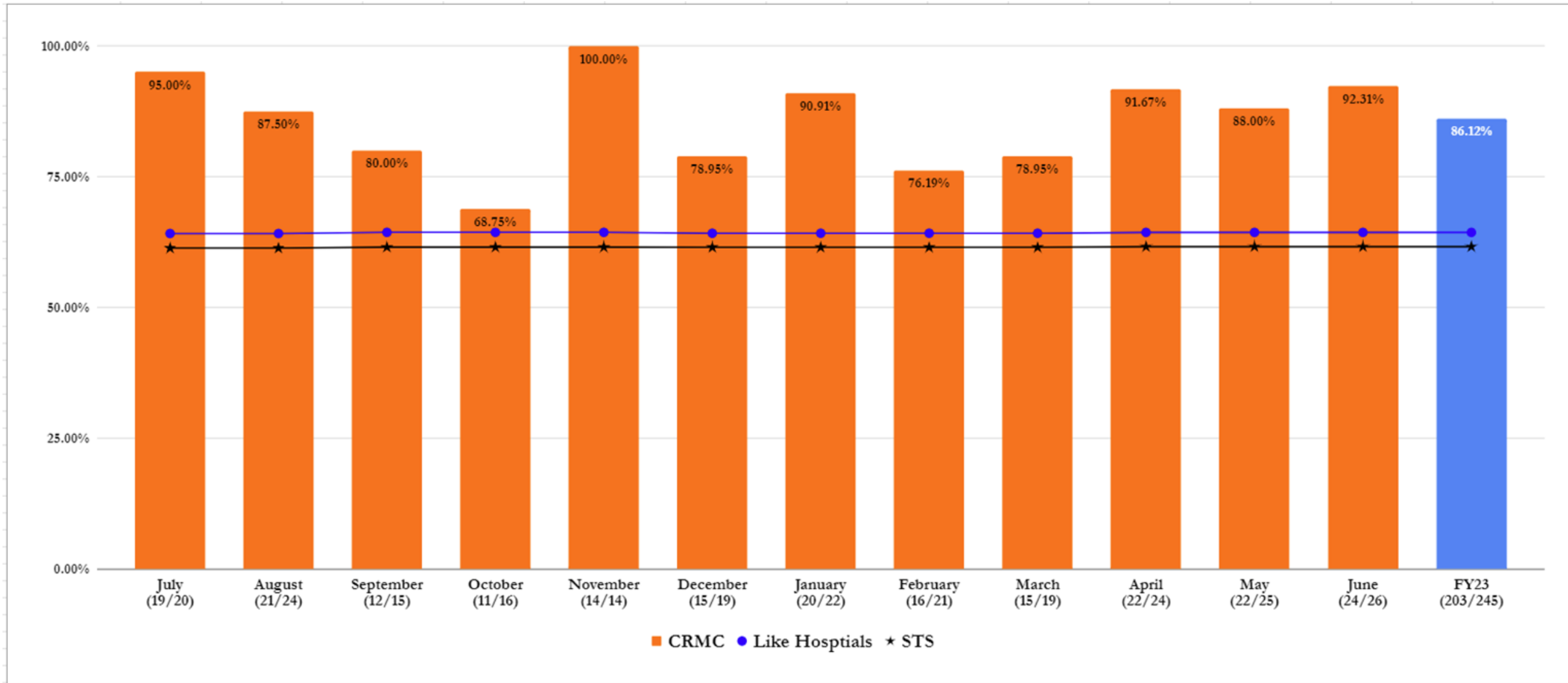
# Chandler Regional Medical Center Annual Initial <6 hour Ventilation vs. STS Benchmark



Chandler Regional Medical Center: Initial <6 hour Ventilation vs. Median Total ICU LOS

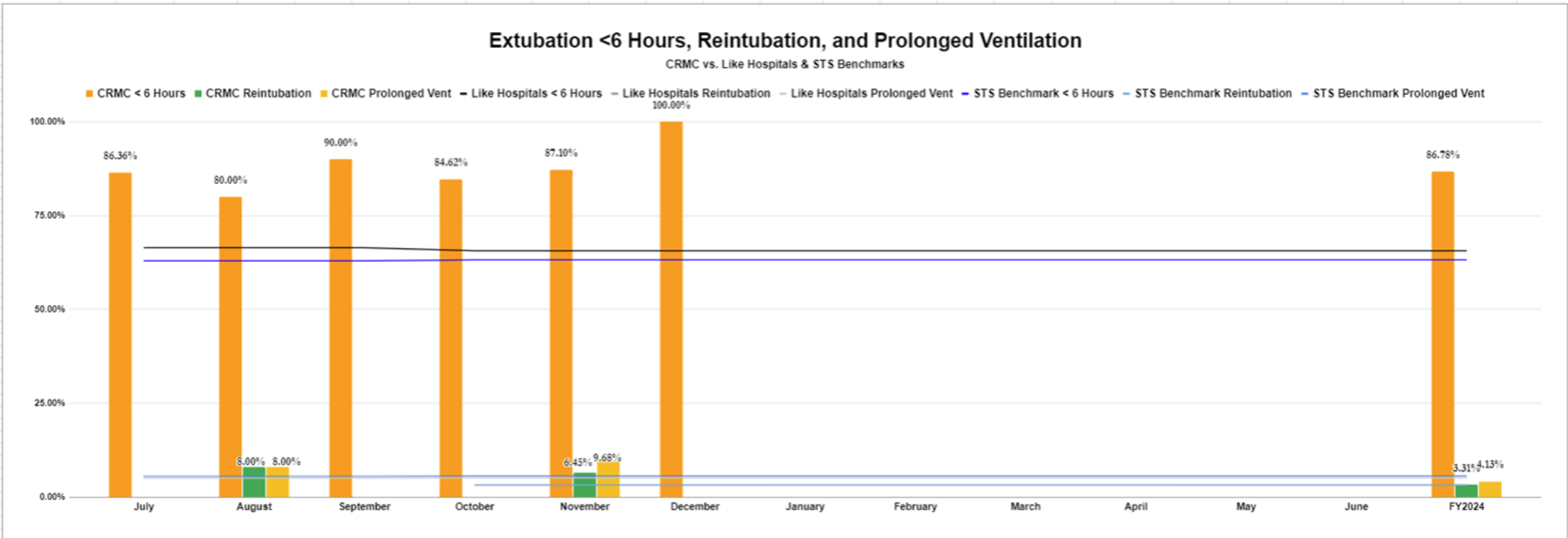


## Example of how the data has been presented over the years



# How our data is currently presented

FY2024 Data (manually calculated)



# **What it is like now for nursing & respiratory therapists**

**We have fostered a culture of both pride and accountability.**

**We have great teamwork and have high expectations for quality care to be delivered. On the rare occasion a patient does not meet the window, reasoning is generally offered before the question is asked.**

**We continue to watch numbers and actively meet to discuss process improvement opportunities.**

# Thank You

# Contact Information

- Carole Krohn, Director, STS National Database
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  - 312-202-5847
- STSDB@sts.org
  - Database Operational Questions (Billing, Contracts, Contacts)
- STSDB\_Helpdesk@sts.org
  - IQVIA/Database Platform Questions (Uploader, DQR, Missing Variable, Dashboard, Password and Login)



# 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!